As filed with the Securities and Exchange Commission on January 27, 2004
Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CYTOKINETICS, INCORPORATED

(Exact name of Registrant as specified in its charter)

Delaware	**2834**	**94-3291317**
(State or other jurisdiction of incorporation or organization)	*(Primary Standard Industrial Classification Code Number)*	*(I.R.S. Employer Identification Number)*

280 East Grand Avenue

South San Francisco, California 94080
(650) 624-3000
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

James H. Sabry, M.D., Ph.D.

President and Chief Executive Officer
Cytokinetics, Incorporated
280 East Grand Avenue
South San Francisco, California 94080
(650) 624-3000
(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"), check the following box. ☐

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the

Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If delivery of the prospectus is expected to be made pursuant to Rule 434, check the following box. ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
Common Stock $0.001 par value	$86,250,000	$6,977.63

(1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457 under the Securities Act of 1933.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission acting pursuant to said Section 8(a) may determine.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion. Dated January 27, 2004.

Shares

CYTOKINETICS

Common Stock

This is an initial public offering of shares of common stock of Cytokinetics, Incorporated. All of the shares of common stock are being sold by the company.

Prior to this offering, there has been no public market for the common stock. It is currently estimated that the initial public offering price per share will be between $ and $. Application has been made for the quotation of the common stock on the Nasdaq National Market under the symbol "CYTK".

See "Risk Factors" on page 6 to read about factors you should consider before buying shares of the common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Share	Total
Initial public offering price	$	$
Underwriting discount	$	$
Proceeds, before expenses, to Cytokinetics	$	$

To the extent that the underwriters sell more than shares of common stock, the underwriters have the option to purchase up to an additional shares from Cytokinetics at the initial public offering price less the underwriting discount.

The underwriters expect to deliver the shares against payment in New York, New York on , 2004.

Goldman, Sachs & Co.

Credit Suisse First Boston

Pacific Growth Equities, LLC
Lazard

Prospectus dated , 2004.

PROSPECTUS SUMMARY

You should read the following summary together with the more detailed information regarding us, the sale of our common stock in this offering, our financial statements and notes to those financial statements that appear elsewhere in this prospectus.

Cytokinetics, Incorporated

We are the leading biopharmaceutical company focused on the discovery, development and commercialization of novel small molecule drugs that specifically target the cytoskeleton. The cytoskeleton is a complex biological infrastructure that plays a fundamental role within every human cell. A number of commonly used drugs and a growing body of research validate the role that the cytoskeleton plays in a wide array of human diseases. Our focus on the cytoskeleton enables us to develop novel and potentially safer and more effective classes of drugs directed at treatments for cancer, cardiovascular disease, fungal diseases and other diseases. We have developed a cell biology driven approach and proprietary technologies to evaluate the function of many interacting proteins in the complex environment of the intact human cell. We believe that our approach enhances the speed, efficiency and yield of our drug discovery and development process by accurately and rapidly identifying drug candidates with attractive properties. Our approach has yielded two drug candidates for the treatment of cancer, potential drug candidates for the treatment of congestive heart failure, and more than ten other research programs. Our most advanced drug candidate, SB-715992, is the subject of a broad Phase II clinical trials program designed to evaluate its effectiveness in many different types of cancer. An investigational new drug application, or IND, was filed with the U.S. Food and Drug Administration, or FDA, in 2003 for our second cancer drug candidate, SB-743921, which we expect will enter Phase I clinical development in early 2004. In addition, we expect to initiate Phase I clinical development for a drug candidate for the treatment of acute congestive heart failure in the second half of 2004.

Our Focus on the Cytoskeleton

The cytoskeleton is one of a few biological areas with broad potential for drug discovery and development and has been scientifically and commercially validated in a wide variety of human diseases. For example, the cytoskeleton plays a fundamental role in the cell proliferation process, and cancer is a disease of unregulated cell proliferation. A number of commonly used cancer drugs inhibit cell proliferation by disrupting aspects of cytoskeletal function. However, these drugs also interrupt cytoskeletal functions unrelated to cell proliferation. This limits their clinical benefit and results in dose-limiting toxicities. As another example, the cytoskeleton plays a fundamental role in cardiac muscle contraction and has been linked to the origins of congestive heart failure, a disease of impaired cardiac function. Certain commonly used congestive heart failure drugs that work by indirectly modulating cytoskeletal function have limited therapeutic value due to their clinical side effects. We believe that our understanding of the cytoskeleton will allow us to develop potentially safer and more effective drugs for cancer and congestive heart failure. Our other research programs are also focused on diseases in which we believe the cytoskeleton plays a significant role.

Our Drug Candidates in Development

- ***Cancer:*** **SB-715992 has entered a Phase II clinical trial for the treatment of non-small cell lung cancer and is expected to enter multiple Phase II clinical trials in other solid and hematologic cancers throughout 2004.** SB-715992 is a novel small molecule drug candidate that inhibits cell proliferation and promotes cancer cell death by specifically disrupting the function of a cytoskeletal protein known as kinesin spindle protein, or KSP. KSP is essential for cell proliferation, a process that when unregulated results in tumor growth. KSP plays no role outside of cell proliferation. Current drugs that inhibit cell proliferation, such as Taxol® (paclitaxel) and Taxotere® (docetaxel), are standard treatments

for many types of cancers, but these drugs target tubulin, a cytoskeletal protein that is essential not only to cell proliferation but also to many other important cellular functions. Because SB-715992 inhibits only cell proliferation, we believe it may exhibit a lower incidence of toxicities than many existing cancer drugs. In addition, SB-715992's novel mechanism of action may be effective against a broader range of tumor types.

SB-715992 is being developed by GlaxoSmithKline, or GSK, with us through our strategic alliance. GSK commenced a Phase II clinical trial for SB-715992 in non-small cell lung cancer in late 2003. A number of parallel Phase II monotherapy clinical trials and Phase Ib combination therapy clinical trials are scheduled to begin throughout 2004. These clinical trials are expected to evaluate this novel drug candidate in multiple tumor types including colorectal, breast, ovarian, and other solid and hematologic cancers. Also in 2004, the National Cancer Institute, or NCI, plans to sponsor additional Phase I and Phase II clinical trials designed to evaluate SB-715992 in other tumor types and other dosing regimens.

- ***Cancer:*** **SB-743921 is expected to enter Phase I clinical trials in early 2004.** This drug candidate also inhibits KSP but is structurally distinct from SB-715992. We believe that having two KSP inhibitors for the potential treatment of cancer in concurrent clinical development increases the likelihood that a commercial drug will be developed. SB-743921 is also being developed by GSK through our strategic alliance.

- ***Cardiovascular Disease:*** **We expect to file an IND and initiate a Phase I clinical trial for a drug candidate for the treatment of acute congestive heart failure in the second half of 2004.** Our potential drug candidates specifically target a cytoskeletal protein, cardiac myosin, which is essential for cardiac muscle contraction. In animal models, compounds arising from this program improve cardiac function without detrimental effects on heart rhythm, heart rate or blood pressure that limit the effectiveness of existing drugs.

Our Research Programs

We have more than ten research programs that address multiple therapeutic areas, such as fungal diseases, inflammatory diseases, high blood pressure and asthma. We structure our research programs in these therapeutic areas around cytoskeletal protein targets to discover and develop novel small molecule drug candidates that may address unmet clinical needs as well as the shortcomings of existing drugs.

Our Cell Biology Driven Approach to Drug Discovery and Development

All of our compounds in research and development have been discovered internally using our unique cell biology driven approach. We develop a detailed understanding of multiple proteins within a cytoskeletal pathway or multi-protein system to identify various intervention points to modulate the pathway or system to treat disease. We can then direct our discovery activities to specific cytoskeletal proteins that may be attractive targets for the development of potentially safer and more effective drugs.

We have also developed proprietary automated technologies, including our PUMA system and Cytometrix technologies, to enable early identification and prioritization of compounds that are highly selective for their intended protein targets without other cellular effects, and are thereby less likely to give rise to clinical side effects. The integrated use of these technologies enables us to efficiently focus our research efforts and resources on those compounds directed at novel cytoskeletal protein targets that are more likely to yield attractive drug candidates. We have advanced our Cytometrix technologies through technical development activities conducted with each of Eisai Research Institute, Novartis Pharma AG, Tularik Inc. and Vertex Pharmaceuticals, Inc.

Our Strategic Alliances

We selectively seek strategic alliances that enable us to maintain financial and operational flexibility while retaining significant economic and commercial rights to our drug candidates. In June 2001, we entered into a strategic alliance with GSK to discover, develop and commercialize small molecule drugs for the treatment of cancer as well as other diseases by targeting KSP and certain other related cytoskeletal proteins involved in cell proliferation. Under this strategic alliance, GSK has made a $14.0 million upfront cash payment and an initial $14.0 million investment in our equity. GSK has also committed to reimburse our full time equivalents, or FTEs, conducting research in connection with the strategic alliance and to make additional precommercialization milestone payments to us and pay royalties to us based on product sales. As of December 31, 2003, we have received $17.2 million in FTE reimbursement and $3.2 million in precommercialization milestone payments from GSK. We will receive future FTE reimbursement and could receive significant precommercialization milestone payments and royalties based on product sales. In addition, we retain both a product-by-product option to co-fund certain later-stage development activities in exchange for a higher royalty rate, and an option to secure additional co-promotion rights. In December 2003, we entered into a strategic alliance with AstraZeneca AB to fund and participate in the development of a new application of our Cytometrix technologies for use by both parties.

Our Corporate Strategy

Our goal is to become a fully-integrated biopharmaceutical company focused on discovering, developing and commercializing novel drugs to treat cancer, cardiovascular disease and other diseases. We intend to achieve this goal by:

- focusing on the cytoskeleton;
- leveraging our cell biology driven approach and proprietary technologies to increase the speed, efficiency and yield of our drug discovery and development process;
- pursuing multiple drug candidates for each cytoskeletal protein target and broad clinical trials for each drug candidate;
- establishing select strategic alliances to accelerate our drug development programs while preserving significant development and commercial rights; and
- building development and commercialization capabilities directed towards large concentrated markets.

Risks

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in “Risk Factors”. All of our drug candidates, including SB-715992 and SB-743921, are in clinical or earlier stages of development. Accordingly, we have not received regulatory approval for, nor commercial revenues from, any of our drug candidates. It is possible that neither we nor our partners may ever successfully commercialize any of our drug candidates. As of September 30, 2003, we had incurred $85.1 million in net losses since inception. Because our initial drug candidates are in the early stages of clinical testing, we expect to continue to incur increasing losses over the next several years, and we may never become profitable.

Company Information

We were incorporated in Delaware in August 1997 as Cytokinetics, Incorporated. Our principal executive offices are located at 280 East Grand Avenue, South San Francisco, California 94080, and our telephone number is (650) 624-3000. Our website address is http://www.cytokinetics.com. Information contained in our website is not a part of this prospectus. References in this prospectus to “we,” “us” and “our” refer to Cytokinetics, Incorporated.

The Offering

Common stock offered	shares
Common stock to be outstanding after this offering	shares
Use of proceeds	For general corporate purposes, including the potential co-funding of certain later-stage development activities with respect to SB-715992 or SB-743921; preclinical activities and clinical development of a drug candidate for the treatment of acute congestive heart failure; research programs; development, sales, marketing and manufacturing operations and the potential license or acquisition of complementary technologies. See "Use of Proceeds."
Proposed Nasdaq National Market symbol	CYTK

The number of shares of common stock to be outstanding after this offering is based on 3,990,393 shares of common stock outstanding as of September 30, 2003 and also reflects the automatic conversion of preferred stock into 34,199,272 shares of common stock. This number does not include, as of September 30, 2003:

- 4,841,012 shares of common stock issuable upon exercise of options outstanding, at a weighted average exercise price of $0.54 per share; and
- up to 367,500 shares of common stock issuable upon exercise of warrants outstanding, at a weighted average exercise price of $1.13 per share; and
- shares of common stock reserved for issuance under our 1997 Stock Option/ Stock Issuance Plan, 2004 Equity Incentive Plan and our 2004 Employee Stock Purchase Plan.

Except as otherwise indicated, all information in this prospectus:

- gives effect to our certificate of incorporation which we will file immediately prior to the closing of this offering;
- gives effect to the automatic conversion of all outstanding shares of preferred stock into shares of common stock upon the closing of this offering; and
- assumes no exercise by the underwriters of their option to purchase additional shares from Cytokinetics in this offering.

Summary Financial Data

The following table summarizes our financial data. The summary financial data for the years ended December 31, 2000, 2001 and 2002 are derived from our audited financial statements included in this prospectus. We have also included data from our unaudited financial statements for the nine months ended September 30, 2002 and 2003. You should read these data together with our financial statements and related notes and the information under "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	Years Ended December 31,			Nine Months Ended September 30,		Cumulative Period from August 5, 1997 (date of Inception) to September 30,
	2000	2001	2002	2002	2003	2003
	(in thousands, except for per share data)					
Statement of Operations Data:						
Revenues:						
Research and development and grant revenues	$ —	$ 7,066	$ 8,596	$ 6,134	$ 5,770	$ 21,432
License revenues	—	1,400	2,800	2,100	2,100	6,300
	—	8,466	11,396	8,234	7,870	27,732
Operating expenses:						
Research and development(1)	$ 10,403	$ 20,961	$ 28,424	$ 19,661	$ 24,140	$ 90,953
General and administrative(1)	3,390	5,897	6,953	5,903	7,451	26,424
Total operating expenses	13,793	26,858	35,377	25,564	31,591	117,377
Loss from operations	(13,793)	(18,392)	(23,981)	(17,330)	(23,721)	(89,645)
Interest and other income (expense), net	714	2,518	901	736	26	4,561
Net loss	$(13,079)	$(15,874)	$(23,080)	$(16,594)	$(23,695)	$ (85,084)
Net loss per share:						
Basic and diluted	$ (6.78)	$ (5.59)	$ (6.62)	$ (4.83)	$ (6.28)	
Pro forma net loss per share:						
Basic and diluted(2)			$ (0.78)		$ (0.67)	

(1) Includes non-cash stock-based compensation.

(2) Gives effect to the conversion of all outstanding shares of preferred stock into 34,199,272 shares of our common stock effective upon the closing of this offering.

	As of September 30, 2003		
	Actual	Pro Forma	Pro Forma, As Adjusted
	(in thousands)		
Balance Sheet Data:			
Cash, cash equivalents, short-term and long-term investments	$ 44,397	$ 44,397	
Restricted cash	13,904	13,904	
Working capital(1)	43,471	43,471	
Total assets	70,199	70,199	
Long-term portion of equipment financing lines	7,384	7,384	
Convertible preferred stock	133,175	—	
Deficit accumulated during the development stage	(85,084)	(85,084)	
Total stockholders' (deficit) equity	(83,550)	49,625	

The table above presents summary balance sheet data on an actual basis, on a pro forma basis and on a pro forma as adjusted basis. The pro forma numbers reflect the conversion of all of our preferred stock into an aggregate of 34,199,272 shares of our common stock immediately upon the closing of this offering and the pro forma as adjusted numbers reflect the sale of shares of our common

stock at an assumed initial public offering price of $ per share, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(1) Represents current assets less current liabilities.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below with all of the other information included in this prospectus before making an investment decision. If any of the possible adverse events described below actually occurs, our business, results of operations or financial condition would likely suffer. In such an event, the market price of our common stock could decline and you could lose all or part of your investment in our common stock.

Risks Related to Our Business

Our initial drug candidates are in the early stages of clinical testing and we have a history of significant losses and may not achieve or sustain profitability and, as a result, you may lose all or part of your investment.

Our initial drug candidates are in the early stages of clinical testing and we must conduct significant additional clinical trials before we can seek the regulatory approvals necessary to begin commercial sales of our drugs. We have incurred operating losses in each year since our inception in 1997 due to costs incurred in connection with our research and development activities and general and administrative costs associated with our operations. Our net loss for the nine-month period ended September 30, 2003, for the fiscal years ended December 31, 2002 and 2001 and for the period August 5, 1997 (inception) through December 31, 2000 was $23.7 million, $23.1 million, $15.9 million and $22.4 million, respectively. As of September 30, 2003, we had an accumulated deficit of $85.1 million. We expect to incur increasing losses for several years, as we continue our research activities and conduct development of, and seek regulatory approvals for, our initial drug candidates, and commercialize any approved drugs. If our initial drug candidates fail in clinical trials or do not gain regulatory approval, or if our drugs do not achieve market acceptance, we will not be profitable. If we fail to become and remain profitable, or if we are unable to fund our continuing losses, you could lose all or part of your investment.

We have never generated, and may never generate, revenues from commercial sales of our drugs and we may not have drugs to market for several years, if ever.

We currently have no drugs for sale and we cannot guarantee that we will ever have marketable drugs. We must demonstrate that our drug candidates satisfy rigorous standards of safety and efficacy before the FDA and other regulatory authorities in the United States and abroad. We and our partners will need to conduct significant additional research, preclinical testing and clinical testing, before we or our partners can file applications with the FDA for approval of our drug candidates. In addition, to compete effectively, our drugs must be easy to use, cost-effective and economical to manufacture on a commercial scale. We may not achieve any of these objectives. SB-715992, our most advanced drug candidate for the treatment of cancer, is currently our only drug candidate in clinical trials and we cannot be certain that the clinical development of this or any other drug candidate in preclinical testing or clinical development will be successful, that it will receive the regulatory approvals required to commercialize it, or that any of our other research programs will yield a drug candidate suitable for entry into clinical trials. Our commercial revenues, if any, will be derived from sales of drugs that we do not expect to be commercially available for several years, if at all. We expect that SB-743921, our other cancer drug candidate, will enter Phase I clinical trials in early 2004. Because SB-743921 has a similar mechanism of action as SB-715992, the development of one or both of these drug candidates may be discontinued at any stage of our clinical trials programs and we may not generate revenue from either of these drug candidates.

We have funded all of our operations and capital expenditures with proceeds from private placements of our securities and strategic alliances with GSK and others. We expect that the net proceeds of this offering, together with our existing cash resources, future payments from GSK and

AstraZeneca, proceeds from equipment financings, and interest earned on investments will be sufficient to meet our projected operating requirements for at least the next 24 months. For the nine months ended September 30, 2003, our cash outflow to fund operations was approximately $23.9 million. To meet our future cash requirements, we may raise funds through public or private equity offerings, debt financings or strategic alliances. To the extent that we raise additional funds by issuing equity securities, our stockholders may experience additional dilution. To the extent that we raise additional funds through debt financing, if available, this may involve covenants that restrict our business activities. To the extent that we raise additional funds through strategic alliance and licensing arrangements, we will likely have to relinquish valuable rights to our technologies, research programs or drug candidates, or grant licenses on terms that may not be favorable to us.

Clinical trials may fail to demonstrate the safety and efficacy of our drug candidates, which could prevent or significantly delay completion of clinical development and regulatory approval.

Prior to receiving approval to commercialize any of our drug candidates, we must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA and other regulatory authorities in the United States and abroad, that such drug candidate is both safe and effective. We will need to demonstrate efficacy for the treatment of specific indications and monitor safety throughout the clinical development process. To date, long-term safety and efficacy have not yet been demonstrated in clinical trials for any of our drug candidates. Through our strategic alliance, GSK is currently conducting a Phase II clinical trial to test the safety and efficacy of SB-715992 in non-small cell lung cancer. Additional Phase II and Phase Ib clinical trials for SB-715992 and Phase I clinical trials for SB-743921 are scheduled to begin throughout 2004. If these trials or future clinical trials are unsuccessful, our business and reputation would be harmed and our stock price would be negatively affected.

All of our drug candidates are prone to the risks of failure inherent in drug development. The results of preclinical studies and early-stage clinical trials of our drug candidates do not necessarily predict the results of later-stage clinical trials. Drug candidates in later-stage clinical trials may fail to show desired safety and efficacy traits despite having progressed through initial clinical trials. Even if we believe the data collected from clinical trials of our drug candidates are promising, such data may not be sufficient to support approval by the FDA or any other United States or foreign regulatory approval. Preclinical and clinical data can be interpreted in different ways. Accordingly, FDA officials could interpret the data in different ways than we or our partners do, which could delay, limit or prevent regulatory approval. Administering any of our drug candidates to humans may produce undesirable side effects. These side effects could interrupt, delay or halt clinical trials of our drug candidates and could result in the FDA or other regulatory authorities denying approval of our drug candidates for any or all targeted indications. The FDA, other regulatory authorities, our partners or we may suspend or terminate clinical trials at any time. Any failure or significant delay in completing clinical trials for our drug candidates, or in receiving regulatory approval for the sale of any drugs resulting from our drug candidates, may severely harm our business and reputation.

Clinical trials are expensive, time consuming and subject to delay.

Clinical trials are very expensive and difficult to design and implement, especially in the cancer and congestive heart failure indications that we are pursuing, in part because they are subject to rigorous requirements. The clinical trial process is also time consuming. We estimate that clinical trials of our most advanced drug candidates will continue for several years, but may take significantly longer to complete. The commencement and completion of our clinical trials could be delayed or prevented by several factors, including:

- delays in obtaining regulatory approvals to commence a study;

- delays in identifying and reaching agreement on acceptable terms with prospective clinical trial sites;

- slower than expected rates of patient recruitment and enrollment;

- lack of effectiveness during clinical trials;

- unforeseen safety issues;

- uncertain dosing issues;

- inability to monitor patients adequately during or after treatment; and

- inability or unwillingness of medical investigators to follow our clinical protocols.

We do not know whether planned clinical trials will begin on time, will need to be restructured or will be completed on schedule, if at all. Significant delays in clinical trials will impede our ability to commercialize our drug candidates and generate revenue and could significantly increase our development costs.

We depend on GSK for the conduct, completion and funding of the clinical development and commercialization of our current drug candidates for the treatment of cancer.

Under our strategic alliance with GSK, GSK is currently responsible for the clinical development and regulatory approval of SB-715992 and SB-743921. GSK is responsible for filing applications with the FDA or other regulatory authorities for approval of these drug candidates, and will be the owner of any marketing approvals issued by the FDA or other regulatory authorities. If the FDA or other regulatory authorities approve these drug candidates, GSK will also be responsible for the marketing and sale of these drugs. Because GSK is responsible for these functions, we cannot control whether GSK will devote sufficient attention and resources to the clinical trials program or will proceed in an expeditious manner. Under certain circumstances, GSK has discretion to elect whether to pursue the development of our drug candidates or to abandon the clinical trials program, and, after June 20, 2006, GSK may terminate our strategic alliance for any reason upon six months prior notice. Disputes may arise between us and GSK, which may delay or cause termination of the clinical trials program, result in significant litigation or arbitration, or cause GSK to act in a manner that is not in our best interest. If development of our drug candidates does not progress for these or any other reasons, we would not receive further milestone payments from GSK. Even if the FDA or other regulatory agencies approve one or more of our drug candidates, GSK may elect not to proceed with the commercialization of such drugs, or may elect to pursue commercialization of one drug but not others. In such event, we would have to undertake and fund the clinical development of our drug candidates or commercialization of our drugs, seek a new partner for clinical development or commercialization, or curtail or abandon the clinical development or commercialization programs. If we were unable to do so on acceptable terms, or at all, our business would be harmed, and the price of our common stock would be negatively affected.

If we fail to enter into and maintain successful strategic alliances for our drug candidates, we may have to reduce or delay our drug candidate development or increase our expenditures.

Our strategy for developing, manufacturing and commercializing in certain therapeutic areas currently requires us to enter into and successfully maintain strategic alliances with pharmaceutical companies or other industry participants to advance our programs and reduce our expenditures on each program. We have formed a strategic alliance with GSK with respect to SB-715992, SB-743921 and certain other research activities. However, we may not be able to negotiate additional strategic alliances on acceptable terms, if at all. If we are not able to maintain our existing strategic alliances or establish and maintain additional strategic alliances, we may have to limit the size or scope of, or delay, one or more of our drug development programs or research programs or undertake and fund these programs ourselves. If we elect to increase our expenditures to fund drug development

programs or research programs on our own, we will need to obtain additional capital, which may not be available on acceptable terms, or at all.

The success of our strategic alliances depends in part on the performance of our partners, over which we have little or no control.

Our ability to commercialize drugs that we develop with our partners and generate royalties from product sales depends on our partners' abilities to assist us in establishing the safety and efficacy of our drug candidates, obtaining and maintaining regulatory approvals and achieving market acceptance of the drugs once commercialized. Our partners may elect to delay or terminate development of one or more drug candidates, independently develop drugs that could compete with ours, or fail to commit sufficient resources to the marketing and distribution of drugs developed through their strategic alliances with us. If our partners fail to perform as we expect, our potential for revenue from drugs developed through our strategic alliances with them could be dramatically reduced.

Our focus on the discovery of drug candidates directed against specific proteins and pathways within the cytoskeleton is unproven, and we do not know whether we will be able to develop any drug candidates of commercial value.

Our focus on drug discovery and development directed at the cytoskeleton is novel and unique to us. While a number of commonly used drugs and a growing body of research validate the importance of the cytoskeleton in the origin and progression of a number of diseases, no existing drugs specifically and directly interact with the cytoskeletal proteins and pathways that our drug candidates seek to modulate. As a result, we cannot be certain that our drug candidates will appropriately modulate targeted cytoskeletal proteins and pathways or produce commercially viable drugs that safely and effectively treat cancer, congestive heart failure and potentially other diseases. In addition, if we are successful in developing and receiving regulatory approval for a commercially viable drug for the treatment of one disease focused to the cytoskeleton, we cannot be certain that we will also be able to develop and receive regulatory approval for drug candidates for the treatment of other forms of that disease or other diseases. If we or our partners fail to develop and commercialize viable drugs, we will not achieve commercial success.

Our proprietary rights may not adequately protect our technologies and drug candidates.

Our commercial success will depend in part on obtaining and maintaining patent protection and trade secret protection of our technologies and drug candidates as well as successfully defending these patents against third-party challenges. We will only be able to protect our technologies and drug candidates from unauthorized use by third parties to the extent that valid and enforceable patents or trade secrets cover them. Furthermore, the degree of future protection of our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage.

The patent positions of life sciences companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in such companies' patents has emerged to date in the United States. The patent situation outside the United States is even more uncertain. Changes in either the patent laws or in interpretations of patent laws in the United States or other countries may diminish the value of our intellectual property. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. For example:

- we or our licensors might not have been the first to make the inventions covered by each of our pending patent applications and issued patents;

- we or our licensors might not have been the first to file patent applications for these inventions;

- others may independently develop similar or alternative technologies or duplicate any of our technologies;

- it is possible that none of our pending patent applications or the pending patent applications of our licensors will result in issued patents;

- our issued patents and issued patents of our licensors may not provide a basis for commercially viable drugs, or may not provide us with any competitive advantages, or may be challenged and invalidated by third parties;

- we may not develop additional proprietary technologies or drug candidates that are patentable; or

- the patents of others may have an adverse effect on our business.

We also rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. While we use reasonable efforts to protect our trade secrets, our or our strategic partners' employees, consultants, contractors, or scientific and other advisors may unintentionally or willfully disclose our information to competitors. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time consuming, and the outcome would be unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Moreover, if our competitors may independently develop equivalent knowledge, methods and know-how, it will be more difficult for us to enforce our patent rights and our business could be harmed.

If we are not able to defend the patent or trade secret protection position of our technologies and drug candidates, then we will not be able to exclude competitors from developing or marketing competing drugs, and we may not generate enough revenue from product sales to justify the cost of development of our drugs and to achieve or maintain profitability.

If we are sued for infringing intellectual property rights of third parties, such litigation will be costly and time consuming, and an unfavorable outcome would have a significant adverse effect on our business.

Our ability to commercialize drugs depends on our ability to sell such drugs without infringing the patents or other proprietary rights of third parties. Numerous United States and foreign issued patents and pending applications, which are owned by third parties, exist in the areas that we are exploring. In addition, because patent applications can take several years to issue, there may be currently pending applications, unknown to us, which may later result in issued patents that our drug candidates may infringe. There could also be existing patents of which we are not aware that our drug candidates may inadvertently infringe.

In particular, we are aware of an issued United States patent and at least one pending United States patent application assigned to Curis, Inc. relating to certain compounds in the quinazolinone class. SB-715992 falls into this class of compounds. The Curis patent claims a method of use for inhibiting signaling by what is called the hedgehog pathway using certain such compounds. We are also aware that Curis has pending applications in Europe, Japan, Australia and Canada with claims covering compositions of certain quinazolinone compounds. Curis or a third party may assert that the sale of SB-715992 may infringe one or more of these or other patents. We believe that we have valid defenses against an assertion that SB-715992 infringes the Curis patent. However, we cannot guarantee that a court would find such defenses valid. We have not attempted to obtain a license to this patent. If we decide to obtain a license to this patent, we cannot guarantee that we would be able to obtain such a license on commercially reasonable terms, or at all.

In addition, we are aware of a European patent application assigned to Cellomics, Inc. relating to an automated method for analyzing cells. The Cellomics application is proceeding to grant in

Europe. We are also aware that Cellomics has pending applications in the United States, Canada, Japan and Australia. Cellomics or a third party may assert that our Cytometrix technologies fall within the scope of the Cellomics European patent application and thus may infringe one or more of these or other patents. We believe that we have valid defenses to such an assertion. Moreover, the grant of the European patent may be opposed by one or more parties. However, we cannot guarantee that a court would find such defenses valid or that such opposition would be successful. We have not attempted to obtain a license to this patent. If we decide to obtain a license to this patent, we cannot guarantee that we would be able to obtain such a license on commercially reasonable terms, or at all.

If a third party claims that we infringe on their patents or other proprietary rights, we could face a number of issues that could seriously harm our competitive position, including:

- infringement and other intellectual property claims which, with or without merit, can be costly and time consuming to litigate and can delay the regulatory approval process and divert management's attention from our core business strategy;
- substantial damages for past infringement which we may have to pay if a court determines that our drugs or technologies infringe upon a competitor's patent or other proprietary rights;
- a court prohibiting us from selling or licensing our drugs or technologies unless the holder licenses the patent or other proprietary rights to us, which it is not required to do; and
- if a license is available from a holder, we may have to pay substantial royalties or grant cross licenses to our patents or other proprietary rights.

To the extent we elect to fund the development of a drug candidate or the commercialization of a drug at our expense, we will need substantial additional funding.

The discovery, development and commercialization of novel small molecule drugs focused on the cytoskeleton for the treatment of a wide array of diseases is costly. As a result, to the extent we elect to fund the development of a drug candidate or the commercialization of a drug at our expense, we will need to raise additional capital to:

- expand our research and development and technologies;
- fund clinical trials and seek regulatory approvals;
- build or access manufacturing and commercialization capabilities;
- implement additional internal systems and infrastructure;
- maintain, defend and expand the scope of our intellectual property; and
- hire additional management and scientific personnel.

Our future funding requirements will depend on many factors, including:

- the rate of progress and cost of our clinical trials and other research and development activities;
- the costs associated with establishing manufacturing and commercialization capabilities;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the costs and timing of seeking and obtaining regulatory approvals;
- the costs of acquiring or investing in businesses, products and technologies;
- the effect of competing technological and market developments; and

• the payment and other terms and timing of any strategic alliance, licensing or other arrangements that we may establish.

Until we can generate a sufficient amount of product revenue to finance our cash requirements, which we may never do, we expect to finance future cash needs primarily through public or private equity offerings, debt financings or strategic alliances. We cannot be certain that additional funding will be available on acceptable terms, or at all. If we are not able to secure additional funding when needed, we may have to delay, reduce the scope of or eliminate one or more of our clinical trials or research and development programs or future commercialization initiatives.

We currently have no marketing or sales staff, and if we are unable to enter into or maintain strategic alliances with marketing partners or if we are unable to develop our own sales and marketing capabilities, we may not be successful in commercializing our potential drugs.

We currently have no sales, marketing or distribution capabilities. To commercialize our drugs that we determine not to market on our own, we will depend on strategic alliances with third parties, such as GSK, which have established distribution systems and direct sales forces. If we are unable to enter into such arrangements on acceptable terms, we may not be able to successfully commercialize such drugs.

We plan to commercialize drugs on our own, with or without a partner, that can be effectively marketed and sold in concentrated markets that do not require a large sales force to be competitive. To achieve this goal, we will need to establish our own specialized sales force and marketing organization with technical expertise and with supporting distribution capabilities. Developing such an organization is expensive and time consuming and could delay a product launch. In addition, we may not be able to develop this capacity efficiently, or at all, which could make us unable to commercialize our drugs.

To the extent that we are not successful in commercializing any drugs ourselves or through a strategic alliance, our product revenues will suffer, we will incur significant additional losses and the price of our common stock will be negatively affected.

We have no manufacturing capacity, depend on a single manufacturer to produce our clinical trial drug supplies, and anticipate continued reliance on third-party manufacturers for the development and commercialization of our potential drugs.

We do not currently operate manufacturing facilities for clinical or commercial production of our drug candidates under development. We have no experience in drug formulation or manufacturing, and we lack the resources and the capabilities to manufacture any of our drug candidates on a clinical or commercial scale. As a result, we currently rely on a single contract manufacturer to supply, store and distribute drug supplies for our clinical trials and anticipate future reliance on a limited number of third-party manufacturers until we are able to expand our operations to include manufacturing capacities. Any performance failure on the part of our existing or future manufacturers could delay clinical development or regulatory approval of our drug candidates or commercialization of our drugs, producing additional losses and depriving us of potential product revenues.

Our drug candidates require precise, high quality manufacturing. Our failure or our contract manufacturer's failure to achieve and maintain high manufacturing standards, including the incidence of manufacturing errors, could result in patient injury or death, product recalls or withdrawals, delays or failures in product testing or delivery, cost overruns or other problems that could seriously hurt our business. Contract manufacturers often encounter difficulties involving production yields, quality control and quality assurance, as well as shortages of qualified personnel. These manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the United States Drug Enforcement Agency, or DEA, and corresponding state agencies to ensure strict compliance with current Good Manufacturing Practice, or GMP, and other applicable government regulations and corresponding foreign standards; however, we do not have control over third-party manufacturers'

compliance with these regulations and standards. If one of our manufacturers fails to maintain compliance, the production of our drug candidates could be interrupted, resulting in delays, additional costs and potentially lost revenues. Additionally, our third-party manufacturer must pass a preapproval inspection before we can obtain marketing approval for any of our drug candidates in development.

If the FDA or other regulatory agencies approve any of our drug candidates for commercial sale, we will need to manufacture them in larger quantities. To date, our drug candidates have been manufactured in small quantities for preclinical testing and clinical trials and we may not be able to successfully increase the manufacturing capacity, whether in collaboration with third-party manufacturers or on our own, for any of our drug candidates in a timely or economic manner, or at all. Significant scale-up of manufacturing may require additional validation studies, which the FDA must review and approve. If we are unable to successfully increase the manufacturing capacity for a drug candidate, the regulatory approval or commercial launch of any related drugs may be delayed or there may be a shortage in supply. Even if any third-party manufacturer makes improvements in the manufacturing process for our drug candidates, we may not own, or may have to share, the intellectual property rights to such innovation.

In addition, our existing and future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to successfully produce, store and distribute our drug candidates. We currently rely on a single third-party manufacturer as the sole supply source for our drug candidates. In the event of a natural disaster, business failure, strike or other difficulty, we may be unable to replace such third-party manufacturer in a timely manner and the production of our drug candidates would be interrupted, resulting in delays and additional costs.

Switching manufacturers may be difficult because the number of potential manufacturers is limited and the FDA must approve any replacement manufacturer prior to manufacturing our drug candidates. Such approval would require new testing and compliance inspections. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our drug candidates after receipt of FDA approval. It may be difficult or impossible for us to find a replacement manufacturer on acceptable terms quickly, or at all.

We expect to expand our development, clinical research and marketing capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We expect to have significant growth in expenditures, the number of our employees and the scope of our operations, in particular with respect to those drug candidates that we elect to commercialize independently or together with a partner. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The physical expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

The failure to attract and retain skilled personnel could impair our drug development and commercialization efforts.

Our performance is substantially dependent on the performance of our senior management and key scientific and technical personnel. We carry key person life insurance on James H. Sabry, M.D., Ph.D., our President and Chief Executive Officer. The loss of the services of any member of our senior management, scientific or technical staff may significantly delay or prevent the achievement of drug development and other business objectives by diverting management's attention to transition

matters and identification of suitable replacements, and could have a material adverse effect on our business, operating results and financial condition. We also rely on consultants and advisors to assist us in formulating our research and development strategy. All of our consultants and advisors are either self-employed or employed by other organizations, and they may have conflicts of interest or other commitments, such as consulting or advisory contracts with other organizations, that may affect their ability to contribute to us.

In addition, we believe that we will need to recruit additional executive management and scientific and technical personnel. There is currently intense competition for skilled executives and employees with relevant scientific and technical expertise, and this competition is likely to continue. The inability to attract and retain sufficient scientific, technical and managerial personnel could limit or delay our product development efforts, which would adversely affect the development of our drug candidates and commercialization of our potential drugs and growth of our business.

Risks Related to Our Industry

Our competitors may develop drugs that are less expensive, safer, or more effective, which may diminish or eliminate the commercial success of any drugs that we may commercialize.

We compete with companies that are developing drug candidates that focus on the cytoskeleton, as well as companies that have developed drugs or are developing alternative drug candidates for cancer and cardiovascular and infectious diseases. For example, with respect to cancer, Bristol-Myers Squibb's Taxol, Aventis Pharmaceuticals Inc.'s Taxotere, and generic equivalents of Taxol are currently available on the market and commonly used in cancer treatment. Furthermore, we are aware that Merck & Co., Inc. and Bristol-Myers Squibb are conducting KSP-directed research. In addition, Bristol-Myers Squibb, Novartis and other pharmaceutical and biopharmaceutical companies are developing other approaches to inhibiting mitosis. With respect to congestive heart failure, we are aware of a potentially competitive approach being developed by Orion in collaboration with Abbott Laboratories.

Our competitors may:

- develop drug candidates and market drugs that are less expensive or more effective than our future drugs;
- commercialize competing drugs before we or our partners can launch any drugs developed from our drug candidates;
- initiate or withstand substantial price competition more successfully than we can;
- have greater success in recruiting skilled scientific workers from the limited pool of available talent;
- more effectively negotiate third-party licenses and strategic alliances; and
- take advantage of acquisition or other opportunities more readily than we can.

We will compete for market share against large pharmaceutical and biotechnology companies and smaller companies that are collaborating with larger pharmaceutical companies, new companies, academic institutions, government agencies and other public and private research organizations. Many of these competitors, either alone or together with their partners, may develop new drug candidates that will compete with ours, as these competitors may, and in certain cases do, operate larger research and development programs or have substantially greater financial resources than we do. Our competitors may also have significantly greater experience in:

- developing drug candidates;
- undertaking preclinical testing and clinical trials;
- building relationships with key customers and opinion-leading physicians;

- obtaining and maintaining FDA and other regulatory approvals of drug candidates;

- formulating and manufacturing drugs; and

- launching, marketing and selling drugs.

If our competitors market drugs that are less expensive, safer or more effective than our potential drugs, or that reach the market sooner than our potential drugs, we may not achieve commercial success. In addition, the life sciences industry is characterized by rapid technological change. Because our research approach integrates many technologies, it may be difficult for us to stay abreast of the rapid changes in each technology. If we fail to stay at the forefront of technological change we may be unable to compete effectively. Our competitors may render our technologies obsolete by advances in existing technological approaches or the development of new or different approaches, potentially eliminating the advantages in our drug discovery process that we believe we derive from our research approach and proprietary technologies.

The regulatory approval process is expensive, time consuming and uncertain and may prevent our partners or us from obtaining approvals for the commercialization of some or all of our drug candidates.

The research, testing, manufacturing, selling and marketing of drug candidates are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, which regulations differ from country to country. Neither we nor our partners are permitted to market our potential drugs in the United States until we receive approval of a NDA from the FDA. Neither we nor our partners have received marketing approval for any of our drug candidates. Obtaining a NDA can be a lengthy, expensive and uncertain process. In addition, failure to comply with the FDA and other applicable foreign and United States regulatory requirements may subject us to administrative or judicially imposed sanctions. These include warning letters, civil and criminal penalties, injunctions, product seizure or detention, product recalls, total or partial suspension of production, and refusal to approve pending NDAs, or supplements to approved NDAs.

Regulatory approval of a NDA or NDA supplement is never guaranteed, and the approval process typically takes several years and is extremely expensive. The FDA also has substantial discretion in the drug approval process. Despite the time and expense exerted, failure can occur at any stage, and we could encounter problems that cause us to abandon clinical trials or to repeat or perform additional preclinical testing and clinical trials. The number of preclinical studies and clinical trials that will be required for FDA approval varies depending on the drug candidate, the disease or condition that the drug candidate is designed to address, and the regulations applicable to any particular drug candidate. The FDA can delay, limit or deny approval of a drug candidate for many reasons, including:

- a drug candidate may not be safe or effective;

- FDA officials may not find the data from preclinical testing and clinical trials sufficient;

- the FDA might not approve our or our third-party manufacturer's processes or facilities; or

- the FDA may change its approval policies or adopt new regulations.

If we or our partners receive regulatory approval for our drug candidates, we will also be subject to ongoing FDA obligations and continued regulatory review, such as continued safety reporting requirements, and we may also be subject to additional FDA post-marketing obligations, all of which may result in significant expense and limit our ability to commercialize our potential drugs.

Any regulatory approvals that we or our partners receive for our drug candidates may also be subject to limitations on the indicated uses for which the drug may be marketed or contain requirements for potentially costly post-marketing follow-up studies. In addition, if the FDA approves any of our drug candidates, the labeling, packaging, adverse event reporting, storage, advertising,

promotion and record-keeping for the drug will be subject to extensive regulatory requirements. The subsequent discovery of previously unknown problems with the drug, including adverse events of unanticipated severity or frequency, may result in restrictions on the marketing of the drug, and could include withdrawal of the drug from the market.

The FDA's policies may change and additional government regulations may be enacted that could prevent or delay regulatory approval of our drug candidates. We cannot predict the likelihood, nature or extent of adverse government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are not able to maintain regulatory compliance, we might not be permitted to market our drugs and our business could suffer.

If physicians and patients do not accept our drugs, we may be unable to generate significant revenue, if any.

Even if our drug candidates obtain regulatory approval, resulting drugs, if any, may not gain market acceptance among physicians, healthcare payors, patients and the medical community. Even if the clinical safety and efficacy of drugs developed from our drug candidates are established, physicians may elect not to recommend these drugs for a variety of reasons including:

- timing of market introduction of competitive drugs;
- demonstration of clinical safety and efficacy;
- cost-effectiveness;
- availability of reimbursement from health maintenance organizations and other third-party payors;
- convenience and ease of administration;
- prevalence and severity of adverse side effects;
- other potential advantages over alternative treatment methods; and
- marketing and distribution support.

If our drugs fail to achieve market acceptance, we may not be able to generate significant revenue and our business would suffer.

The coverage and reimbursement status of newly approved drugs is uncertain and failure to obtain adequate coverage and reimbursement could limit our ability to market any drugs we may develop and decrease our ability to generate revenue.

There is significant uncertainty related to the coverage and reimbursement of newly approved drugs. The commercial success of our potential drugs in both domestic and international markets is substantially dependent on whether third-party coverage and reimbursement is available for the ordering of our potential drugs by the medical profession for use by their patients. Medicare, Medicaid, health maintenance organizations and other third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement of new drugs, and, as a result, they may not cover or provide adequate payment for our potential drugs. They may not view our potential drugs as cost-effective and reimbursement may not be available to consumers or may not be sufficient to allow our potential drugs to be marketed on a competitive basis. Likewise, legislative or regulatory efforts to control or reduce healthcare costs or reform government healthcare programs could result in lower prices or rejection of our potential drugs. Changes in coverage and reimbursement policies or healthcare cost containment initiatives that limit or restrict reimbursement for our drugs may cause our revenue to decline.

We may be subject to costly product liability claims and may not be able to obtain adequate insurance.

Because we conduct clinical trials in humans, we face the risk that the use of our drug candidates will result in adverse effects. We currently maintain product liability insurance in the amount of $10.0 million with a $5,000 deductible per occurrence, however, such liability insurance excludes coverage of liability resulting from clinical trials. We cannot predict the possible harms or side effects that may result from our clinical trials. We may not have sufficient resources to pay for any liabilities resulting from a claim excluded from, or beyond the limit of, our insurance coverage.

In addition, once we have commercially launched drugs based on our drug candidates, we will face exposure to product liability claims. This risk exists even with respect to those drugs that are approved for commercial sale by the FDA and manufactured in facilities licensed and regulated by the FDA. We intend to secure limited product liability insurance coverage, but may not be able to obtain such insurance on acceptable terms with adequate coverage, or at reasonable costs. There is also a risk that third parties that we have agreed to indemnify could incur liability. Even if we were ultimately successful in product liability litigation, the litigation would consume substantial amounts of our financial and managerial resources and may create adverse publicity, all of which would impair our ability to generate sales of the litigated product as well as our other potential drugs. Moreover, product recalls may be issued at our discretion or at the direction of the FDA, other governmental agencies or other companies having regulatory control for drug sales. If product recalls occur, such recalls are generally expensive and often have an adverse effect on the image of the drugs being recalled as well as the reputation of the drug's developer or manufacturer.

We may be subject to damages resulting from claims that our employees or we have wrongfully used or disclosed alleged trade secrets of their former employers.

Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A loss of key research personnel or their work product could hamper or prevent our ability to commercialize certain potential drugs, which could severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

We use hazardous chemicals and radioactive and biological materials in our business. Any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.

Our research and development processes involve the controlled use of hazardous materials, including chemicals, radioactive and biological materials. Our operations produce hazardous waste products. We cannot eliminate the risk of accidental contamination or discharge and any resultant injury from those materials. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of hazardous materials. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials. Compliance with environmental laws and regulations may be expensive, and current or future environmental regulations may impair our research, development and production efforts.

In addition, our partners may use hazardous materials in connection with our strategic alliances. To our knowledge, their work is performed in accordance with applicable biosafety regulations. In the event of a lawsuit or investigation, however, we could be held responsible for any injury caused to persons or property by exposure to, or release of, these hazardous materials used

by these parties. Further, we may be required to indemnify our partners against all damages and other liabilities arising out of our development activities or drugs produced in connection with these strategic alliances.

Our facilities in California are located near an earthquake fault, and an earthquake or other types of natural disasters or resource shortages could disrupt our operations and adversely affect results.

Important documents and records, such as hard copies of our laboratory books and records for our drug candidates and compounds, are located in our corporate headquarters at a single location in South San Francisco, California near active earthquake zones. In the event of a natural disaster, such as an earthquake, drought or flood, or localized extended outages of critical utilities or transportation systems, we do not have a formal business continuity or disaster recovery plan, and could therefore experience a significant business interruption. In addition, California from time to time has experienced shortages of water, electric power and natural gas. Future shortages and conservation measures could disrupt our operations and cause expense, thus adversely affecting our business and financial results.

Risks Related To Our Common Stock and This Offering

We expect that our stock price will fluctuate significantly, and you may not be able to resell your shares at or above the initial public offering price.

Prior to this offering, you could not buy or sell our common stock publicly. An active public market for our common stock may not develop or be sustained after this offering. We will negotiate and determine the initial public offering price with the representatives of the underwriters based on several factors. This price may vary from the market price of our common stock after this offering. You may be unable to sell your shares of common stock at or above the initial offering price due to fluctuation in the market price of the common stock arising from changes in our operating performance or prospects. In addition, the stock market, particularly in recent years, has experienced significant volatility particularly with respect to pharmaceutical, biotechnology and other life sciences company stocks. The volatility of pharmaceutical, biotechnology and other life sciences company stocks often does not relate to the operating performance of the companies represented by the stock. Factors that could cause this volatility in the market price of our common stock include:

- results from and any delays in the clinical trials programs, including the clinical trials for SB-715992 and SB-743921, our drug candidates for the treatment of cancer;
- failure or delays in entering additional drug candidates into clinical trials, including a drug candidate for the treatment of acute congestive heart failure;
- failure or discontinuation of any of our research programs;
- delays in establishing new strategic alliances;
- announcements concerning our strategic alliances with GSK or AstraZeneca or future strategic alliances;
- delays in the development of our drug candidates and commercialization of our potential drugs by GSK or any future partners or otherwise;
- market conditions in the pharmaceutical and biotechnology sectors and issuance of new or changed securities analysts' reports or recommendations;
- actual and anticipated fluctuations in our quarterly financial and operating results;
- developments or disputes concerning our intellectual property or other proprietary rights;

- introduction of technological innovations or new commercial products by us or our competitors;
- issues in manufacturing our drug candidates or drugs;
- market acceptance of our drugs;
- third-party healthcare reimbursement policies;
- FDA or other United States or foreign regulatory actions affecting us or our industry;
- litigation or public concern about the safety of our drug candidates or drugs; and
- additions or departures of key personnel.

These and other external factors may cause the market price and demand for our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In addition, in the past, when the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit. Such a lawsuit could also divert the time and attention of our management.

If the ownership of our common stock continues to be highly concentrated, it may prevent you and other stockholders from influencing significant corporate decisions and may result in conflicts of interest that could cause our stock price to decline.

Our executive officers, directors and their affiliates will beneficially own or control approximately percent of the outstanding shares of our common stock (after giving effect to the conversion of all outstanding convertible preferred stock and the exercise of all outstanding vested and unvested options and warrants), following the completion of this offering. Accordingly, these executive officers, directors and their affiliates, acting as a group, will have substantial influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets or any other significant corporate transactions. These stockholders may also delay or prevent a change of control of us, even if such a change of control would benefit our other stockholders. The significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors' perception that conflicts of interest may exist or arise.

Future sales of common stock by our existing stockholders may cause our stock price to fall.

The market price of our common stock could decline as a result of sales by our existing stockholders of shares of common stock in the market after this offering, or the perception that these sales could occur. These sales might also make it more difficult for us to sell equity securities at a time and price that we deem appropriate. The lock-up agreements delivered by our executive officers and directors and substantially all of our stockholders and optionholders provide that Goldman, Sachs & Co., in its sole discretion, may release those parties, at any time or from time to time and without notice, from their obligation not to dispose of shares of common stock for a period of 180 days after the date of this prospectus. Goldman, Sachs & Co. has no pre-established conditions to waiving the terms of the lock-up agreements, and any decision by it to waive those conditions would depend on a number of factors, which may include market conditions, the performance of the common stock in the market and our financial condition at that time. Please see "Shares Eligible for Future Sale."

We will have broad discretion in how we use the proceeds of this offering, and we may not use these proceeds effectively, which could affect our results of operations and cause our stock price to decline.

We will have considerable discretion in the application of the net proceeds of this offering. We currently intend to use the net proceeds to:

- co-fund certain later-stage development activities, if we exercise our option under our strategic alliance with GSK, for either or both of SB-715992 or SB-743921;
- continue preclinical activities and conduct clinical development of a drug candidate for the treatment of acute congestive heart failure;
- advance our other research programs;
- scale up our development, sales, marketing and manufacturing operations; and
- in-license technology and acquire or invest in businesses, products or technologies that we believe are complementary to our own.

We have not yet finalized the amount of net proceeds that we will use specifically for each of these purposes. We may use the net proceeds for corporate purposes that do not yield a significant return or any return at all for our stockholders.

Provisions of our charter documents or Delaware law could delay or prevent an acquisition of our company, even if the acquisition would be beneficial to our stockholders, and could make it more difficult for you to change management.

Provisions of our certificate of incorporation and bylaws may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. This is because these provisions may prevent or frustrate attempts by stockholders to replace or remove our current management. These provisions include:

- a classified board of directors;
- a prohibition on stockholder action through written consent;
- a requirement that special meetings of stockholders be called only by the board of directors or a committee duly designated by the board of directors whose powers and authorities include the power to call such special meetings;
- advance notice requirements for stockholder proposals and nominations;
- a requirement of approval of not less than 66 2/3% of all outstanding shares of our capital stock entitled to vote to amend certain of our bylaws by stockholder action, or to amend certain provisions of our certificate of incorporation; and
- the authority of the board of directors to issue preferred stock with such terms as the board of directors may determine.

In addition, Section 203 of the Delaware General Corporation Law prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder, generally a person which together with its affiliates owns or within the last three years has owned 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. Accordingly, Section 203 may discourage, delay or prevent a change in control of our company.

As a result, these provisions in our charter and others available under Delaware law could limit the price that investors are willing to pay in the future for shares of our common stock.

Evolving regulation of corporate governance and public disclosure may result in additional expenses and continuing uncertainty.

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new SEC regulations and Nasdaq National Market rules are creating uncertainty for public companies. We are presently evaluating and monitoring developments with respect to new and proposed rules and cannot predict or estimate the amount of the additional costs we may incur or the timing of such costs. These new or changed laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We are committed to maintaining high standards of corporate governance and public disclosure. As a result, we intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us and we may be harmed.

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have paid no cash dividends on any of our classes of capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our businesses. In addition, the terms of existing or any future debts may preclude us from paying these dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

Investors in this offering will pay a much higher price than the book value of our common stock.

If you purchase common stock in this offering, you will pay more for your shares than the amounts paid by existing stockholders for their shares. You will incur immediate and substantial dilution of $ per share, representing the difference between our pro forma net tangible book value per share after giving effect to this offering and an assumed initial public offering price of $. In the past, we issued options and warrants to acquire common stock at prices significantly below the initial public offering price. To the extent these outstanding options or warrants are ultimately exercised, you will sustain further dilution.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," contains forward-looking statements.

Forward-looking statements include, but are not limited to, statements about:

- the initiation, progress, timing and completion of preclinical research, development, and clinical trials for our drug candidates and potential drug candidates;
- the time and costs involved in obtaining regulatory approvals;
- delays that may be caused by evolving requirements of regulatory agencies;
- the number of drug candidates we pursue;
- our ability to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others, including the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims;
- our options to co-fund the development of one or both of SB-715992 and SB-743921;
- the level of funding we may provide for future drug candidates, including a drug candidate for the treatment of acute congestive heart failure;
- our plans or ability to establish sales, marketing or manufacturing capabilities and to achieve market acceptance for drug candidates;
- our ability to establish, enforce and maintain selected strategic alliances and activities required for commercialization of our drug candidates;
- the acquisition of technologies, products and other business opportunities that require financial commitments;
- our estimates of future performance; and
- our estimates regarding anticipated operating losses, future revenues, if any, from successful development of our drug candidates and commercialization of our potential drugs, capital requirements and our needs for additional financing.

These statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. These risks and other factors include those listed under "Risk Factors" and elsewhere in this prospectus. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable terminology. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We do not intend to update any of the forward-looking statements after the date of this prospectus or to conform these statements to actual results. Neither the Private Securities Litigation Reform Act of 1995 nor Section 27A of the Securities Act of 1933 provides any protection for statements made in this prospectus.

USE OF PROCEEDS

Our net proceeds from the sale of shares of common stock in this offering are estimated to be approximately $ million, based on an assumed offering price of $ per share, after deducting estimated underwriting discounts and commissions and estimated offering expenses, which are payable by us.

We intend to use the proceeds of this offering for general corporate purposes, including to:

- co-fund certain later-stage development activities, if we exercise our option under our strategic alliance with GSK, for either or both of SB-715992 or SB-743921;
- continue preclinical activities and conduct clinical development of a drug candidate for the treatment of acute congestive heart failure;
- advance our other research programs;
- scale up our development, sales, marketing and manufacturing operations; and
- potentially in-license technology and acquire or invest in businesses, products or technologies that we believe are complementary to our own.

Although we periodically engage in preliminary discussions with respect to acquisitions, we are not currently a party to any agreements or commitments and we have no understandings with respect to any acquisitions.

The amounts and timing of our actual expenditures depend on several factors, including the progress of our research and development efforts and the amount of cash used by our operations. We have not determined the amount or timing of the expenditures in the areas listed above. Pending their use, we intend to invest the net proceeds in short-term, investment-grade, interest-bearing instruments.

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We do not anticipate paying any cash dividends on our capital stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business.

CAPITALIZATION

The following table sets forth our capitalization as of September 30, 2003:

- on an actual basis;
- on a pro forma basis, reflecting the conversion of all of our preferred stock into an aggregate of 34,199,272 shares of common stock immediately upon the closing of this offering; and
- on a pro forma as adjusted basis, reflecting the sale of shares of common stock in this offering at an assumed initial public offering price of $ per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this table in conjunction with the sections of this prospectus entitled "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and with our financial statements and related notes.

	As of September 30, 2003		Pro Forma As Adjusted
	Actual	Pro Forma	
	(in thousands)		
Long-term portion of equipment financing lines	$ 7,384	$ 7,384	$
Convertible preferred stock, $0.001 par value, 37,300,000 shares authorized, 34,124,308 shares issued and outstanding, no shares issued and outstanding pro forma and pro forma as adjusted	133,175	—	
Stockholders' equity (deficit):			
Common stock, $0.001 par value, 61,500,000 shares authorized, 3,990,393 shares issued and outstanding, actual; 38,189,665 shares outstanding pro forma; shares outstanding pro forma as adjusted	4	38	
Additional paid-in capital	4,106	137,247	
Deferred stock-based compensation	(2,652)	(2,652)	
Accumulated other comprehensive income	76	76	
Deficit accumulated during the development stage	(85,084)	(85,084)	
Total stockholders' equity (deficit)	(83,550)	49,625	
Total capitalization	$ 57,009	$ 57,009	

The actual number of shares of common stock shown as issued and outstanding in the table above excludes:

- 4,841,012 shares subject to stock options outstanding as of September 30, 2003;
- 1,053,226 shares reserved for issuance under our 1997 Stock Option/ Stock Issuance Plan as of September 30, 2003; and
- 367,500 shares of common stock underlying warrants to issue common and preferred stock outstanding as of September 30, 2003.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the initial public offering price per share and the pro forma as adjusted net tangible book value per share of common stock upon the completion of this offering. Our historical net tangible book value as of September 30, 2003 was approximately $(83.6) million. Pro forma net tangible book value per share represents our total tangible assets less total liabilities divided by the pro forma total number of shares of common stock outstanding after giving effect to the automatic conversion of all shares of our outstanding convertible preferred stock. Dilution in pro forma as adjusted net tangible book value per share represents the difference between the amount per share paid by purchasers of common stock in this offering and the pro forma as adjusted net tangible book value per share of common stock immediately after the closing of this offering.

After giving effect to the sale of the shares of common stock at an assumed initial public offering price of $ per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2003 would have been approximately $ million, or $ per share of common stock. This represents an immediate increase in pro forma net tangible book value of $ per share to existing stockholders and an immediate dilution of $ per share to new investors purchasing shares of common stock in this offering at the initial offering price.

The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share		$
Historical net tangible book value per share as of September 30, 2003	$(20.94)	
Increase per share due to assumed conversion of all shares of convertible preferred stock	22.24	
Pro forma net tangible book value per share as of September 30, 2003	$ 1.30	
Increase per share attributable to new investors		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution per share to new investors		$

The following table summarizes as of September 30, 2003 the number of shares of our common stock purchased from us, the total consideration paid to us, and the average price per share paid to us by existing stockholders and to be paid by new investors purchasing shares of our common stock in this offering. The table assumes an initial public offering price of $ per share, and deducts underwriting discounts and commissions and estimated offering expenses payable by us:

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders		%	$	%	$
New investors					
Total		100%	$	100%	

The above discussion and tables are based on 3,990,393 shares of common stock issued and outstanding as of September 30, 2003 and excludes:

- 4,841,012 shares subject to stock options outstanding as of September 30, 2003;
- 1,053,226 shares reserved for issuance under our 1997 Stock Option/ Stock Issuance Plan as of September 30, 2003; and
- 367,500 shares of common stock underlying warrants to issue common and preferred stock outstanding as of September 30, 2003.

To the extent the outstanding options or warrants are exercised, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

SELECTED FINANCIAL DATA

The following selected financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" following this section and our financial statements and related notes included in the back of this prospectus. The selected financial data for the period from August 5, 1997 (inception) to December 31, 1998 and for the year ended December 31, 1999 and as of December 31, 1998, 1999 and 2000 are derived from our audited financial statements not included in this prospectus. The selected financial data for the years ended December 31, 2000, 2001 and 2002 and as of December 31, 2001 and 2002 are derived from our audited financial statements included in this prospectus. The selected financial data for the nine months ended September 30, 2002 and 2003 and as of September 30, 2003 are derived from our unaudited financial statements included in this prospectus. The selected financial data as of September 30, 2002 are derived from our unaudited financial statements not included in this prospectus. The unaudited selected financial statements include, in the opinion of management, all adjustments, consisting only of normal, recurring adjustments, which management considers necessary for a fair statement of the results for those periods. The historical results are not necessarily indicative of results to be expected in any future period and the results for the nine months ended September 30, 2003 should not be considered indicative of results expected for the full fiscal year.

	Period from August 5, 1997 (date of inception) through December 31,	Year Ended December 31,				Nine Months Ended September 30,	
	1998	1999	2000	2001	2002	2002	2003
Statement of Operations Data:							
Revenues:							
Research and development and grant revenues	$ —	$ —	$ —	$ 7,066	$ 8,596	$ 6,134	$ 5,770
License revenues	—	—	—	1,400	2,800	2,100	2,100
Total revenues	—	—	—	8,466	11,396	8,234	7,870
Operating expenses:							
Research and development	922	6,103	10,403	20,961	28,424	19,661	24,140
General and administrative	1,218	1,515	3,390	5,897	6,953	5,903	7,451
Total operating expenses	2,140	7,618	13,793	26,858	35,377	25,564	31,591
Operating loss	(2,140)	(7,618)	(13,793)	(18,392)	(23,981)	(17,330)	(23,721)
Interest and other income	132	378	902	3,232	2,232	1,838	1,797
Interest and other expense	(7)	(101)	(188)	(714)	(1,331)	(1,102)	(1,771)
Net loss	$ (2,015)	$(7,341)	$(13,079)	$(15,874)	$ (23,080)	$ (16,594)	$ (23,695)
Net loss per common share:							
Basic and diluted	$ (1.80)	$ (4.72)	$ (6.78)	$ (5.59)	$ (6.62)	$ (4.83)	$ (6.28)
Weighted average shares used in computing net loss per common share, basic and diluted	1,122	1,556	1,930	2,840	3,484	3,437	3,772
Pro forma net loss per common share, basic and diluted					$ (0.78)		$ (0.67)
Weighted average shares used in computing pro forma net loss per common share, basic and diluted					29,668		35,336

	As of December 31,					As of September 30,	
	1998	1999	2000	2001	2002	2002	2003
Balance Sheet Data:							
Cash, cash equivalents, short-term and long-term investments	$ 2,055	$ 14,823	$ 56,787	$ 62,314	$ 30,461	$ 36,529	$ 44,397
Restricted cash	157	225	225	6,236	13,106	13,376	13,904
Working capital	1,890	13,113	43,006	50,074	31,693	42,911	43,471
Total assets	3,638	17,644	61,038	79,019	56,168	61,779	70,199
Long-term portion of equipment financing lines	—	892	1,079	3,525	7,077	7,146	7,384
Deficit accumulated during the development stage	(2,016)	(9,356)	(22,434)	(38,309)	(61,389)	(54,902)	(85,084)
Total convertible preferred stock	5,269	24,605	79,462	93,304	93,304	93,304	133,175
Total stockholders' deficit	$(2,005)	$(9,121)	$(21,818)	$(37,352)	$(60,572)	$ (54,103)	$ (83,550)

MANAGEMENT'S DISCUSSION AND ANALYSIS

OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion of our financial condition and results of operations in conjunction with the financial statements and the notes to those statements included elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties. As a result of many factors, such as those set forth under the section entitled "Risk Factors" and elsewhere in this prospectus, our actual results may differ materially from those anticipated in these forward-looking statements.

Overview

We are a biopharmaceutical company focused on the discovery, development and commercialization of novel small molecule drugs specifically targeting the cytoskeleton. Employing our cell biology driven approach and proprietary technologies we have enhanced the speed, efficiency and yield of our drug discovery and development process. We have two drug candidates for the treatment of cancer and potential drug candidates for the treatment of acute congestive heart failure and are pursuing more than ten research programs addressing a number of therapeutic areas.

Since our inception in August 1997, we have incurred significant net losses. As of September 30, 2003, we had an accumulated deficit of $85.1 million. We expect to incur substantial and increasing losses for the next several years as:

- one or both of SB-715992 and SB-743921 enter later-stage development and commercialization, if we exercise our options to co-fund the development of, and co-promote, these drug candidates under our strategic alliance with GSK;
- we advance a drug candidate for the treatment of acute congestive heart failure and other drug candidates through clinical trials;
- we expand our research programs and further develop our proprietary drug discovery technologies; and
- if we elect to fund development or commercialization of any drug candidate.

We intend to pursue selective strategic alliances to enable us to maintain financial and operational flexibility.

To date, we have funded our operations primarily through the sale of equity securities, non-equity payments from GSK, capital lease financings, interest on investments and government grants. We received net proceeds from the sale of equity securities of $39.9 million in the nine-month period ended September 30, 2003, $13.8 million in 2001, $54.9 million in 2000, $19.3 million in 1999 and $5.3 million in 1998. Under our strategic alliance with GSK, GSK has made a $14.0 million upfront cash payment and an initial $14.0 million investment in our equity. GSK has also committed to reimburse FTEs performing research in connection with the strategic alliance and to make additional milestone payments and pay royalties based on product sales. As of December 31, 2003, we have received $17.2 million in FTE reimbursement and $3.2 million in milestone payments from GSK. We received $1.4 million, $6.4 million, $3.5 million, $0.6 million and $1.3 million under equipment financing arrangements in the nine-month period ended September 30, 2003, and the years ending December 31, 2002, 2001, 2000, and 1999, respectively. Interest earned on investments in the nine months ended September 30, 2003, and the years ending December 31, 2002, 2001, 2000 and 1999 was $1.7 million, $2.2 million, $3.1 million, $0.8 million and $0.3 million, respectively. Grant revenues were $0.3 million and $0.1 million in 2001 and 2002, respectively.

GSK has also committed to reimburse FTEs through the end of the five-year research term of the strategic alliance, and to make additional payments upon the achievement of certain precommercialization milestones. GSK has agreed to fund worldwide development and commercialization of drug candidates arising from our strategic alliance. We will earn royalties from sales of any

resulting drugs. We retain a product-by-product option to co-fund certain later-stage development activities, thereby potentially increasing our royalties and affording co-promotion rights in North America. In the event we exercise our co-promotion option, we are entitled to receive reimbursement from GSK for certain sales force costs we incur in support of our commercial activities.

Revenues

Our current revenue sources are limited, and we do not expect to generate any direct revenue from product sales for several years. We currently recognize revenues from our strategic alliance with GSK for contract research activities, which we record as related expenses are incurred. Charges to GSK are based on negotiated rates which are intended to approximate costs for our FTEs performing research under the strategic alliance and our out-of-pocket expenses. GSK has paid us an upfront licensing fee, which we recognize ratably over the five-year research term of the strategic alliance. We may receive additional payments from GSK upon achieving certain precommercialization milestones. Milestone payments are non-refundable and recognized as revenue when earned, as evidenced by achievement of the specified milestones and the absence of ongoing performance obligations. We record amounts received in advance of performance as deferred revenue. None of the revenues recognized to date are refundable if the relevant research effort is not successful. Because a substantial portion of our revenues for the foreseeable future will depend on achieving research, development and other precommercialization milestones, our results of operations may vary substantially from year to year. In the event, we exercise our co-promotion option, we are entitled to receive reimbursement from GSK for certain sales force costs we incur in support of our commercial activities.

We expect that ultimately our future revenues will be derived from royalties on sales from drugs licensed to GSK under our strategic alliance and from those licensed to future partners, as well as from direct sales of our drugs. We retain a product-by-product option under our strategic alliance with GSK to co-fund certain later-stage development activities with GSK under our strategic alliance, thereby potentially increasing our royalties and affording co-promotion rights in North America.

Research and Development

We incur research and development expenses associated with both partnered and unpartnered research activities, as well as the development and expansion of our drug discovery technologies. Research and development expenses relating to our strategic alliance with GSK consist primarily of costs related to research and screening, lead optimization and other activities relating to the identification of compounds for development as mitotic kinesin inhibitors for the treatment of cancer. These costs are reimbursed by GSK on a FTE basis. GSK funds all costs related to preclinical and clinical development of the compounds that are selected for development. Accordingly, we do not currently incur research and development expenses related to the ongoing development of SB-715992 and SB-743921. Under our strategic alliance, we have an option on a product-by-product basis to co-fund certain later-stage development costs for each of these drug candidates. If we exercise an option, our research and development expenses will increase significantly. Research and development expenses related to any development and commercialization activities we elect to fund would consist primarily of employee compensation, supplies and materials, costs for consultants and contract research, facilities costs, and depreciation of equipment. We expect to incur research and development expenses to conduct clinical trials for a drug candidate for the treatment of acute congestive heart failure and in connection with our more than ten research programs in other diseases, as well as the continued advancement of our PUMA system, Cytometrix technologies and our other existing and future drug discovery technologies.

General and Administrative Expenses

General and administrative expenses consist primarily of compensation for employees in executive and operational functions, including finance, business development and corporate

development. Other significant costs include facilities costs and professional fees for accounting and legal services, including legal services associated with obtaining and maintaining patents. After completion of the offering made by this prospectus, we anticipate incurring increases in general and administrative expenses, such as increased costs for insurance and investor relations associated with operating as a publicly traded company. These increases will also likely include the hiring of additional personnel.

Stock Compensation

In connection with the grant of stock options to employees and non-employees, we recorded deferred stock-based compensation as a component of stockholders' deficit. Deferred stock compensation for options granted to employees is the difference between the fair value of our common stock on the date such options were granted and their exercise price. Through 2002, for stock options granted to non-employees, we initially recorded on the date of grant the fair value of the options, estimated using the Black-Scholes valuation model. As the non-employee options become exercisable, we revalue the remaining unvested options, with the change in fair value from period to period represented as a change in the deferred compensation charge. Beginning in 2003, we value and recognize the stock-based compensation expense related to options granted to non-employees as the stock options are earned. We amortize this stock-based compensation as charges to operations over the vesting periods of the options, generally four years.

We recorded $2.8 million of deferred stock-based compensation and $362,000 of amortization of deferred stock-based compensation related to options granted to employees during the nine months ended September 30, 2003. We have recorded $716,000 of deferred stock-based compensation for the period from inception through September 30, 2003 related to options granted to non-employees. We recorded amortization of non-employee deferred compensation of $101,000, $93,000 and $6,000 for the years ended December 31, 2000, 2001 and 2002, respectively. We recorded non-employee stock-based compensation for the nine month periods ended September 30, 2002 and 2003 of ($5,000) and $244,000, respectively. We expect the remaining $2.7 million to be amortized as follows: $266,000 in the fourth quarter of 2003, $840,000 in 2004, $699,000 in 2005, $682,000 in 2006 and $165,000 in 2007, respectively.

The amount of non-cash stock-based compensation expense we expect in future periods may decrease if unvested options for which deferred compensation expense has been recorded are subsequently cancelled, or may increase if we make future option grants with exercise prices below the estimated fair market value of our common stock on the date of grant.

Interest and Other Income and Expense

Interest and other income and expense consists primarily of interest income and interest expense. Interest income is generated primarily from investment of our cash reserves. Interest expense relates generally to the borrowings for capital asset financings.

Results of Operations

Nine months ended September 30, 2002 and 2003

Revenues

Revenues decreased by $0.3 million from $8.2 million in the nine months ended September 30, 2002 to $7.9 million in the nine months ended September 30, 2003. License revenues from our strategic alliance agreement with GSK were $2.1 million for each of the nine-month periods ended September 30, 2002 and 2003 representing ratable recognition of the upfront license fee we received. Research and development and grant revenues of $6.1 million for the nine months ended September 30, 2002 were comprised of $5.0 million of reimbursement for FTEs, $1.0 million of milestone revenues and $0.1 million of other revenues. Research and development and grant

revenues of $5.8 million for the nine months ended September 30, 2003 were comprised of $5.2 million of reimbursement for FTEs, $0.2 million of milestone revenues and $0.4 million of other revenues. The decrease was due to the recognition of $1.0 million of milestone revenue in the nine months ended September 30, 2002, compared to $0.2 million of milestone revenue in the nine months ended September 30, 2003, partially offset by increased FTE reimbursement rates and increased research funding.

Research and development expenses

Research and development expenses increased by $4.4 million from $19.7 million in the nine months ended September 30, 2002 to $24.1 million in the nine months ended September 30, 2003. The increase was primarily due to costs of $2.0 million associated with the expansion of our preclinical and clinical development activities. The increase was also due to increases in salary and benefit costs of $2.2 million as a result of an increase in research and development personnel.

For the nine months ended September 30, 2003, we incurred costs of approximately $4.2 million for research and development activities relating to the discovery of mitotic kinesin inhibitors. During the same period, we incurred costs of approximately $8.4 million, $6.2 million and $5.3 million, respectively, for research and development activities relating to our congestive heart failure program, all other research programs and our PUMA system and Cytometrix technologies.

Clinical development timelines, likelihood of success and total completion costs vary significantly for each drug candidate and are difficult to estimate. We anticipate that we will make determinations as to which research programs to pursue and how much funding to direct to each program on an ongoing basis in response to the scientific and clinical success of each drug candidate. The lengthy process of seeking regulatory approvals, and the subsequent compliance with applicable regulations, require the expenditure of substantial resources. Any failure by us to obtain, or any delay in obtaining, regulatory approvals could cause our research and development expenditures to increase and, in turn, have a material adverse effect on our results of operations.

General and administrative expenses

General and administrative expenses increased by $1.6 million from $5.9 million in the nine months ended September 30, 2002 to $7.5 million in the nine months ended September 30, 2003. The increase was primarily due to rising expenditures for prosecuting and maintaining our intellectual property portfolio of $0.7 million and $0.8 million for outsourced contracted services.

Interest and Other Income and Expenses

Interest and other income (expense), net was $0.7 million for the nine months ended September 30, 2002 compared with $26,000 for the nine months ended September 30, 2003. The decrease was primarily due to an increase in interest expense from $1.1 million for the nine months ending September 30, 2002 to $1.7 million for the nine months ending September 30, 2003. The increase was due to increased debt as a result of additional draw downs on our equipment financing lines.

Years ended December 31, 2000, 2001 and 2002

Revenues

We recorded no revenues for the year ended December 31, 2000 compared with $8.5 million and $11.4 million for the years ended December 31, 2001 and 2002, respectively. The increase in license revenues from our strategic alliance with GSK, which we formed in June 2001, from $1.4 million for the year ended December 31, 2001 to $2.8 million for the year ended December 31, 2002 resulted from a full year of revenue recognition in 2002 compared to a partial year of revenue recognition in 2001. Research and development and grant revenues of $7.1 million for the year

ended December 31, 2001 comprised $3.5 million of reimbursement for FTEs, $2.0 million of milestone revenues, $1.3 million of research funding and $0.3 million of other revenues. Research and development and grant revenues of $8.6 million for the year ended December 31, 2002 comprised $6.7 million of reimbursement for FTEs, $1.0 million of milestone revenues, $0.9 million of various research related revenues. The increase in FTE reimbursement resulted from a full year of FTE activity in 2002 compared to a partial year of FTE activity in 2001.

Research and development expenses

Research and development expenses were $10.4 million for the year ended December 31, 2000 compared with $21.0 million for the year ended December 31, 2001. The increase in research and development expense was primarily due to increased salary and benefit costs of $2.8 million resulting from the hiring of additional research and development personnel and $4.0 million of outsourced contracted services and laboratory consumables. Research and development expenses were $28.4 million for the year ended December 31, 2002, an increase of $7.4 million from the year before. The increase was primarily due to increased salary and benefit costs resulting from the hiring of additional research and development personnel of $3.8 million and increased spending for contracted services and laboratory consumables of $1.1 million.

For the years ended December 31, 2000, 2001 and 2002, we incurred costs of approximately $5.2 million, $7.9 million and $8.9 million, respectively, for research and development activities relating to the discovery of mitotic kinesin inhibitors, of which GSK reimbursed none, $4.8 million and $7.5 million, respectively. During the same periods, we incurred costs of approximately $1.3 million, $6.4 million and $8.8 million, respectively, for research and development activities relating to our congestive heart failure program, $1.1 million, $1.8 million and $3.2 million, respectively, for all other research programs and $2.8 million, $4.9 million and $7.5 million, respectively, for our PUMA system and Cytometrix technologies.

Clinical development timelines, likelihood of success and total completion costs vary significantly for each drug candidate and are difficult to estimate. We anticipate that we will make determinations as to which research programs to pursue and how much funding to direct to each program on an ongoing basis in response to the scientific and clinical success of each drug candidate. The lengthy process of seeking regulatory approvals, and the subsequent compliance with applicable regulations, require the expenditure of substantial resources. Any failure by us to obtain, or any delay in obtaining, regulatory approvals could cause our research and development expenditures to increase and, in turn, have a material adverse effect on our results of operations.

General and administrative expenses

General and administrative expenses were $3.4 million for the year ended December 31, 2000 compared with $5.9 million for the year ended December 31, 2001. The increase of $2.5 million was primarily due to increased salary and benefit costs of $1.1 million resulting from the hiring of additional general and administrative personnel and $0.6 million for corporate legal and accounting fees. General and administrative expenses were $7.0 million for the year ended December 31, 2002, an increase of $1.1 million from the year before. The increase was due to increased salary and benefit costs resulting from the hiring of additional general and administrative personnel.

Interest and Other Income and Expense

Interest and other income (expense), net was $0.7 million for the year ended December 31, 2000 compared with $2.5 million and $0.9 million for the years ended December 31, 2001 and 2002, respectively. The increase in interest and other income (expense), net from the year ended December 31, 2000 as compared with the year ended December 31, 2001 was primarily due to an increase in interest and other income from $0.9 million in 2000 to $3.2 million in 2001. The increase in interest income was due to higher average balances of cash, cash equivalents and investments in

2001, primarily due to the net proceeds from our private equity financing and strategic alliance agreement with GSK in June 2001. Interest and other expense increased from $0.2 million in 2000 to $0.7 million in 2001. This increase was primarily due to loans entered into for capital asset financings. The decrease in interest and other income (expense), net from the year ended December 31, 2001 as compared with the year ended December 31, 2002, was primarily due to an increase in interest and other expense from $0.7 million in 2001 to $1.3 million in 2002. The increase was due to increased debt as a result of loans entered into for capital lease financings. Interest and other income also decreased from $3.2 million in 2001 to $2.2 million in 2002. The decrease in interest income was due to lower average balances of cash, cash equivalents and investments in 2002.

Liquidity and Capital Resources

Our cash, cash equivalents and investments totaled $44.4 million, and our restricted cash totaled $13.9 million, at September 30, 2003. From August 5, 1997, date of inception, through September 30, 2003, we funded our operations through the sale of equity securities, non-equity payments from GSK, equipment financings, government grants and interest earned on investments. We received net proceeds of $39.9 million, $13.8 million, $54.9 million, $19.3 million, and $5.3 million from the sale of equity securities in 2003, 2001, 2000, 1999, and 1998, respectively. As of September 30, 2003, we have received $35.0 million in non-equity payments from GSK. We have received $1.4 million, $6.4 million, $3.5 million, $0.6 million, and $1.3 million under equipment financing arrangements in 2003, 2002, 2001, 2000, and 1999, respectively. Grant revenues were $0.3 million and $0.1 million in 2001 and 2002, respectively. Interest earned on investments in the nine months ended September 30, 2003, and the years ending December 31, 2002, 2001, 2000 and 1999 was $1.7 million, $2.2 million, $3.1 million, $0.8 million, and $0.3 million, respectively.

Net cash used in operating activities amounted to $23.9 million for the nine months ended September 30, 2003, primarily reflecting the net loss occurring for this period of $23.7 million, partially offset by non-cash charges for depreciation and amortization of $2.4 million and deferred stock-based compensation of $0.6 million. Net cash used in investing activities (excluding net proceeds from purchases, sales and maturities of short-term investments) for the nine months ended September 30, 2003 amounted to $2.2 million. Net cash provided by financing activities amounted to $40.0 million for the nine months ended September 30, 2003, primarily reflecting the net proceeds received from the sale of Series E convertible preferred stock and proceeds from additional credit facilities, offset by principal payments on credit facilities.

Net cash used in operating activities was $11.4 million, $1.8 million and $24.8 million for the years ended December 31, 2000, 2001 and 2002, respectively, and resulted primarily from net losses of $13.1 million, $15.9 million and $23.1 million, respectively, adjusted for non-cash depreciation and amortization and stock-based compensation expenses and changes in accounts receivable, accounts payable and accrued liabilities balances. In 2001, cash used in operating activities was significantly decreased by the receipt of the $14.0 million license fee from GSK, which is being recognized as revenue ratably over the five-year research term of the strategic alliance.

Net cash used in investing activities of $25.1 million and $23.5 million for the years ended December 31, 2000 and 2001, respectively was primarily used to fund our purchases of investments and to a lesser extent, to fund purchases of property and equipment. Net cash provided by investing activities was $25.1 million for the year ended December 31, 2002 as a result of sales and maturities of investments to meet liquidity needs.

Net cash provided by financing activities was $55.4 million, $17.0 million and $4.9 million for the years ended December 31, 2000, 2001 and 2002, respectively. The net cash provided by financing activities was primarily attributable to the sale of preferred stock which generated $54.9 million in 2000 and $13.8 million in 2001.

As of September 30, 2003, future minimum payments under lease obligations and equipment financing lines are as follows (in thousands):

	Within one year	One to three years	Four to five years	After five years	Total
Operating leases	$1,678	$ 4,830	$ 3,074	$6,030	$15,612
Equipment financing line	2,104	6,299	1,085	—	9,488
Total	$3,782	$ 11,129	$ 4,159	$6,030	$25,100

Our long-term commitments under operating leases shown above consist of payments relating to our facility lease in South San Francisco, California, which expires in 2013. We have investigated additional office space expansion opportunities to support our administrative, research and development requirements beyond the year 2004 as we expect that by executing our strategy, we will require additional space. As of this date, we have made no formal commitments or plans to access any additional lease space.

We expect to incur substantial costs as we continue to expand our research programs and related research and development activities. Under the terms of our strategic alliance with GSK, we have options to co-fund certain later-stage development activities for SB-715992 and SB-743921. If we exercise an option, our research and development expenses will increase significantly. Research and development expenses for our unpartnered drug discovery programs consist primarily of employee compensation, supplies and materials, costs for consultants and contract research, facilities costs and depreciation of equipment. We expect to incur significant research and development expenses to complete Phase I and subsequent clinical trials for a drug candidate for the treatment of acute congestive heart failure, to advance our more than ten research programs in multiple therapeutic areas and to develop our PUMA system, Cytometrix technologies and other proprietary drug discovery technologies.

Our future capital uses and requirements depend on numerous forward-looking factors. These factors include but are not limited to the following:

- the initiation, progress, timing and completion of preclinical research, development, and clinical trials for our drug candidates and potential drug candidates;
- the time and costs involved in obtaining regulatory approvals;
- delays that may be caused by evolving requirements of regulatory agencies;
- the number of drug candidates we pursue;
- the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims;
- our options to co-fund the development of one or both of SB-715992 and SB-743921;
- the level of funding that we may provide for future drug candidates, including a drug candidate for the treatment of acute congestive heart failure;
- our plans or ability to establish sales, marketing or manufacturing capabilities and to achieve market acceptance for potential drugs;
- our ability to establish, enforce and maintain selected strategic alliances and activities required for commercialization of our potential drugs;
- the acquisition of technologies, products and other business opportunities that require financial commitments; and
- our revenues, if any, from successful development of our drug candidates and commercialization of potential drugs.

We believe that the net proceeds of this offering, our existing cash resources, future payments from GSK and AstraZeneca, proceeds from equipment financings and interest earned on investments will be sufficient to meet our projected operating requirements for at least the next 24 months. If, at any time, our prospects for internally financing our research programs decline, we may decide to reduce research and development expenses by delaying, discontinuing or reducing our funding of development of one or more drug candidates. Alternatively, we might raise funds through public or private financings, strategic relationships or other arrangements. We cannot assure you that the funding, if needed, will be available on attractive terms, or at all. Furthermore, any additional equity financing may be dilutive to stockholders and debt financing, if available, may involve restrictive covenants. Similarly, financing obtained through future co-development arrangements may require us to forego certain commercial rights to future drug candidates. Our failure to raise capital as and when needed could have a negative impact on our financial condition and our ability to pursue our business strategy.

As of September 30, 2002 and 2003 and December 31, 2000, 2001 and 2002, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. In addition, we do not engage in trading activities involving non-exchange traded contracts. Therefore, we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these relationships. We do not have relationships or transactions with persons or entities that derive benefits from their non-independent relationship with us or our related parties.

Disclosure about Market Risk

Our exposure to market risk is limited to interest income sensitivity, which is affected by changes in the general level of United States interest rates, particularly because the majority of our investments are in short-term debt securities. The primary objective of our investment activities is to preserve principal while at the same time maximizing the income we receive without significantly increasing risk. To minimize risk, we maintain our portfolio of cash, cash equivalents, short-term and long-term, and restricted investments in a variety of interest-bearing instruments, including United States government and agency securities, high-grade United States corporate bonds, commercial paper and money market funds. The investment portfolio is subject to interest rate risk and will fall in value in the event market interest rates increase. Due to the short duration of our investment portfolio, we believe an immediate 10% change in interest rates would not be material to our financial condition or results of operations. We do not have any foreign currency or derivative financial instruments.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses and related disclosure of contingent assets and liabilities. We review our estimates on an ongoing basis. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. While our significant accounting policies are described in more detail in the notes to our financial statements included in this prospectus, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our financial statements.

Revenue Recognition

We recognize revenue in accordance with Securities and Exchange Commission Staff Accounting Bulletin, or SAB, No. 101, Revenue Recognition in Financial Statements, as amended by SAB Nos. 101A and 101B. SAB No. 101 requires that four basic criteria must be met before revenue can be recognized: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the fee is fixed and determinable; and collectibility is reasonably assured. Determination of whether persuasive evidence of an arrangement exists and whether delivery has occurred or services have been rendered are based on management's judgments regarding the fixed nature of the fee charged for research performed and milestones met, and the collectibility of those fees. Should changes in conditions cause management to determine these criteria are not met for certain future transactions, revenue recognized for any reporting period could be adversely affected.

Research and development revenues, which are earned under agreements with third parties for contract research and development activities, are recorded as the related expenses are incurred. Charges to the third parties are based upon negotiated rates for our FTEs and actual out-of-pocket costs. Rates for FTEs are intended to approximate our anticipated costs. Milestone payments are non-refundable and recognized as revenue when earned, as evidenced by achievement of the specified milestones and the absence of ongoing performance obligations. Any amounts received in advance of performance are recorded as deferred revenue. None of the revenues recognized to date are refundable if the relevant research effort is not successful.

Grant revenues are recorded as research is performed. Grant revenues are not refundable.

License revenues received in connection with strategic alliance agreements are deferred and recognized on a straight-line basis over the term of the agreement.

Stock-Based Compensation

We account for stock-based employee compensation arrangements in accordance with the provisions of Accounting Principles Board Opinion No. 25 ("APB 25"), "Accounting for Stock Issued to Employees," Statement of Financial Accounting Standards No. 123 ("SFAS No. 123"), "Accounting for Stock-Based Compensation" and complies with the disclosure requirements of Statement of Financial Accounting Standards ("SFAS") No. 148, "Accounting for Stock-Based Compensation and Disclosure an Amendment of FASB Statement No. 123." Under APB 25, compensation expense is based on the difference, if any, on the date of grant, between the estimated fair value of our common stock and the exercise price. SFAS No. 123 defines a "fair value" based method of accounting for an employee stock option or similar equity investment.

We account for equity instruments issued to non-employees in accordance with the provisions of SFAS No. 123 and Emerging Issues Task Force ("EITF") Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling Goods, or Services."

Recent Accounting Pronouncements

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51." FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. In December 2003, the FASB issued FIN 46R, a revision to FIN 46. FIN 46R provides a broad deferral of the latest date by which all public entities must apply FIN 46 to certain variable interest entities to the first reporting period ending after March 15, 2004. We do not expect the adoption of FIN 46 to have a material impact upon our financial position, cash flows or results of operations.

In May 2003, the FASB issued SFAS No. 150, “Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity.” SFAS No. 150 establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability or an asset in some circumstances. Many of those instruments were previously classified as equity. SFAS No. 150 is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. It is to be implemented by reporting the cumulative effect of a change in an accounting principle for financial instruments created before the issuance date of SFAS No. 150 and still existing at the beginning of the interim period of adoption. While the effective date of certain elements of SFAS No. 150 has been deferred, we do not expect the adoption of SFAS No. 150 to have a material impact upon our financial position, cash flows or results of operations.

BUSINESS

Overview

We are the leading biopharmaceutical company focused on the discovery, development and commercialization of novel small molecule drugs that specifically target the cytoskeleton. A number of commonly used drugs and a growing body of research validate the role the cytoskeleton plays in a wide array of human diseases. Our focus on the cytoskeleton enables us to develop novel and potentially safer and more effective drugs for the treatment of these diseases. We believe that our cell biology driven approach and proprietary technologies enhance the speed, efficiency and yield of our drug discovery and development process. Our unique approach has produced two cancer drug candidates, potential congestive heart failure drug candidates, and more than ten other research programs addressing a variety of other disease areas including fungal diseases, inflammatory diseases, high blood pressure and asthma. Our most advanced cancer drug candidate, SB-715992, is the subject of a broad Phase II clinical trials program, being conducted by our partner GSK, designed to evaluate effectiveness in multiple tumor types. An IND was filed with the FDA in 2003 for SB-743921, our second cancer drug candidate being developed by GSK, which we expect will enter Phase I clinical trials in early 2004. In addition, we expect to file an IND and initiate Phase I clinical trials for a drug candidate to treat acute congestive heart failure in the second half of 2004.

Because the cytoskeleton plays a fundamental role in the cell proliferation process, we focused our initial research and development activities on cancer, a disease of unregulated cell proliferation. Our most advanced cancer drug candidate, SB-715992, is a small molecule compound that interferes with cell proliferation and promotes cancer cell death by specifically inhibiting the function of KSP. KSP is a cytoskeletal protein that is essential for cell proliferation, a process which when unregulated, results in tumor growth. Unlike many commonly used cancer drugs, such as Taxol and Taxotere which also impact cytoskeletal proteins, SB-715992 inhibits only cell proliferation and does not interfere with other cell functions. As a result, we believe SB-715992 may exhibit a lower incidence of toxicities. In addition, our preclinical studies indicate that SB-715992 may be effective in treating a wider variety of tumors than existing cancer drugs. SB-715992 is being developed by GSK under our strategic alliance. A Phase II clinical trial for SB-715992 in non-small cell lung cancer began in late 2003. A series of parallel Phase II monotherapy clinical trials and Phase Ib combination therapy clinical trials are scheduled to begin throughout 2004. These additional trials are expected to evaluate SB-715992 in multiple tumor types, including colorectal, breast, ovarian, and other solid and hematologic cancers. In addition, the NCI plans to sponsor additional Phase I and Phase II clinical trials in 2004 to evaluate SB-715992 in other tumor types and other dosing regimens.

Our other cancer drug candidate, SB-743921, is a structurally distinct small molecule compound that also modulates cell proliferation by specifically inhibiting KSP. Like SB-715992, SB-743921 is being developed by GSK under our strategic alliance. We expect that Phase I clinical trials evaluating the safety and pharmacokinetics of SB-743921 will begin in early 2004. The concurrent development of both drug candidates is key to our strategy of maximizing the potential for the development of a commercially viable cancer drug. We expect other drug candidates targeting other related cytoskeletal proteins essential for cell proliferation will emerge from our strategic alliance with GSK. In addition, we are independently pursuing compounds directed at other cytoskeletal protein pathways, unrelated to cell proliferation, in our other research programs that may also have application for the treatment of cancer.

Our focus on the cytoskeleton enables us to leverage research and development investments made in our cancer program for our programs in other diseases. For example, we have extended our understanding of the biology of the cytoskeleton to cardiovascular disease. The cytoskeleton plays a pivotal role in cardiac muscle contraction and has been linked to the origins of congestive heart failure, a disease of impaired cardiac function. We believe that by targeting cytoskeletal proteins and multi-protein systems that are responsible for cardiac muscle contraction, we will be able to develop

effective and safe drugs for the treatment of acute and chronic congestive heart failure. We expect to file an IND and initiate a Phase I clinical trial for a drug candidate for the treatment of acute congestive heart failure in the second half of 2004. Our potential drug candidates specifically target and activate cardiac myosin, a cytoskeletal protein essential for cardiac muscle contraction. In animal models, compounds arising from this program improve cardiac contractility without the potentially life-threatening effects on heart rhythm, heart rate and blood pressure often exhibited by existing congestive heart failure drugs.

We have more than ten other research programs similarly focused on diseases in which we believe the cytoskeleton plays a significant role. For example, in infectious diseases, we are conducting chemical lead optimization activities for compounds that disrupt a specific cytoskeletal protein essential to fungal cell proliferation. These compounds have demonstrated improved survival in an animal model of fungal infection and, because they are directed against a novel cytoskeletal protein target, we believe they may overcome the increasing clinical resistance seen with existing antifungal drugs. In addition, we are evaluating specific inhibitors of other cytoskeletal proteins implicated in fungal cell proliferation and virulence that may also result in potential drugs for fungal infections. We also have a research program designed to find anti-inflammatory drug candidates by targeting specific cytoskeletal proteins involved in cell movement. We have identified compounds that inhibit the function of a key cytoskeletal protein involved in the migration of inflammatory cells into diseased tissues. Furthermore, we have identified, characterized and are now seeking to chemically optimize other compounds that target another cytoskeletal multi-protein system and that inhibit smooth muscle contractility. Our objective for this research program is to discover potential drug candidates for high blood pressure, asthma and other disease conditions.

All of our compounds in research and development have been discovered internally using our cell biology driven approach and proprietary automated technologies. This approach, which we have applied specifically to the cytoskeleton, enables increased speed, efficiency and yield not only in our drug discovery process, but also potentially in clinical development. We focus on developing a detailed understanding of validated protein pathways and multi-protein systems to allow our assay systems to more correctly represent the natural environment of a human cell. This approach differs from the conventional practice of concentrating on individual protein targets assayed in a system that may not adequately represent the natural functional environment that is relevant to disease. As a result, we can identify multiple points of biological intervention to modulate a specific protein pathway or multi-protein system. Our discovery activities are thus directed at particular proteins that may be better targets for the development of potentially safer and more effective drugs.

Our PUMA system and Cytometrix technologies enable early identification and automated prioritization of compounds that are highly selective for their intended protein targets without other cellular effects, and are thereby less likely to give rise to clinical side effects. Our PUMA system identifies compounds within our small molecule library that are likely to target specific cytoskeletal proteins. Our Cytometrix technologies enable us to simultaneously analyze and quantify hundreds of effects of each compound on a cell-by-cell basis. The integrated use of these technologies enables us to efficiently focus our efforts towards those compounds directed at novel cytoskeletal protein targets that are more likely to yield attractive drug candidates. We have advanced our Cytometrix technologies through technical development activities conducted with each of Eisai Research Institute, Novartis Pharma AG, Tularik Inc. and Vertex Pharmaceuticals, Inc.

We selectively seek partners and strategic alliances that enable us to maintain financial and operational flexibility while retaining significant economic and commercial rights to our drug candidates. For example, under our strategic alliance, GSK has made a $14.0 million upfront cash payment, an initial $14.0 million equity investment and has committed to reimburse our FTEs performing research in connection with the strategic alliance. As of December 31, 2003, we have received FTE reimbursement of $17.2 million, and in the future we expect to receive additional FTE reimbursement. In addition, we have received, through December 31, 2003, $3.2 million in precommercialization milestone payments from GSK, and in the future we could receive significant

precommercialization milestone payments and royalties on product sales. GSK is responsible for worldwide development of drug candidates and commercialization of drugs arising from the strategic alliance but we retain a product-by-product option to co-fund certain later-stage development activities in exchange for a higher royalty rate and a further option to secure co-promotion rights in North America. In the event we exercise a co-promotion option, we are entitled to receive reimbursement from GSK for certain sales force costs that we may incur in support of our commercial activities. In addition to our strategic alliance with GSK, our joint technology development activities with each of Eisai Research Institute, Novartis Pharma AG, Tularik Inc. and Vertex Pharmaceuticals, Inc. have supported the continued development and further validated the proprietary technologies that we use in our research programs. In December 2003, we entered into a strategic alliance with AstraZeneca to fund and participate in the development of a new application of our Cytometrix technologies for use by both parties.

We plan to build commercial capabilities to address markets characterized by severe illnesses, large patient populations and concentrated customer groups. For example, for SB-715992 and SB-743921, we intend to establish sales and marketing capabilities in collaboration with GSK to support the future commercialization of one or both of those potential drugs in North America. In markets for which customer groups are not concentrated, we intend to seek strategic alliances for the development and commercialization of drug candidates while retaining significant financial interests.

The Cytoskeleton

The cytoskeleton is a diverse, multi-protein framework that carries out fundamental mechanical activities of cells including mitosis, or the division of genetic material during cell division, intracellular transport, cell movement and contraction and overall cell organization. It provides an ordered but dynamic organizational scaffolding for the cell, and mediates movement, whether of proteins within the cell or of the entire cell itself. The cytoskeleton is comprised of a unique set of filaments and molecular motor proteins. Filaments are long linear structures of proteins that serve as the major scaffolding in cells and conduits for movement of molecular motor proteins transporting other proteins or intracellular material. Microtubule filaments are composed of tubulin, and actin filaments are composed of actin. Molecular motor proteins, such as kinesins and myosins, are proteins that transport materials within cells and are also responsible for cellular movement. Kinesins move along microtubule filaments and myosins move along actin filaments.

These cytoskeletal proteins organize into ordered protein pathways or multi-protein systems that perform important cellular functions. For example, one such structure called the mitotic spindle organizes and divides genetic material during cell proliferation. The mitotic spindle encompasses many cytoskeletal proteins including tubulin, which forms microtubule filaments, and a sub-group of kinesins known as mitotic kinesins. The highly orchestrated action of the proteins within this structure transports and segregates genetic material during cell proliferation. Our most advanced cancer program, partnered with GSK, is focused on discovering potential drugs that inhibit human mitotic kinesins. One of our founders and scientific advisory board members, Dr. Ron Vale, first discovered kinesins. Another of our founders and scientific advisory board members, Dr. Larry Goldstein, was the first scientist to identify and characterize kinesin genes.

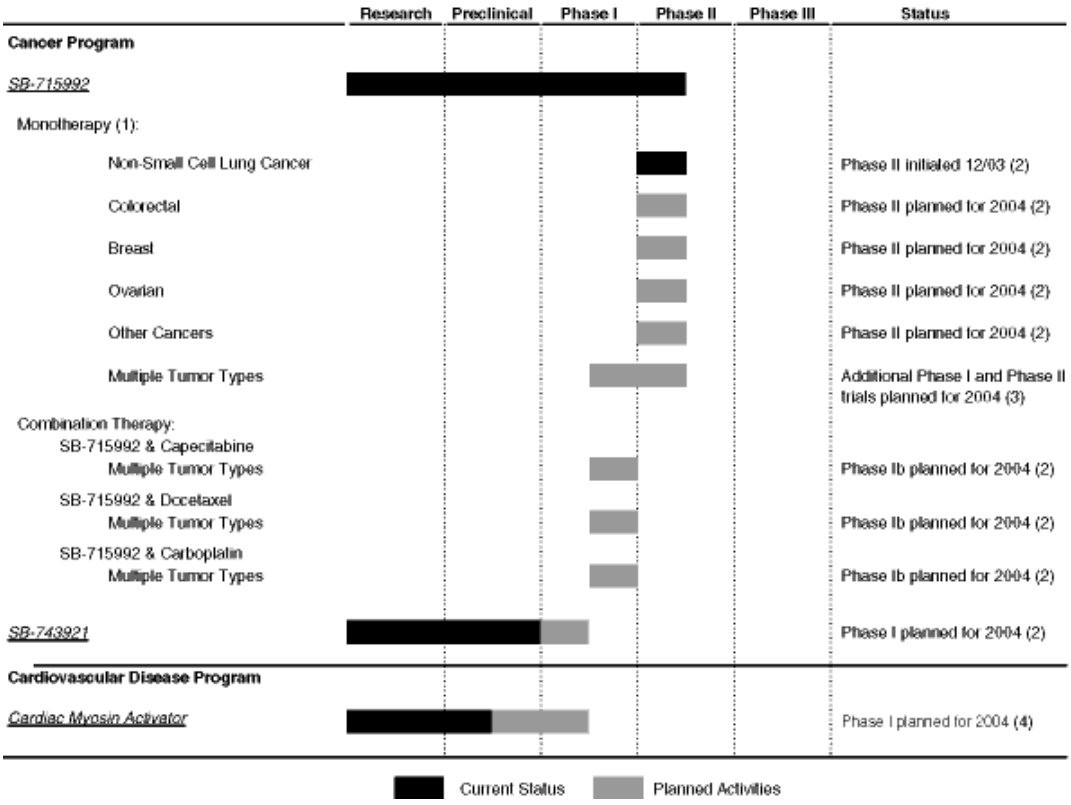
Another multi-protein cytoskeletal structure, called the cardiac sarcomere, contains a highly ordered array of cardiac myosin interacting with actin filaments. The movement of myosin along actin filaments generates the cell contraction responsible for cardiac muscle function. Our program in congestive heart failure is focused on discovering potential drugs that activate cardiac myosin. Another of our founders and scientific advisory board members, Dr. James Spudich, was one of the first scientists to characterize the functional interrelationships of the cytoskeletal proteins in the sarcomere.

Beyond the role these specific cytoskeletal proteins play in cell proliferation and cardiac muscle contraction, other cytoskeletal proteins have been implicated in a variety of other important biological processes and related human diseases. Our drug discovery activities are focused on several of these mechanical cellular processes, including cell proliferation, cardiac and other muscle contraction, cellular organization and cell motility, and are specifically directed at the cytoskeletal proteins that play essential roles in carrying out these functions. For instance, a unique set of cytoskeletal proteins forms the cellular machinery that maintains blood vessel tone. One of our research programs is focused on discovering inhibitors of these proteins as a potential treatment for high blood pressure. In addition, another unique set of cytoskeletal proteins is essential for the movement and function of inflammatory cells. We have a research program focused on the discovery of novel anti-inflammatory drug candidates that inhibit these proteins.

Our Product Development Opportunities

All of our research programs are focused on diseases in which we believe the cytoskeleton plays a significant role. The following table summarizes our clinical and preclinical programs in 2004 with their current status shown in black and planned activities shown in gray, and excludes those programs that are still in the research stage:

Clinical and Preclinical Programs in 2004



(1) The Phase I clinical trials of SB-715992 will be used to support Phase II clinical trials for each of the cancer indications set forth below.
(2) To be conducted by GSK.
(3) To be conducted by NCI. Phase I and Phase II clinical trials may include liver, kidney, head and neck, prostate and melanoma tumor types, as well as the potential evaluation of other potential dosing schedules for SB-715992.
(4) To be conducted by Cytokinetics.

In addition to the above preclinical and clinical programs, we also have more than ten other research programs. For example, we are conducting chemical lead optimization activities in our antifungal program with the objective of selecting a drug candidate to enter IND-enabling studies in 2005. Currently, we are also conducting research on several earlier stage research programs that we believe will contribute to our development pipeline over time.

Our Cancer Program

One of our major development programs is focused on cancer, a disease of unregulated cell proliferation. Each of our cancer drug candidates, SB-715992 and SB-743921, is a structurally distinct small molecule compound that modulates cell proliferation and promotes cancer cell death by specifically inhibiting KSP. KSP is a mitotic kinesin that acts early in the process of mitosis during cell proliferation and is responsible for the formation of a functional mitotic spindle. We initially discovered, characterized and optimized both drug candidates in our research laboratories. These drug candidates are now being developed by GSK through our strategic alliance. SB-715992 is currently the subject of a broad Phase II clinical trials program designed to evaluate efficacy against multiple tumor types. We expect SB-743921 to enter Phase I clinical trials in early 2004. We are also pursuing other potential drug candidates for the treatment of cancer, both within our strategic alliance with GSK and on our own.

Market Opportunity. Each year over 1.3 million new patients are diagnosed with primary malignant solid tumors or hematological cancers in the United States. The incidence of three of the more common cancer types, colorectal, breast and non-small cell lung cancers, in the United States represents between 35% and 50% of the total incidence of these cancers in the United States, Japan and the major commercial markets in Europe.

The current market for cancer drugs worldwide is greater than $10.0 billion. Within this market, we estimate that sales of drugs that inhibit mitosis, or anti-mitotic drugs, such as taxanes, most notably Taxol from Bristol-Myers Squibb and Taxotere from Aventis, comprise a large portion of the commercial market for cancer drugs. Worldwide sales from these taxanes alone represented over $2.0 billion in 2002.

Since their introduction over 30 years ago, anti-mitotic drugs have advanced the treatment of cancer and are commonly used for the treatment of several tumor types. However, these drugs have demonstrated no treatment benefit against certain tumor types, such as colorectal and other tumors. In addition, these drugs target tubulin, a cytoskeletal protein involved not only in mitosis and cell proliferation, but also in other important cellular functions. The inhibition of these other cellular functions produces dose-limiting toxicities such as peripheral neuropathy, an impairment of the peripheral nervous system. Neuropathies result when these drugs interfere with the dynamics of microtubule filaments that are responsible for the long-distance transport of important cellular components within nerve cells.

Our Solution. Mitotic kinesins form a diverse family of newly characterized cytoskeletal proteins that, like tubulin, facilitate the mechanical processes required for mitosis and cell proliferation. There are 14 human mitotic kinesins required to carry out cell division. We have identified and characterized all of them. Each of these mitotic kinesins functions in a pathway to enable cell division. In our cancer program directed towards inhibitors of mitotic kinesins, we have screened each mitotic kinesin and identified small molecule inhibitors of most of them using our PUMA system, and have begun characterizing these inhibitors using our Cytometrix technologies. We believe that this comprehensive approach to the complete mitotic kinesin pathway will allow us to identify a number of drug candidates that may have diverse clinical utilities. The first mitotic kinesin in this pathway and the one upon which we have focused a majority of our research and development efforts is KSP.

We believe that drugs inhibiting KSP and other mitotic kinesins represent the next generation of anti-mitotic cancer drugs. Mitotic kinesins are essential to mitosis, and, unlike tubulin, appear to have

no role in unrelated cellular functions. In addition, they are expressed only in proliferating cells and in higher concentrations in many tumor cells than in non-cancerous proliferating cells. We believe drugs that inhibit KSP and other mitotic kinesins can arrest mitosis and cell proliferation without impacting unrelated, normal cellular functions, avoiding many of the toxicities commonly experienced by patients treated with existing anti-mitotic cancer drugs.

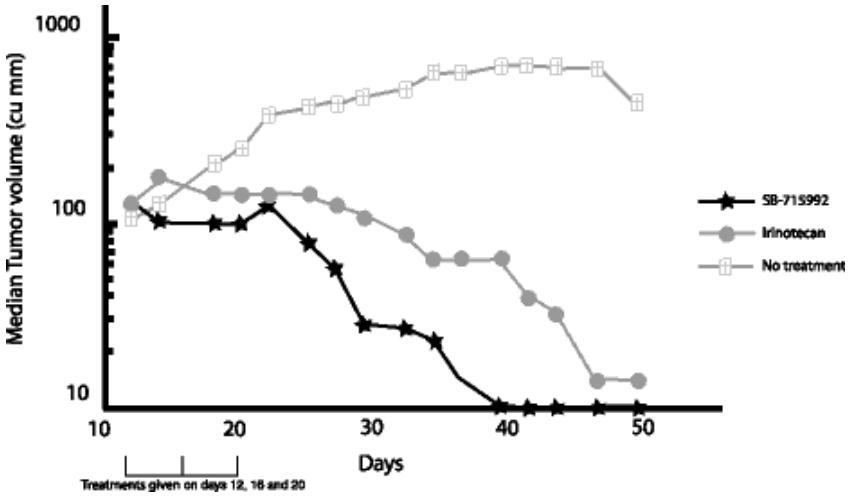
Our small molecule inhibitors of KSP are highly potent and specific. We have performed detailed biochemical studies to understand the precise molecular mechanism by which our drug candidates inhibit KSP activity. In preclinical research, our drug candidates cause shrinkage of tumor size or reduction in tumor growth rates in more than ten different animal models, including cancers of the colon, lung, breast, ovary, pancreas and prostate, sarcomas and leukemias. These models reveal favorable results for our drug candidates in comparison to existing drugs such as irinotecan, topotecan, gemcitabine, paclitaxel, vinblastine and cyclophosphamide. Based on our preclinical data, we believe that our KSP inhibitor drug candidates may have the potential to expand the range of tumor types susceptible to this novel form of targeted anti-mitotic treatment.

We have identified, characterized and optimized several distinct structural classes of KSP inhibitors as well as specific inhibitors of other mitotic kinesins. Our KSP inhibitor drug candidates, SB-715992 and SB-743921, are being developed by GSK through our strategic alliance. We and GSK are also characterizing several other mitotic kinesin inhibitors that may have therapeutic potential. We believe that our cancer drug candidates may be safer, more effective and treat a wider variety of tumor types than current anti-mitotic drugs. In addition, preclinical data on SB-715992 indicate that this compound may have an additive effect in certain combination regimens with existing cancer drugs. Potential advantages of our drug candidates include:

- ***Broad therapeutic potential.*** Our preclinical testing indicates that SB-715992 and SB-743921 cause tumor regression in the form of partial response, complete response or tumor growth inhibition in a variety of tumor types. This is consistent with the important role that KSP plays in cell proliferation in all tumor types, and with the observation that KSP expression levels are higher in some tumor cells than in non-cancerous cells. The graphic below illustrates preclinical effects observed with SB-715992 in a mouse model of colon cancer, a type of cancer that is difficult to treat with existing anti-mitotic drugs.

Reduction in Tumor Volume

SB-715992 Compared to Irinotecan in a Mouse Model of Colon Cancer



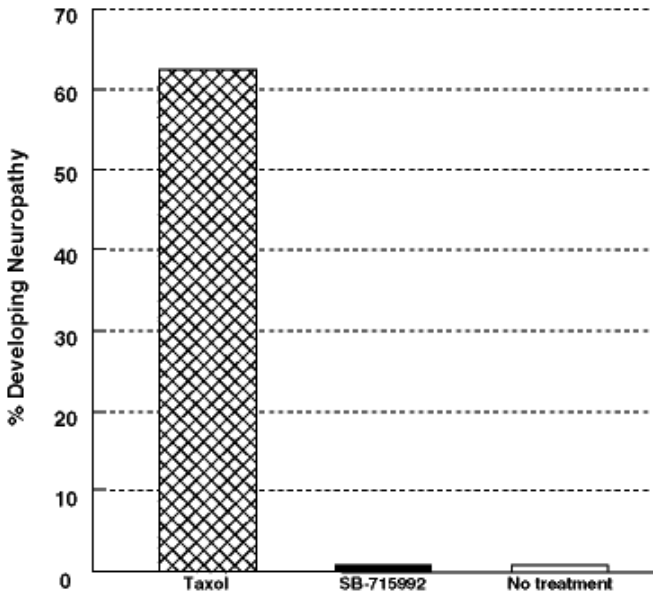
SB-715992 causes colon tumor reduction in a mouse model. This graph shows the size of human colon tumors implanted in a mouse as treated with SB-715992 (shown on the lower curve with stars), irinotecan, a drug that is commonly used in treating colon cancer (middle curve with circles) or no treatment (upper curve with squares). Mice given SB-715992 experienced greater tumor shrinkage over the course of the study than those given irinotecan. Both drugs were administered at the maximum dose tolerated by the animals on days 12, 16 and 20 of the study.

- ***Favorable safety profile.*** Preclinical testing of SB-715992 and SB-743921 demonstrates that these compounds have fewer toxicities than many existing cancer drugs. These studies indicate that the primary toxicities are temporary, limited to gastrointestinal side effects and a reduction in bone marrow function. We observed no evidence of drug-related toxicities to the nervous system, heart, lung, kidney or liver. We believe that this safety profile could enable higher dosing of SB-715992 and SB-743921 and increase their therapeutic value.

Because neuropathy is a common dose-limiting side effect of anti-mitotic cancer drugs, such as Taxol, we analyzed the effects of SB-715992 on the peripheral nervous system in a mouse model.

Incidence of Neurotoxicity Side Effects

SB-715992 Compared to Taxol in a Mouse Model



This graph shows the percentage of mice developing peripheral nervous system dysfunction after being given Taxol (shown on the left with hatched bar), SB-715992 (shown in the middle with black bar) or no treatment (shown on the right with white bar). No evidence of nervous system dysfunction is seen in mice given SB-715992, whereas Taxol causes nerve dysfunction in over 60% of mice tested. Both drugs were given at doses used to treat cancer in mouse models.

Current Program Status. SB-715992 is the subject of an ongoing broad Phase II clinical trials program designed to evaluate its efficacy in treating multiple tumor types. The first Phase II clinical trial began in late 2003 to evaluate SB-715992 as a monotherapy in non-small cell lung cancer. Throughout 2004, other monotherapy Phase II clinical trials are planned to evaluate SB-715992 in other prevalent tumor types addressing large commercial markets, including colorectal, breast, ovarian and other solid and hematologic cancers. Also, throughout 2004, the NCI plans to sponsor several additional Phase I and Phase II clinical trials to evaluate other potential dosing regimens and the effectiveness of SB-715992 in other tumor types, which may include liver, kidney, head and neck, prostate and melanoma, respectively. In aggregate, we anticipate that Phase II clinical trials for SB-715992 will enroll more than 500 patients at over 50 clinical trial sites worldwide and evaluate our drug candidate in patients with a wide array of tumor types who have failed multiple prior therapies in both later and earlier-line treatments. Furthermore, we anticipate that SB-715992 may eventually be used in combination therapy regimens with existing cancer drugs. Phase Ib clinical trials are planned throughout 2004 to evaluate SB-715992 in combination with standard cancer drugs such as capecitabine, docetaxel and carboplatin.

The design of the Phase II clinical trials program draws upon information learned from Phase I clinical trials of SB-715992. GSK commenced the first Phase I clinical trial of SB-715992 in August 2002. This clinical trial, which is nearing completion, is an open-label, non-randomized, dose-finding trial investigating safety, tolerability, pharmacokinetics and pharmacodynamics of SB-715992. This Phase I clinical trial is evaluating various doses of SB-715992 given as a one-hour intravenous infusion repeated once every three weeks. A second similarly designed dose-finding Phase I clinical trial commenced in January 2003. This second study, which is also nearing completion, is evaluating dosing of SB-715992 given once per week for each of three weeks and repeated over a 28-day

cycle. In both clinical trials, the participants are patients with different types of cancer, all of whom have previously failed multiple regimens of drugs.

As of December 31, 2003, 44 patients were enrolled in the first clinical trial and 30 patients were enrolled in the second clinical trial. The only dose-limiting toxicity observed in both clinical trials is temporary neutropenia, a decrease in the number of a certain type of white blood cell. This was anticipated given that we believe SB-715992 inhibits KSP in these white blood cells and prevents their proliferation. At the planned Phase II clinical dosing levels, Phase I clinical trial investigators have observed no clinically meaningful evidence of drug-related toxicity to the nervous system, heart, lung, kidney or liver. Both studies demonstrate that the pharmacokinetics of SB-715992 are dose-proportional, indicating that an increased dose is correlated with increased drug exposure. This allows us to more accurately correlate drug dose with drug effectiveness. Although these Phase I clinical trials were not designed to measure efficacy, anti-cancer activity was observed as indicated by stabilization of disease in seven patients with colorectal, liver, head and neck and kidney cancers over three to thirteen courses of treatment. In addition, trial investigators reported tumor shrinkage in three patients with colorectal, kidney and pancreatic cancers.

In December 2003, under our strategic alliance, GSK filed an IND for SB-743921, a structurally distinct KSP inhibitor. We expect GSK to commence Phase I clinical trials for this drug candidate in early 2004. The Phase I clinical trials program for SB-743921 is designed as an open-label, non-randomized, dose-finding trial investigating safety, tolerability, pharmacokinetics and pharmacodynamics of this drug candidate. Though we are aware of no clinical shortcomings of SB-715992 that are addressed by SB-743921, we believe that having two KSP inhibitors in concurrent clinical development increases the likelihood that a commercial product will result from this program.

Commercialization. GSK is responsible for the worldwide development and commercialization of SB-715992 and SB-743921 and other drug candidates arising from the strategic alliance. We will receive royalties from the sale of any drugs developed under the strategic alliance. In addition, we retain an option for each of SB-715992 and SB-743921 to co-fund certain later-stage development activities, and thereby increase our potential royalty rate. Furthermore, for those drug candidates that we co-fund certain later-stage development activities, we have a further option to secure co-promotion rights in North America. We expect that the royalties to be paid on future sales of SB-715992 and SB-743921 could potentially increase to an upper-teen percentage rate based on increasing product sales and our anticipated level of co-funding. In the event we exercise our co-promotion option, we are entitled to receive reimbursement from GSK for certain sales force costs we incur in support of our commercial activities. We expect to develop sales and marketing capabilities to support the North American commercialization of one or both of SB-715992 and SB-743921 and other drug candidates that may be developed under our strategic alliance with GSK. Because cancer patients are largely treated in institutional and other settings that can be addressed by a specialized sales force, developing our commercial capabilities to address such treatment centers is consistent with our corporate strategy of focusing our commercial efforts on large, concentrated markets.

Our Cardiovascular Disease Program

We have focused our cardiovascular disease research and development activities on congestive heart failure, a disease characterized by compromised contractile function of the heart that impacts its ability to effectively pump blood throughout the body. We have discovered and optimized small molecule compounds that improve cardiac contractility by specifically targeting and activating cardiac myosin, a cytoskeletal protein essential for cardiac muscle contraction. In animal models, compounds arising from this program improve cardiac contractility without the adverse effects on heart rate, blood pressure and oxygen consumption often exhibited by existing congestive heart failure drugs. We are pursuing compounds that are suitable for intravenous administration in an acute care setting. We expect to file an IND with the FDA and initiate a Phase I clinical trial for a small molecule drug candidate for the treatment of acute congestive heart failure in the second half of 2004. We are

conducting additional chemical optimization activities for compounds that are intended for the treatment of chronic congestive heart failure through oral administration.

Market Opportunity. Congestive heart failure is a widespread and rapidly growing disease affecting approximately five million people in the United States alone. The high prevalence of congestive heart failure translates into significant hospitalization rates and associated societal costs. The number of hospital discharges in the United States identified with a primary diagnosis of congestive heart failure rose from 550,000 in 1989 to 900,000 in 1999. Congestive heart failure is the most common primary diagnosis identified in hospital discharges for patients over 65. The annual costs of congestive heart failure in the United States are estimated to be $28.8 billion, including $17.1 billion for inpatient care.

The market for congestive heart failure drugs was approximately $2.7 billion in 2001 and is expected to grow to approximately $4.0 billion by 2011. Current congestive heart failure drugs may have reached a plateau in terms of efficacy because they typically treat only the symptoms and effects of the disease. We believe that drugs that directly target the underlying cellular mechanisms responsible for congestive heart failure will be more effective.

Existing drugs that improve cardiac contractility, including milrinone, dobutamine and digoxin, treat congestive heart failure in part by improving the contraction of cardiac cells, thus leading to an improvement in overall cardiac contractility. These drugs work through a complex cascade of cellular proteins, eventually resulting in an increase in intracellular calcium and a subsequent increase in cardiac cell contractility. However, activation of this cascade and the elevation of calcium levels may also impact other cardiac cell functions, producing unintended and potentially life threatening side effects, such as cardiac ischemia from increased oxygen demand and cardiac arrhythmias. Cardiac ischemia is a condition in which oxygen delivery to the heart is limited and is frequently observed in heart failure patients due to constriction or obstruction of blood vessels. Cardiac arrhythmias are irregularities in the force, quality and sequence of the heart beat. In addition, these existing drugs impact tissues apart from cardiac muscle leading to increases in heart rate and decreases in blood pressure, which can complicate their use in this patient population. Therefore, although existing drugs may be effective in treating the symptoms of heart failure, they often increase congestive heart failure patient morbidity and mortality.

Our Solution. We believe that the direct activation of cardiac myosin is a more specific mechanism by which to improve cardiac cell contractility. Cardiac myosin is the cytoskeletal protein in the cardiac cell that is directly responsible for converting chemical energy into the mechanical force that results in contraction. Cardiac muscle cell contractility is driven by the cardiac sarcomere, a highly ordered cytoskeletal structure composed of cardiac myosin, actin and a set of regulatory proteins. The sarcomere represents one of the most thoroughly characterized protein machines in human biology. Existing drugs that seek to improve cardiac cell contractility increase the concentration of intracellular calcium, which indirectly activates cardiac myosin, but this effect on calcium levels also produces potentially life threatening side effects. Alternatively, our potential drug candidates for the treatment of acute congestive heart failure increase cardiac contractility by specifically targeting and directly activating cardiac myosin in the cardiac sarcomere.

We believe we are the first to develop potential drug candidates that directly activate cardiac myosin. We accomplished this by leveraging our expertise in the biochemistry, biophysics, chemistry and pharmacology of the cardiac sarcomere. We developed a series of proprietary assays that measure the integrated function of the cardiac sarcomere. We believe that we are the first to reconstitute for use in a high-throughput screen the essential components of the cardiac sarcomere from purified proteins as a fully calcium-regulated system simulating the activity of the multi-protein system *in vivo*. The resulting high-throughput assay, incorporated within our PUMA system, is capable of detecting modulators of key aspects of sarcomere function ranging from cardiac myosin interaction with the actin filament to the sensitivity of the regulatory proteins to calcium. We have also developed a suite of complementary assays for the characterization of cardiac myosin activators

in a manner that predicts their physiological activity. As a result, we can rapidly advance and evaluate highly potent and selective compounds in predictive assays replicating physiologic systems, and determine the precise mechanism of action of promising chemical compounds.

We have identified multiple chemical series of cardiac myosin activators with attractive properties through repeated characterization in cell and animal models. In rats, guinea pigs and dogs, compounds arising from this program demonstrate increased cardiac contractility and improved cardiac efficiency without accompanying adverse effects.

Our preclinical testing indicates that our compounds work through a novel mechanism of action that enables the modulation of cardiac cell contraction without increasing intracellular calcium levels or interfering with other unrelated cardiac muscle functions. As a result, we believe that our potential drug candidates may effectively improve cardiac contractility and cardiac output for the treatment of acute congestive heart failure patients without adversely impacting heart rate or blood pressure and minimally affecting cardiac energy consumption.

We believe that our potential drug candidates could be safer and more effective than existing congestive heart failure drugs. Potential advantages of our potential drug candidates may include:

- ***Cardiac efficiency.*** Our preclinical testing indicates that compounds arising from this program both enhance cardiac output and improve cardiac efficiency. Cardiac output measures the volume of blood pumped into circulation by the heart per minute. Cardiac work is the product of cardiac output and blood pressure. One measure of cardiac efficiency is the ratio of cardiac work divided by oxygen consumption.

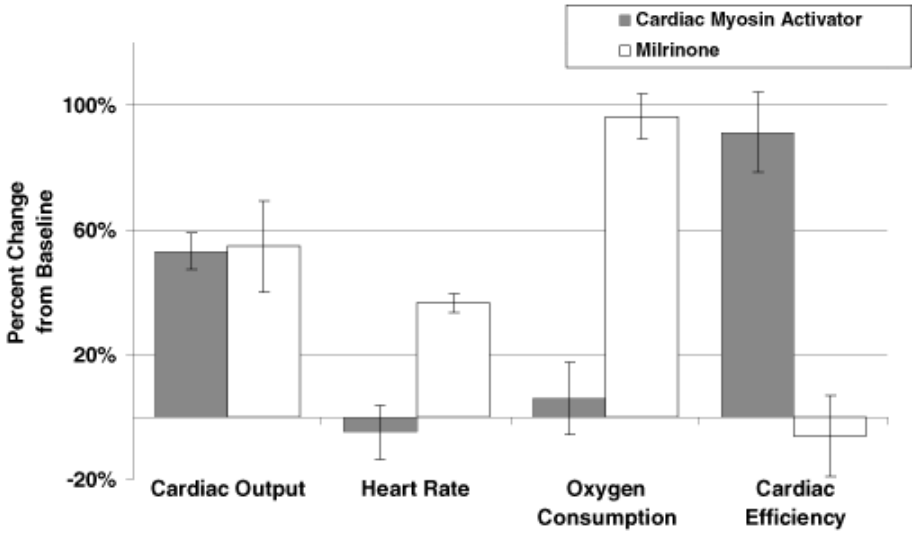
- ***Favorable safety profile.*** Our preclinical testing indicates that compounds arising from this program enhance cardiac output without significantly increasing heart rate, decreasing blood pressure or causing cardiac arrhythmias.

We expect that these properties of our potential drug candidates could result in their improved safety over existing congestive heart failure drugs and allow for the potential use of our cardiac myosin activators for the treatment of patients for whom current drugs cannot be safely administered.

As shown below, in studies in a rat model, our cardiac myosin activator improves cardiac efficiency at a dose producing an equal increase in cardiac output, as compared to milrinone, a drug commonly used to treat acute congestive heart failure.

Increase in Cardiac Efficiency

Our Cardiac Myosin Activator Compared to Milrinone in a Rat Model



Our cardiac myosin activator efficiently increases cardiac output. This graph shows the percentage change of cardiac output, heart rate, oxygen consumption and cardiac efficiency in rats as measured against a baseline. The baseline was established by measuring these cardiac functions in the rat model prior to treatment. While both the cardiac myosin activator (gray bars) and milrinone (white bars) both increase cardiac output in isolated hearts, only the cardiac myosin activator achieves the increase in cardiac output with no associated increase in heart rate or significant increase in oxygen consumption.

Currently our objective in this program is to complete preclinical testing and select a drug candidate that directly activates cardiac myosin for the treatment of acute congestive heart failure. In addition, some of our compounds have properties that may allow for the development of an orally administered compound suitable for the treatment of chronic congestive heart failure. We believe that cardiac myosin activators arising from our cardiovascular disease drug discovery activities may represent improvements relative to drugs commonly used in the treatment of both acute and chronic congestive heart failure.

Current Program Status. We are currently performing advanced characterization activities on a series of potential drug candidates. We expect to file an IND and initiate a Phase I clinical trial with a drug candidate for the treatment of acute congestive heart failure in the second half of 2004. We plan to design this Phase I clinical trial to assess in healthy volunteers the drug candidate's safety, including dosing pharmacokinetics and effects on blood pressure and heart rate. We expect that follow-on studies will evaluate the effects of our drug candidate on cardiac output.

Compounds identified through our research program have been shown to be effective in animal models of normal cardiac function and of heart failure. These compounds specifically activate cardiac myosin and increase cardiac contractile force *in vitro* and *in vivo,* and have no unintended effects on related targets in skeletal or smooth muscle. Furthermore, these compounds have no unintended effects on cardiac cellular calcium concentration. In animal models, these compounds increase cardiac contractility and have no significant adverse effects on heart rate or blood pressure.

We are pursuing compounds that are suitable for intravenous administration for use in treating acute congestive heart failure. We are also undertaking chemical optimization activities for compounds that are intended for oral administration for use in treating chronic congestive heart failure.

Commercialization. While we may seek a strategic alliance to assist in the further funding and expansion of our cardiovascular disease drug discovery and development program, we expect to build capabilities to develop, market and sell our acute congestive heart failure drugs in North America. Because acute congestive heart failure patients are largely treated in teaching and community-based hospitals that can be addressed by a specialized sales force, developing our commercial capabilities to address such treatment centers is consistent with our corporate strategy of focusing our commercial efforts on large, concentrated markets. We expect to rely on one or more strategic alliances to further the discovery, development and commercialization of our potential acute congestive heart failure drugs outside North America and our potential chronic congestive heart failure drugs worldwide.

Other Research Programs

The cytoskeleton plays a role in a broad array of disease areas beyond cancer and cardiovascular disease. Our drug discovery and development activities focused on other therapeutic areas will build on our investments in and experience gained from our more mature cancer and cardiovascular disease programs. Currently, we are conducting drug discovery activities on several earlier stage research programs that we believe will continue to contribute novel drug candidates to our pipeline over time. In each case, our decision to pursue these programs is based on a therapeutic rationale regarding the role of specific cytoskeletal proteins implicated in the relevant disease and desired treatment.

We currently have several chemical series of antifungal drug candidates in lead optimization stage. Many critically ill patients, who have received bone marrow transplantations, solid organ transplantations, chemotherapy or treatment in an intensive care unit, suffer from systemic fungal infections as a result of suppressed or weakened immune systems. Depending on the patient, their condition and the underlying disease, these infections can be fatal. It is estimated that more than 120,000 patients will be treated with antifungal drugs in 2008. The largest drug in this market is Diflucan® (fluconazole), which had sales of approximately $1.1 billion in 2002. The effectiveness of existing antifungals is limited due to their spectrum of activity, their side effects and the resistance to these drugs that develops over time. The evolving resistance of fungal infections requires drugs that are directed against novel microbial targets with novel mechanisms of action.

Currently, we are characterizing several series of antifungal compounds. Each of these compounds targets one of several fungal mitotic kinesins. As with human mitotic kinesins, fungal mitotic kinesins play a role in the formation and function of the mitotic spindle in fungal cell proliferation. In a preclinical model, compounds arising from this program increased survival in mice with systemic fungal infections. We are currently conducting chemical lead optimization activities and expect to continue these activities through 2004, with the goal of selecting a drug candidate for development and initiating IND-enabling studies in 2005. In addition, we are evaluating specific inhibitors of other compounds against other cytoskeletal proteins implicated in fungal cell proliferation and virulence that may also result in drug candidates for fungal infections.

In addition to the programs mentioned above, we have more than ten other research programs in cancer, cardiovascular disease, inflammatory diseases, asthma, high blood pressure and other therapeutic areas. In each of these areas, there is a scientific and therapeutic rationale for modulating a specific cytoskeletal protein pathway or multi-protein system for the treatment of disease that guides our activities. For example, we have a research program designed to find anti-inflammatory drug candidates by targeting specific cytoskeletal proteins involved in cell movement. We have identified compounds that inhibit the function of a key cytoskeletal protein involved in the migration of inflammatory cells into diseased tissues. Furthermore, we have identified, characterized

and are now seeking to chemically optimize compounds that inhibit smooth muscle contractility. Our objective for this research program is to discover potential drug candidates for high blood pressure, asthma and other diseases.

Our Cell Biology Driven Approach to Drug Discovery and Development

All of our compounds in discovery and development have been discovered internally using our cell biology driven approach and proprietary automated technologies.

Cell Biology Driven Approach. We believe that the human cell represents a comprehensive environment in which the full complement of proteins and biological pathways and systems operate, and is therefore the most appropriate context for drug discovery. Unlike the conventional drug discovery approach that typically focuses on a singular molecular target or protein in isolation, we focus on each protein along an entire biological pathway or in multi-protein systems that better represent the natural environment of the cell in which the target proteins function. We then seek to identify the most appropriate protein target or targets, as well as multiple effective ways to chemically modulate each target to elicit the appropriate cellular response without other effects and thereby more likely achieve a desired therapeutic effect. We believe that this approach maximizes the chance of finding the preferred protein target implicated in a particular disease and provides multiple opportunities for success within each target-based drug discovery and development program. Our approach to drug discovery and development may thereby increase the productivity and likelihood of success of our research and development activities compared to the more customary approach practiced by other companies.

Proprietary Drug Discovery Technologies. Our proprietary automated technologies, most notably our PUMA system and Cytometrix technologies, enable early identification and prioritization of drug candidates.

Our PUMA system is a high-throughput screening platform comprised of a series of automated proprietary multi-protein biochemical assays designed to comprehensively screen large compound libraries to yield chemical entities that specifically modulate each of several cytoskeletal molecular motor proteins. To date, we have applied the PUMA system to perform more than 20 million assays, against an in-house library of approximately 500,000 small molecule compounds and a diverse group of molecular motor protein targets. Unlike many screening platforms, these technologies allow us to analyze protein pathway activity and complexity in a high-throughput format that we believe is more predictive of the natural cellular environment. We complement this system with a customized suite of secondary and supplemental biochemical assays.

The PUMA system leverages our focus and expertise in cytoskeletal biology and is a highly sensitive and specific screen for both inhibitors and activators of molecular motor proteins such as mitotic kinesin inhibitors in our cancer program and activators of cardiac myosin in our cardiovascular disease program. We screen small molecule members of our compound library against specific cytoskeletal targets, as well as against related proteins that mediate other cellular functions, to ensure that we identify compounds that modulate our protein targets of interest in a highly potent, specific and understandable manner.

We have developed our Cytometrix technologies as an automated cell biology platform that is an integral part of our small molecule drug discovery process. Cytometrix technologies are our suite of automated and digital microscopy assays that enable us to screen for potency and specificity against multiple biological targets in cells, facilitating the early identification and rejection of those compounds that may have unintended effects and that may subsequently give rise to toxicities. By eliminating undesirable compounds earlier in the drug discovery process, we can focus our attention and resources on the most promising drug candidates. As a result, we believe we minimize investment on commercially unattractive compounds and we can devote more resources to understanding, qualifying and optimizing the compounds that are more likely to yield safe and effective drug candidates.

Cytometrix technologies systematically and comprehensively measure responses of individual human cells to potential drug candidates across multiple experimental conditions. For example, in our cancer program, Cytometrix technologies measure, on a cell-by-cell basis, the number of cells at each stage of cell division and cell death and characterize the type of cell death. This is accomplished by combining the same microscope-based approach that has characterized biological research in the past with modern robotic cell handling, digital imaging, image segmentation and analysis and information handling software technologies.

Cytometrix technologies enable us to efficiently analyze the effects of individual compounds against all proteins simultaneously on a cell-by-cell basis in contrast to assessing more simple outputs of a compound against a single molecular target as is practiced in most other screening systems. Cytometrix technologies profile both existing drugs and small molecule compounds arising out of our drug discovery activities to create detailed cell-by-cell reports of an individual compound's biological response. In 2003, Cytometrix technologies measured hundreds of variables across each of over 800 million human cells. The resulting information is quantitative and reproducible, allowing prioritization of potential drug candidates by identifying those compounds with certain unintended cellular effects. We believe Cytometrix technologies provide additional and potentially complementary information to gene and protein expression pattern analyses because they measure, cell-by-cell, the response of a network of integrated proteins within their natural environment, the human cell.

Attractive small molecule compounds, first identified in primary screening against cytoskeletal protein targets using the PUMA system, are more thoroughly profiled using Cytometrix technologies for secondary screening. These technologies generate quantifiable and reproducible cell-based profiles that fingerprint the cellular responses of diverse molecular mechanisms of drug action. Through the integrated use of our PUMA system and Cytometrix technologies, we are able to efficiently focus our efforts towards those compounds that are directed towards novel cytoskeletal protein targets and that are more likely to yield attractive drug candidates.

Advanced Small Molecule Chemistries. We have assembled a small molecule compound library containing approximately 500,000 compounds. We designed this library to maximize diversity and drug-like characteristics. We support this library with a fully automated infrastructure for compound handling and housing, thus allowing rapid and accurate robotic integration of this chemistry resource with our PUMA system and Cytometrix technologies. We utilize our chemistry technologies together with our expertise in cell biology, pharmacology, drug metabolism and pharmacokinetics for the rapid identification and advancement of attractive compounds and potential drug candidates.

Discovery Informatics. We have organized our drug discovery operations based on the principle that aggregating informatics across biology and chemistry leads to predictive approaches to target identification, compound analoging and lead optimization, as well as enhances the speed, efficiency and yield of our drug discovery and development process. In support of this principle, we have also created a powerful discovery informatics infrastructure that efficiently manages large and complex data sets representing valuable cell biology driven and biochemical research insights across state-of-the-art chemoinformatics, bioinformatics and genomics resources.

Our Corporate Strategy

Our goal is to become a fully-integrated biopharmaceutical company focused on discovering, developing and commercializing novel drugs to treat cancer, cardiovascular disease and other disease areas. We intend to achieve this goal by:

Focusing on the cytoskeleton.

We focus our drug discovery activities on the cytoskeleton because its role in disease has been scientifically and commercially validated. We believe that our unique understanding of the cytoskeleton will enable us to discover drug candidates with novel mechanisms of action and

which may avoid the limitations of current drugs. We believe that there are few, if any, other companies that have focused specifically on the cytoskeleton.

Because the cytoskeleton has been validated in a wide array of human disease, we intend to pursue drug discovery programs across a number of therapeutic areas and we believe we can leverage research and development investments made for a program directed at one therapeutic area to programs directed at other therapeutic areas. This may facilitate our building a diverse pipeline of drug candidates in a cost-effective fashion.

Leveraging our cell biology driven approach and proprietary technologies to increase the speed, efficiency and yield of our drug discovery and development process.

Our innovative cell biology driven research approach and proprietary technologies, including our PUMA system and Cytometrix technologies, enhance the speed, efficiency and yield of the discovery and, potentially, the development process. We believe we can identify and focus on the most promising compounds earlier in the drug discovery process. We do this by quickly and efficiently eliminating those compounds that exhibit potential toxicities. As a result, we may save time and discovery and development resources and reduce the occurrence of later-stage failures. This early intervention and screening may result in a higher yield of drug candidates with a greater chance of clinical success.

Pursuing multiple drug candidates for each cytoskeletal protein target and broad clinical trials for select drug candidates.

For each of our programs, we characterize several drug candidates for each of a number of cytoskeletal protein targets that act together in a protein pathway or in a multi-protein system. By leveraging our drug discovery efficiencies, we intend to identify, for each cytoskeletal protein target, multiple potential drug candidates that we may progress into clinical development. We believe that this approach of pursuing a portfolio of potential drug candidates for each cytoskeletal protein target in parallel allows us to increase our potential for commercial success.

Because the cytoskeleton plays a fundamental role in many related diseases, we have an opportunity in those diseases to conduct broad and comprehensive Phase II clinical development trials programs for our drug candidates across multiple related disease areas. We believe that by pursuing this approach we increase the probability of these drug candidates achieving success in clinical trials and maximize the commercial potential related to these programs.

Establishing select strategic alliances to accelerate our drug development programs while preserving significant development and commercial rights.

We intend to selectively enter into strategic alliances to advance our drug discovery and development programs or technologies, to obtain financial support and to leverage the therapeutic area expertise and development and commercialization resources of our partners to accelerate the development of our drug candidates. Where appropriate, we plan to maintain certain rights in development of potential drug candidates and commercialization of potential drugs arising from our alliances so we can build our internal clinical development and sales and marketing capabilities while also maintaining a significant share of the potential revenues for any products arising from each alliance.

Building development and commercialization capabilities directed at large concentrated markets.

We focus our drug discovery and development efforts on large commercial market opportunities in concentrated markets, such as cancer and acute congestive heart failure. By

focusing on concentrated markets, we believe that a company at our stage of development can compete effectively within these markets against larger, more established companies with more financial resources. For each opportunity focused on these markets, we intend to build clinical development and sales and marketing capabilities in order to become a fully-integrated biopharmaceutical company that can develop and commercialize drugs that arise from our research programs.

Our Strategic Alliances

GlaxoSmithKline. In June 2001, we formed a strategic alliance with GSK to discover, develop and commercialize novel small molecule drugs targeting KSP and certain other cytoskeletal proteins involved in cell proliferation for applications in the treatment of cancer and other diseases. This strategic alliance leverages our expertise in the biology and pharmacology of mitotic kinesins and GSK's pharmaceutical research, development and commercialization capabilities. Under this strategic alliance, GSK has made a $14.0 million upfront cash payment and an initial $14.0 million investment in our equity. GSK has also committed to reimburse our FTEs conducting research in connection with the strategic alliance and to make additional milestone payments and pay royalties based on product sales. As of December 31, 2003, we have received $17.2 million in FTE reimbursement and $3.2 million in precommercialization milestone payments. GSK is responsible for worldwide development of drug candidates and commercialization of drugs arising from the strategic alliance, but we retain a product-by-product option to co-fund certain later-stage development activities in exchange for a higher royalty rate and a further option to secure co-promotion rights in North America. In the event we exercise a co-promotion option for a product, we are entitled to receive from GSK reimbursement of certain sales force costs that we may incur in support of our commercial activities. We are eligible to receive precommercialization milestone payments ranging from $30.0 to $50.0 million for each mitotic kinesin target for products directed towards each target. In addition, our royalty rate increases based on our level of participation in funding of certain later-stage development activities and as total worldwide sales escalate for each drug developed and commercialized under the strategic alliance. We expect that the royalties to be paid on future sales of SB-715992 and SB-743921 could potentially increase to an upper-teen percentage rate based on our anticipated level of co-funding of certain later-stage development activities of the drug candidates and increasing product sales.

At predefined times during the research term of the collaboration, we are entitled to select certain mitotic kinesin targets and related compounds for independent research and development at our expense. If we elect to pursue a compound independently, then at a predetermined time during clinical development, GSK will have an option to return the compound to the joint activities of the collaboration subject to GSK's payment to us of both an amount based on a premium over our research and development costs and also an enhanced royalty on product sales. In the event that GSK does not exercise its option with respect to a compound, we may independently develop and commercialize that compound, subject to a royalty on product sales payable to GSK.

Under our strategic alliance, GSK has commenced a comprehensive Phase II clinical trials program designed to evaluate SB-715992 in parallel clinical trials across multiple tumor types in 2003. We expect GSK to commence Phase I clinical trials of SB-743921 to begin in early 2004. Additionally, through the strategic alliance, we are performing target validation, hit identification and lead characterization and optimization on other cytoskeletal targets, to select potential drug candidates that may similarly be advanced to clinical development.

AstraZeneca. In December 2003, we formed an exclusive strategic alliance with AstraZeneca to develop automated imaging-based cellular phenotyping and analysis technologies for the *in vitro* prediction of hepatotoxicity, or toxicity of the liver, a common reason for failure of drug candidates in clinical development. AstraZeneca has agreed to fund a portion of our technology development activities over a two-year research term and pay annual licensing fees and make a milestone payment to us upon the successful achievement of certain agreed-upon performance criteria.

Other Strategic Alliances. We have advanced our Cytometrix technologies through our Cytometrix Technologies Development Partner Program with each of Eisai Research Institute, Novartis Pharma AG, Tularik Inc. and Vertex Pharmaceuticals, Inc. These partners provided us with research compounds that were profiled using our Cytometrix technologies. We have completed our obligations associated with these relationships.

We formed a strategic alliance with Exelixis, Inc. in December 2001 to design and generate diverse, small molecule compound libraries. We and Exelixis may use these libraries for screening in our respective drug discovery programs. Exelixis may use its proprietary combinatorial chemistry platform to synthesize compounds designed in collaboration with us. The synthesized compounds will be jointly owned and each company will have the right to use the compounds in its own internal research programs, as well as in its respective collaborative research efforts.

Our Patents and Intellectual Property

Our policy is to patent the technology, inventions and improvements that we consider important to the development of our business. As of December 31, 2003, we had 72 issued United States patents, notices of allowance on six additional United States patent applications and over 100 additional pending United States and foreign patent applications. In addition, we have an exclusive license to five United States patents and more than 20 pending United States and foreign patent applications from the University of California and Stanford University. We also rely on trade secrets, technical know-how and continuing innovation to develop and maintain our competitive position.

We seek to protect our proprietary information by requiring our employees, consultants, contractors, outside partners and other advisers to execute nondisclosure and assignment of invention agreements upon commencement of their employment or engagement, through which we seek to protect our intellectual property. Agreements with our employees also prevent them from bringing the proprietary rights of third parties to us. We also require confidentiality or material transfer agreements from third parties that receive our confidential data or materials.

Our commercial success will depend in part on obtaining and maintaining patent protection and trade secret protection of our technologies and drug candidates as well as successfully defending these patents against third-party challenges. We will only be able to protect our technologies from unauthorized use by third parties to the extent that valid and enforceable patents or trade secrets cover them.

The patent positions of pharmaceutical, biotechnology and other life sciences companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in such patents has emerged to date in the United States. The patent situation outside the United States is even more uncertain. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- we or our licensors might not have been the first to make the inventions covered by each of our pending patent applications and issued patents;
- we or our licensors might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies;

- it is possible that none of our pending patent applications or none of the pending patent applications of our licensors will result in issued patents;

- our issued patents and issued patents of our licensors may not provide a basis for commercially viable drugs or therapies, or may not provide us with any competitive advantages, or may be challenged and invalidated by third parties;

- our patent applications or patents may be subject to interference, opposition or similar administrative proceedings;

- we may not develop additional proprietary technologies that are patentable; or

- the patents of others may have an adverse effect on our business.

The defense and prosecution of intellectual property suits, interferences, oppositions and related legal and administrative proceedings in the United States are costly, time consuming to pursue, and result in diversion of resources. The outcome of these proceedings is uncertain and could significantly harm our business.

We also rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. While we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, partners and other advisors may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third party illegally obtained and is using our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how.

The pharmaceutical, biotechnology and other life sciences industries are characterized by the existence of a large number of patents and frequent litigation based upon allegations of patent infringement. While our drug candidates are in clinical trials, and prior to commercialization, we believe our current activities fall within the scope of the exemptions provided by 35 U.S.C. Section 271(e) in the United States and Section 55.2(1) of the Canadian Patent Act, each of which covers activities related to developing information for submission to the FDA and its counterpart agency in Canada. As our drug candidates progress toward commercialization, the possibility of an infringement claim against us increases. While we attempt to ensure that our drug candidates and the methods we employ to manufacture them do not infringe other parties' patents and other proprietary rights, competitors or other parties may assert that we infringe on their proprietary rights.

In particular, we are aware of an issued United States patent and at least one pending United States patent application assigned to Curis, Inc. relating to certain compounds in the quinazolinone class. SB-715992 falls into this class of compounds. The Curis patent claims a method of use for inhibiting signaling the hedgehog pathway using certain quinazolinones. We are also aware that Curis has pending applications in Europe, Japan, Australia and Canada with claims covering compositions of certain quinazolinone compounds. Curis or a third party may assert that the sale of SB-715992 candidate may infringe one or more of these or other patents.

We believe that we have valid defenses to an assertion that SB-715992 infringes the Curis patent. However, we cannot guarantee that a court would find such defenses valid. We have not attempted to obtain a license to this patent. If we decide to obtain a license to this patent, we cannot guarantee that we would be able to obtain such a license on commercially reasonable terms, or at all.

In addition, we are aware of a European patent application assigned to Cellomics, Inc. relating to an automated method for analyzing cells. The Cellomics application is proceeding to grant in Europe. We are also aware that Cellomics has pending applications in the United States, Canada, Japan and Australia. Cellomics or a third party may assert that our Cytometrix technologies fall within the scope of the Cellomics European patent application and thus, may infringe one or more of

these or other patents. We believe that we have valid defenses to such an assertion. Moreover, the grant of the European patent may be opposed by one or more parties. However, we cannot guarantee that a court would find such defenses valid or that such opposition would be successful. We have not attempted to obtain a license to this patent. If we decide to obtain a license to this patent, we cannot guarantee that we would be able to obtain such a license on commercially reasonable terms, or at all.

Government Regulation

The FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries impose substantial requirements upon the clinical development, manufacture, marketing and distribution of drugs. These agencies and other federal, state and local entities regulate research and development activities and the testing, manufacture, quality control, safety, effectiveness, labeling, storage, record keeping, approval, advertising and promotion of our drug candidates and drugs.

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FFDCA, and implementing regulations. The process required by the FDA before our drug candidates may be marketed in the United States generally involves the following:

- completion of extensive preclinical laboratory tests, preclinical animal studies and formulation studies all performed in accordance with the FDA's good laboratory practice, or GLP, regulations;
- submission to the FDA of an IND application which must become effective before clinical trials may begin;
- performance of adequate and well-controlled clinical trials to establish the safety and efficacy of the product candidate for each proposed indication;
- submission of a NDA to the FDA;
- satisfactory completion of an FDA preapproval inspection of the manufacturing facilities at which the product is produced to assess compliance with current GMP, or cGMP, regulations; and
- FDA review and approval of the NDA prior to any commercial marketing, sale or shipment of the drug.

The testing and approval process requires substantial time, effort and financial resources, and we cannot be certain that any approvals for our drug candidates will be granted on a timely basis, if at all.

Preclinical tests include laboratory evaluation of product chemistry, formulation and stability, as well as studies to evaluate toxicity in animals. The results of preclinical tests, together with manufacturing information and analytical data, are submitted as part of an IND application to the FDA. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises concerns or questions about the conduct of the clinical trial, including concerns that human research subjects will be exposed to unreasonable health risks. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Our submission of an IND, or those of our collaborators, may not result in FDA authorization to commence a clinical trial. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development, and the FDA must grant permission before each clinical trial can begin. Further, an independent institutional review board, or IRB, for each medical center proposing to conduct the clinical trial must review and approve the plan for any clinical trial before it commences at that center and it must monitor the study until completed. The FDA, the IRB, or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects or patients are being exposed to an

unacceptable health risk. Clinical testing also must satisfy extensive Good Clinical Practice, or GCP, regulations and regulations for informed consent.

Clinical Trials. For purposes of NDA submission and approval, clinical trials are typically conducted in the following three sequential phases, which may overlap:

- *Phase I:* Studies are initially conducted in a limited population to test the drug candidate for safety, dose tolerance, absorption, metabolism, distribution and excretion in healthy humans or, on occasion, in patients, such as cancer patients. In some cases, particularly in cancer trials, a sponsor may decide to run what is referred to as a "Phase Ib" evaluation, which is a second safety-focused Phase I clinical trial typically designed to evaluate the impact of the drug candidate in combination with currently approved drugs.

- *Phase II:* Studies are generally conducted in a limited patient population to identify possible adverse effects and safety risks, to determine the efficacy of the drug candidate for specific targeted indications and to determine dose tolerance and optimal dosage. Multiple Phase II clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more expensive Phase III clinical trials. In some cases, a sponsor may decide to run what is referred to as a "Phase IIb" evaluation, which is a second, confirmatory Phase II clinical trial that could, if positive and accepted by the FDA, serve as a pivotal clinical trial in the approval of a drug candidate.

- *Phase III:* These are commonly referred to as pivotal studies. When Phase II clinical trials demonstrate that a dose range of the drug candidate is effective and has an acceptable safety profile, Phase III clinical trials are undertaken in large patient populations to further evaluate dosage, to provide substantial evidence of clinical efficacy and to further test for safety in an expanded and diverse patient population at multiple, geographically dispersed clinical trial sites.

In some cases, the FDA may condition approval of an NDA for a drug candidate on the sponsor's agreement to conduct additional clinical trials to further assess the drug's safety and effectiveness after NDA approval. Such post-approval trials are typically referred to as Phase IV clinical trials.

New Drug Application. The results of drug candidate development, preclinical testing and clinical trials are submitted to the FDA as part of an NDA. The NDA also must contain extensive manufacturing information. Once the submission has been accepted for filing, by law the FDA has 180 days to review the application and respond to the applicant. The review process is often significantly extended by FDA requests for additional information or clarification. The FDA may refer the NDA to an advisory committee for review, evaluation and recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations. The FDA may deny approval of an NDA if the applicable regulatory criteria are not satisfied, or it may require additional clinical data or an additional pivotal Phase III clinical trial. Even if such data are submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. Data from clinical trials are not always conclusive and FDA may interpret data differently than we or our collaborators interpret data. Once issued, the FDA may withdraw drug approval if ongoing regulatory requirements are not met or if safety problems occur after the drug reaches the market. In addition, the FDA may require testing, including Phase IV clinical trials, and surveillance programs to monitor the effect of approved products which have been commercialized, and the FDA has the power to prevent or limit further marketing of a drug based on the results of these post-marketing programs. Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved label. Further, if there are any modifications to the drug, including changes in indications, labeling, or manufacturing processes or facilities, we may be required to submit and obtain FDA approval of a new NDA or NDA supplement, which may require us to develop additional data or conduct additional preclinical studies and clinical trials.

Fast Track Designation. The FDA's fast track program is intended to facilitate the development and to expedite the review of drugs that are intended for the treatment of a serious or life-threatening condition for which there is no effective treatment and which demonstrate the potential to address unmet medical needs for the condition. Under the fast track program, the sponsor of a new drug candidate may request the FDA to designate the drug candidate for a specific indication as a fast track drug concurrent with or after the filing of the IND for the drug candidate. The FDA must determine if the drug candidate qualifies for fast track designation within 60 days of receipt of the sponsor's request.

If fast track designation is obtained, the FDA may initiate review of sections of an NDA before the application is complete. This rolling review is available if the applicant provides and the FDA approves a schedule for the submission of the remaining information and the applicant pays applicable user fees. However, the time period specified in the Prescription Drug User Fees Act, which governs the time period goals the FDA has committed to reviewing an application, does not begin until the complete application is submitted. Additionally, the fast track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

In some cases, a fast track designated drug candidate may also qualify for one or more of the following programs:

- ***Priority Review.*** Under FDA policies, a drug candidate is eligible for priority review, or review within a six-month time frame from the time a complete NDA is accepted for filing, if the drug candidate provides a significant improvement compared to marketed drugs in the treatment, diagnosis or prevention of a disease. A fast track designated drug candidate would ordinarily meet the FDA's criteria for priority review. We cannot guarantee any of our drug candidates will receive a priority review designation, or if a priority designation is received, that review or approval will be faster than conventional FDA procedures, or that FDA will ultimately grant drug approval.

- ***Accelerated Approval.*** Under the FDA's accelerated approval regulations, the FDA is authorized to approve drug candidates that have been studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit to patients over existing treatments based upon either a surrogate endpoint that is reasonably likely to predict clinical benefit or on the basis of an effect on a clinical endpoint other than patient survival. In clinical trials, surrogate endpoints are alternative measurements of the symptoms of a disease or condition that are substituted for measurements of observable clinical symptoms. A drug candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase IV or post-approval clinical trials to validate the surrogate endpoint or confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or to validate a surrogate endpoint or confirm a clinical benefit during post-marketing studies, will allow the FDA to withdraw the drug from the market on an expedited basis. All promotional materials for drug candidates approved under accelerated regulations are subject to prior review by the FDA.

When appropriate, we and our collaborators intend to seek fast track designation or accelerated approval for our drug candidates. We cannot predict whether any of our drug candidates will obtain a fast track or accelerated approval designation, or the ultimate impact, if any, of the fast track or the accelerated approval process on the timing or likelihood of FDA approval of any of our drug candidates.

Satisfaction of FDA regulations and requirements or similar requirements of state, local and foreign regulatory agencies typically takes several years and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease. Typically, if a drug candidate is intended to treat a chronic disease, as is the case with some of the drug

candidates we are developing, safety and efficacy data must be gathered over an extended period of time. Government regulation may delay or prevent marketing of drug candidates for a considerable period of time and impose costly procedures upon our activities. The FDA or any other regulatory agency may not grant approvals for new indications for our drug candidates on a timely basis, if at all. Even if a drug candidate receives regulatory approval, the approval may be significantly limited to specific disease states, patient populations and dosages. Further, even after regulatory approval is obtained, later discovery of previously unknown problems with a drug may result in restrictions on the drug or even complete withdrawal of the drug from the market. Delays in obtaining, or failures to obtain, regulatory approvals for any of our drug candidates would harm our business. In addition, we cannot predict what adverse governmental regulations may arise from future United States or foreign governmental action.

Other regulatory requirements. Any drugs manufactured or distributed by us or our collaborators pursuant to FDA approvals are subject to continuing regulation by the FDA, including recordkeeping requirements and reporting of adverse experiences associated with the drug. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with ongoing regulatory requirements, including cGMPs, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Failure to comply with the statutory and regulatory requirements can subject a manufacturer to possible legal or regulatory action, such as warning letters, suspension of manufacturing, seizure of product, injunctive action or possible civil penalties. We cannot be certain that we or our present or future third-party manufacturers or suppliers will be able to comply with the cGMP regulations and other ongoing FDA regulatory requirements. If our present or future third-party manufacturers or suppliers are not able to comply with these requirements, the FDA may halt our clinical trials, require us to recall a drug from distribution, or withdraw approval of the NDA for that drug.

The FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities and promotional activities involving the Internet. A company can make only those claims relating to safety and efficacy that are approved by the FDA. Failure to comply with these requirements can result in adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe legally available drugs for uses that are not described in the drug's labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, impose stringent restrictions on manufacturers' communications regarding off-label use.

Competition

We compete in the segments of the pharmaceutical, biotechnology and other related markets that address cancer, cardiovascular disease and antifungal applications, each of which is highly competitive. We face significant competition from most pharmaceutical companies as well as biotechnology companies that are also researching and selling products designed to address cancer, cardiovascular disease or antifungal applications. Many of our competitors have significantly greater financial, manufacturing, marketing and drug development resources than we do. Large pharmaceutical companies in particular have extensive experience in clinical testing and in obtaining regulatory approvals for drugs. These companies also have significantly greater research capabilities than we do. In addition, many universities and private and public research institutes are active in cancer, cardiovascular disease and antifungal research, some in direct competition with us.

We believe that our ability to successfully compete will depend on, among other things:

- efficacy, safety and reliability of our drug candidates;
- the speed at which we develop drug candidates;
- completion of clinical development and laboratory testing and obtaining regulatory approvals for drug candidates;
- timing and scope of regulatory approvals;
- our ability to manufacture and sell commercial quantities of a product to the market;
- product acceptance by physicians and other health care providers;
- quality and breadth of our technology;
- skills of our employees and our ability to recruit and retain skilled employees;
- protection of our intellectual property;
- cash flows under existing and potential future arrangements with licensees, partners and other parties; and
- availability of substantial capital resources to fund development and commercialization activities.

It is possible that our competitors will develop drug candidates and market drugs that are less expensive and more effective than our future drugs or that will render our drugs obsolete. It is also possible that our competitors will commercialize competing drugs before we or our partners can launch any drugs developed from our drug candidates. Companies that currently sell drugs in our markets of interest include, for example, Bristol-Myers Squibb, Abbott, Aventis, Johnson & Johnson, Merck and Pfizer. Other companies that are early-stage are currently developing alternative treatments and products that could compete with our drugs. These organizations also compete with us to attract qualified personnel and potential parties for acquisitions, joint ventures or other strategic alliances.

Legal Proceedings

We are not involved in any legal proceedings.

Facilities

Our facilities consist of approximately 53,408 square feet of research and office space. We lease 50,195 square feet located at 280 East Grand Avenue in South San Francisco, California until 2013 with an option to renew that lease over that timeframe. We also lease 3,213 square feet at 250 East Grand Avenue in South San Francisco, California on a month-to-month basis.

Employees

As of December 31, 2003, our workforce consisted of 163 full-time employees, 57 of whom hold Ph.D. or M.D. degrees, or both, and 30 of whom hold other advanced degrees. Of our total workforce, 131 are engaged in research and development and 32 are engaged in business development, finance, and administration. We have no collective bargaining agreements with our employees, and we have not experienced any work stoppages. We believe that our relations with our employees are good.

MANAGEMENT

Executive Officers and Directors

Our directors and executive officers as of January 15, 2004 are as follows:

Name	Age	Position
James H. Sabry, M.D., Ph.D.	45	President and Chief Executive Officer; Director
Robert I. Blum	40	Executive Vice President, Corporate Development and Finance and Chief Financial Officer
David J. Morgans, Jr., Ph.D.	51	Senior Vice President, Drug Discovery and Development
Jay K. Trautman, Ph.D.	45	Vice President, Technology
Gail A. Sheridan	55	Vice President, Human Resources
Stephen Dow(1)(3)	48	Director
A. Grant Heidrich, III(1)(2)	51	Director
Charles Homcy, M.D.	55	Director
William J. Rutter, Ph.D.(2)(3)	76	Director
Michael Schmertzler(1)	51	Director
James A. Spudich, Ph.D.(3)	62	Director

(1) Member of the Audit Committee.

(2) Member of the Compensation Committee.

(3) Member of the Nominating and Governance Committee.

James H. Sabry, M.D., Ph.D. co-founded the company and has served as our President and Chief Executive Officer and as a member of our board of directors since August 1997. Prior to that he held faculty positions at the University of California, San Francisco, from 1989 to 1998, and Harvard Medical School from 1984 to 1987. Dr. Sabry received a M.D. from Queens University and a Ph.D. in Cell Biology from the University of California, San Francisco.

Robert I. Blum has served as our Executive Vice President, Corporate Development and Finance and Chief Financial Officer since January 2004. From October 2001 to December 2003, he served as our Senior Vice President, Corporate Development and Finance and Chief Financial Officer. From July 1998 to September 2001, Mr. Blum was our Vice President, Business Development. Prior to joining us in July 1998, he was Director, Marketing at COR Therapeutics, Inc., a biopharmaceutical company from 1996. From 1991 to 1996, he was Director, Business Development at COR Therapeutics. Prior to this, Mr. Blum performed roles of increasing responsibility in sales, marketing and other pharmaceutical business functions at Marion Laboratories, Inc. and Syntex Laboratories, Inc. Mr. Blum received B.A. degrees in Human Biology and Economics from Stanford University and a M.B.A. from Harvard Business School.

David J. Morgans, Jr., Ph.D. has served as our Senior Vice President, Drug Discovery and Development since October 2003. From March 2002 to September 2003, he served as our Senior Vice President, Drug Discovery and, from January 2002 to February 2002, he served as our Vice President, Drug Discovery. From October 2000 to December 2001, he served as our Vice President Chemistry. From July 1998 to October 2000, Dr. Morgans served as Vice President of Research for Iconix Pharmaceuticals, Inc., a biopharmaceutical company. From March 1995 to July 1998, he was Vice President, Inflammatory Diseases at Roche Bioscience, a pharmaceutical company. From 1983 to 1995, he held various positions at Syntex Laboratories, Inc., most recently as Director, Medicinal Chemistry. From 1980 to 1983, Dr. Morgans was Assistant Professor of Chemistry at University of California, Santa Cruz. Dr. Morgans received a B.S. in Chemistry from Saint Joseph's University in Philadelphia and a Ph.D. in Chemistry from Columbia University.

Jay K. Trautman, Ph.D. has served as our Vice President, Technology since May 2003. He served as our Vice President, Cell Technologies from June 2002 to May 2003. From March 2000 to June 2002, he served as the Chief Executive Officer of Praelux Incorporated, a research and development company and wholly owned subsidiary of Amersham Biosciences Corp. From March 1996 to March 2000, Dr. Trautman held a variety of positions at Praelux and its predecessor company, SEQ Ltd., and was responsible for directing research and development activities. Dr. Trautman received a B.S. in Chemistry from the University of Washington and a Ph.D. in Chemistry from Cornell University.

Gail A. Sheridan has served as our Vice President, Human Resources since January 2004. She joined Cytokinetics as a consultant in March 2003 and became an employee in January 2004. She was sole proprietor of Human Resources Consulting from January 1995 to December 2003. From 1993 to 1995, she was Director, Human Resources at SyStemix Incorporated. From 1990 to 1993, she was Director, Human Resources at Software Publishing Corporation. From 1986 to 1990, Ms. Sheridan was a Principal at Telemarketing Solutions. From 1983 to 1986, she held Vice President positions at Bank of America. Ms. Sheridan holds a B.A. in Political Science from the University of California at Berkeley and an M.A. in American Studies from the University of Southern California.

Stephen Dow has served as a member of our board of directors since April 1999. Mr. Dow has been a General Partner with Sevin Rosen Funds, a venture capital firm, since 1983. Since 1989, Mr. Dow has served on the board of directors of Citrix Systems, an enterprise software company, and has been Citrix's Chairman of the Board since May 2002. Mr. Dow received a B.A. in Economics and a M.B.A. from Stanford University.

A. Grant Heidrich, III has served as a member of our board of directors since April 1999. Mr. Heidrich has been a Managing Director of certain Mayfield funds, each a venture capital firm, since 1983. Mr. Heidrich currently serves as Chairman of the board of directors of Tularik, Inc., a biotechnology company, and as the Lead Outside Director of Millennium Pharmaceuticals, Inc., a biopharmaceutical company. Mr. Heidrich received a B.A. in Human Biology from Stanford University and a M.B.A. from Columbia University.

Charles Homcy, M.D. has served as a member of our board of directors since February 2003. Since November 2003, Dr. Homcy has served as Chief Executive Officer of Portola Pharmaceuticals, Inc., a biopharmaceutical company. From January 2003 to November 2003, Dr. Homcy served as Senior Research and Development Advisor of Millennium Pharmaceuticals. From February 2002 to December 2002, Dr. Homcy served as the President of Research and Development at Millennium Pharmaceuticals. From 1995 to February 2002, he served as Executive Vice President, Research and Development of COR Therapeutics, Inc., where he served as a member of the board of directors from 1998 to February 2002. From 1994 to March 1995, Dr. Homcy was President of the Medical Research Division of American Cyanamid Company-Lederle Laboratories (now a division of Wyeth-Ayerst Laboratories). From 1990 to 1994, Dr. Homcy was Executive Director of the Cardiovascular and Central Nervous System Research Section at Lederle Laboratories. Dr. Homcy currently serves on the board of directors of Millennium Pharmaceuticals and Kosan Biosciences, Inc., a biopharmaceutical company. Dr. Homcy received a A.B. in Biology and a M.D. from Johns Hopkins University.

William J. Rutter, Ph.D. has served as a member of our board of directors since May 1999. Since July 2002, Dr. Rutter has been the Chairman, Chief Executive Officer and a principal shareholder of Synergenics LLC, a biotechnology consulting company. From 1981 until May 1999, Dr. Rutter served as Chairman of the Board of Directors of Chiron Corporation, a biopharmaceutical, vaccine and blood testing company that he co-founded. He is currently Chairman Emeritus of Chiron. From August 1983 to April 1989, Dr. Rutter was the Director of the Hormone Research Institute at the University of California, San Francisco. Since January 2000, Dr. Rutter has served on the board of directors of Sangamo Biosciences, Inc., a biotechnology company. Dr. Rutter received a B.A. in

Biochemistry from Harvard University, a M.S. in Biochemistry from the University of Utah and a Ph.D. in Biochemistry from the University of Illinois.

Michael Schmertzler has served as a member of our board of directors since April 2003. Since 2001, Mr. Schmertzler has been a Managing Director of Aries Advisors, LLC, a sub-advisor to Credit Suisse First Boston Equity Partners, L.P., a private equity fund, and the Chair of the investment committees. From 1997 to 2001, Mr. Schmertzler was Co-Head of United States and Canadian Private Equity at Credit Suisse First Boston, an investment banking company. Prior to 1997, Mr. Schmertzler held various management positions with Morgan Stanley and its affiliates, including President of Morgan Stanley Leveraged Capital Funds and Managing Director, and was Managing Director and Chief Financial Officer of Lehman Brothers Kuhn Loeb, an investment banking firm. Mr. Schmertzler received a B.A. from Yale College in Molecular Biophysics and Biochemistry, History and City Planning and a M.B.A. from the Harvard Business School.

James A. Spudich, Ph.D. co-founded the company and has served as a member of our board of directors since August 1997. From September 1998 to September 1999, he served as our Principal Scientist. Dr. Spudich is the Douglass M. Nola Leishman Professor in Cardiovascular Disease and Professor of Biochemistry and Developmental Biology at Stanford University where he has been a member of the faculty since 1977. From 1994 to 1998, Dr. Spudich served as Chairman of Stanford University's Department of Biochemistry. From 1979 to 1984, he was Chairman of Stanford's Department of Structural Biology. He was elected a member of the American Academy of Arts and Sciences in 1997 and a member of the National Academy of Sciences in 1991. Dr. Spudich is also a member of our scientific advisory board. Dr. Spudich received a B.S. in Chemistry from the University of Illinois and a Ph.D. in Biochemistry from Stanford University.

Scientific Advisory Board

The following individuals are members of our scientific advisory board:

John C. Chabala, Ph.D. is a founder and member of the Management Scientific Advisory Board of Pharmacopeia, Inc., a combinatorial chemistry and chemoinformatics company, where he served as President from 1993 to 1996 and Chief Scientific Officer from 1993 to 1997. Prior to joining Pharmacopeia, Dr. Chabala was Vice President of Discovery Chemistry at Bristol-Myers Squibb from 1991 to 1993. Prior to that, he was with Merck ultimately as Executive Director, Basic Chemistry, supervising a variety of medicinal and other chemistry programs. Dr. Chabala received a B.S. in Chemistry from Bucknell University, and a Ph.D. in Organic Chemistry from Massachusetts Institute of Technology.

David G. Drubin, Ph.D. is Professor of Genetics in the Department of Molecular and Cell Biology at the University of California, Berkeley, where he has been a member of the faculty since 1988. Dr. Drubin is Associate Editor of Molecular Biology of the Cell, Editor of the Journal of Cell Biology and a member of the editorial board of Trends of Cell Biology. He was elected Co-Chair and Chair of the Gordon Research Conference on the Plant and Fungal Cytoskeleton in 1995 and 1998, respectively, and was Chair of the Program Committee for the 1999 meeting of the American Society of Cell Biology. Dr. Drubin received an A.B. in Biochemistry from the University of California at Berkeley, and a Ph.D. in Biochemistry from the University of California at San Francisco.

Lawrence S. B. Goldstein, Ph.D. co-founded our company in August 1997. Dr. Goldstein has been a member of the University of California, San Diego faculty since 1995, where he is Professor of Cellular and Molecular Medicine and an Investigator in the Howard Hughes Medical Institute. From 1984 to 1993, he was Professor of Cellular and Developmental Biology at Harvard University. Dr. Goldstein is a member of the editorial boards of Molecular Biology of the Cell and the Journal of Cell Biology. He is also Associate Editor of the Annual Review of Cell and Developmental Biology. Dr. Goldstein received a B.A. in Biology from the University of California, San Diego, and a Ph.D. in Genetics from the University of Washington.

Eric M. Gordon, Ph.D. held the position of Senior Vice President of Research at Sunesis Pharmaceuticals, Inc. from October 1998 to July 2002. From 1996 to 1998, Dr. Gordon was President, Scientific Founder and Chief Scientific Officer of Versicor. Prior to this, Dr. Gordon served as Vice President of Research and Director of Chemistry at Affymax Research Institute from 1992 to 1996, and from 1990 to 1992, he was the Director of Medicinal Chemistry at The Squibb Institute in Princeton where he began as a Postdoctoral Fellow in 1974. His professional activities include serving as president of the Princeton American Chemical Society, Adjunct Professor of Medicinal Chemistry at the University of Wisconsin, and he was elected an American Association Advancement of Science (AAAS) Fellow. Dr. Gordon received a B.S. and a Ph.D. in Medicinal Chemistry from the University of Wisconsin.

Marc W. Kirschner, Ph.D. is the founding chair of the Department of Cell Biology and the Carl W. Walter Professor of Cell Biology at Harvard Medical School, where he joined the faculty in 1993. Dr. Kirschner was a co-founder of Harvard's Institute of Chemistry and Cell Biology. From 1978 to 1993, Dr. Kirschner was Professor at the University of California, San Francisco. From 1972 to 1978, he was on faculty at Princeton University. Dr. Kirschner is a member of the National Academy of Sciences and the American Academy of Arts and Sciences, and was elected a Foreign Member of the Royal Society of London in 1999. Dr. Kirschner received a B.A. in Chemistry from Northwestern University and received a Ph.D. in Cell Biology from the University of California, Berkeley.

Larry E. Overman, Ph.D. has been a member of the faculty at the University of California, Irvine since 1971, where he is currently a Distinguished Professor of Chemistry. He is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. Dr. Overman is Editor-in-Chief of Organic Reactions and a member of the Board of Consulting Editors of Tetrahedron Publications. He is a member of the board of directors of Organic Syntheses and Organic Reactions and a member of Pharmacopeia's scientific advisory board. Dr. Overman received a B.A. in Chemistry in 1965 from Earlham College and a Ph.D. in Organic Chemistry in 1969 from the University of Wisconsin.

Thomas D. Pollard, M.D. is the Higgins Professor of Molecular, Cellular and Developmental Biology at Yale University. From 1996 to 2000, Dr. Pollard served as Professor and President of the Salk Institute for Biological Studies in La Jolla, California. From 1977 to 1996, Dr. Pollard directed the Department of Cell Biology at the Johns Hopkins Medical School. From 1993 to 1998, he chaired the Commission on Life Sciences at the National Research Council. Dr. Pollard served as Council Member and President of both the American Society for Cell Biology and the Biophysical Society. Dr. Pollard received a B.A. in Chemistry and Zoology from Pomona College, and a M.D. from Harvard Medical School.

Stephen J. Smith, Ph.D. is a Professor of Molecular and Cellular Physiology at the Stanford University School of Medicine. From 1977 to 1979, Dr. Smith was a Miller Fellow at the University of California, Berkeley. Dr. Smith received a B.S. in Psychology from Reed College, and a Ph.D. in Physiology and Biophysics from the University of Washington.

James A. Spudich, Ph.D. Dr. Spudich's biographical information is provided above.

Ronald D. Vale, Ph.D. co-founded our company in August 1997. Since 1986, Dr. Vale has been a member of the University of California, San Francisco faculty. Dr. Vale was appointed to the Howard Hughes Medical Institute in 1995, and was elected to the National Academy of Sciences in 2001. He serves as the Chair of the Department of Cellular and Molecular Pharmacology at the University of California, San Francisco and is the W. K. Hamilton Distinguished Professor of Anesthesia. Dr. Vale received a B.S. in Biology and Chemistry from the University of California, Santa Barbara, and a Ph.D. in Neurosciences from Stanford University.

Board Composition and Committees

Our board of directors currently consists of seven members. Prior to the closing of this offering, our board of directors will be divided into three classes, with each director serving a three-year term and one class being elected at each year's annual meeting of stockholders. Directors A. Grant Heidrich and William J. Rutter will be in the class of directors whose initial term expires at the 2004 annual meeting of stockholders. Directors James Spudich and Charles Homcy will be in the class of directors whose initial term expires at the 2005 annual meeting of the stockholders. Directors Stephen Dow, Michael Schmertzler and James Sabry will be in the class of directors whose initial term expires at the 2006 annual meeting of stockholders.

Our board of directors currently has an audit committee, a compensation committee and a nominating and governance committee. Directors Stephen Dow, Grant Heidrich and Michael Schmertzler are currently members of the audit committee. The audit committee reviews our internal accounting procedures and consults with and reviews the services provided by our independent accountants. Directors A. Grant Heidrich and William J. Rutter are currently members of the compensation committee. The compensation committee reviews and recommends to the board of directors the compensation and benefits for all of our officers and establishes and reviews general policies relating to compensation and benefits for our other employees. Directors Stephen Dow, James Spudich and William J. Rutter are currently members of the nominating and governance committee. The nominating and governance committee assists our board of directors in the areas of membership selection, evaluation of overall effectiveness of the board of directors and the review of developments in corporate governance practices.

Director Compensation

We reimburse our non-employee directors for their expenses incurred in connection with attending board and committee meetings but do not plan to compensate them for their services as board or committee members. We have in the past granted non-employee directors options to purchase our common stock pursuant to the terms of our 1997 Stock Option/ Stock Issuance Plan, and our board continues to have the discretion to grant options to new and continuing non-employee directors. In addition, one director has purchased shares of our common stock pursuant to restricted stock purchase agreements, subject to a repurchase right in our favor. For a discussion of such director's restricted stock purchase agreement, see "Related Party Transactions."

In January 2004, our stockholders approved our 2004 Equity Incentive Plan, which provides for automatic grants of stock options to directors who are not our officers or employees. The 2004 Equity Incentive Plan provides that such directors will automatically receive:

- one-time option grants of 20,000 shares vesting annually over three years from the date of joining the board which are to be granted on such date at the fair market value of one share of our common stock on the date of grant; and

- annual option grants of 15,000 shares vested in full on the date of grant which are to be granted on the date of each annual stockholder meeting following the closing of this offering at the fair market value of one share of our common stock on the date of grant, provided that such grant will only be made to non- employee directors that have been members of the board for at least six months at the time of such annual stockholder meeting.

Executive Compensation

The following table sets forth the compensation earned for services rendered to us in all capacities by our Chief Executive Officer and our other executive officers whose total cash compensation exceeded $100,000 — collectively, the "Named Executive Officers" — for the year ended December 31, 2003.

Summary 2003 Compensation Table

		Annual Compensation ($)			Long-Term Compensation	
Name and Principal Positions	Year	Salary	Bonus	Other	Securities Underlying Options (#)	All Other Compensation(7)
James H. Sabry, M.D., Ph.D.,	2003	$ 354,167	$ 86,760	$10,610(2)	150,000(8)	$ 1,031
President and Chief	2002	317,917	71,190	10,610(2)	600,000(9)	660
Executive Officer	2001	277,083	52,500	1,152(2)	—	618
Robert I. Blum,	2003	268,404	210,290	6,248(3)	358,850(10)	604
Executive Vice President,	2002	268,484	42,525	8,987(3)	300,000(11)	468
Corporate Development and Finance and Chief Financial Officer	2001	234,375	31,500	9,256(3)	—	456
David J. Morgans, Jr., Ph.D.,	2003	243,078	54,660	11,123(4)	109,000(12)	1,239
Senior Vice President,	2002	226,208	34,965	8,935(5)	100,000(13)	1,146
Drug Discovery and Development	2001	192,708	—	8,935(5)	30,000(14)	609
Jay K. Trautman, Ph.D.,	2003	223,333	39,800	—	55,000(15)	736
Vice President, Technology(1)	2002	126,992	60,000	11,506(6)	125,000(16)	228

(1) Dr. Trautman's employment with us began on June 3, 2002.

(2) Represents loan to be forgiven over eight years beginning November 12, 2001.

(3) Represents interest payments on a loan co-signed by us on behalf of Mr. Blum.

(4) Represents loans to be forgiven over eight years beginning on October 18, 2000 and May 20, 2002.

(5) Represents loan to be forgiven over eight years beginning October 18, 2000.

(6) Represents non-deductible moving expenses.

(7) Represents group term life Insurance

(8) Represents a stock option granted to Dr. Sabry in May, 2003. Such option vests monthly over a four-year period beginning March 1, 2003.

(9) Represents a stock option granted to Dr. Sabry in July, 2002. Such option vests monthly over a five-year period beginning March 15, 2002.

(10) Represents a stock option granted to Mr. Blum in May, 2003, which vests monthly over a four-year period beginning March 1, 2003, and a stock option granted in December, 2003, which vests monthly over a five-year period beginning December 18, 2003.

(11) Represents a stock option granted to Mr. Blum in July, 2002. Such option vests monthly over a five-year period beginning March 15, 2002.

(12) Represents a stock option granted to Dr. Morgans in May, 2003. Such option vests monthly over a four-year period beginning March 1, 2003.

(13) Represents a stock option granted to Dr. Morgans in July, 2002. Such option vests monthly over a five-year period beginning March 15, 2002.

(14) Represents a stock option granted to Dr. Morgans in March, 2001. Such option vested as to 25% of the shares subject to the option on March 14, 2002, and as to 1/48th of the shares subject to such option each month thereafter.

(15) Represents a stock option granted to Dr. Trautman in May, 2003. Such option vests monthly over a four-year period from March 1, 2003.

(16) Represents a stock option granted to Dr. Trautman in July, 2002. Such option vested as to 25% of the shares subject to the option on June 3, 2003, and as to 1/48th of the shares subject to such option each month thereafter.

Option Grants in 2003

The following table sets forth information concerning grants of stock options to each of the executive officers named in the table above during 2003. All options granted to these executive officers in 2003 were granted under the 1997 Stock Option/ Stock Issuance Plan, as amended. Except as otherwise noted, one forty-eighth of the shares subject to each option vests and becomes exercisable on the first month after the vesting commencement date, and an additional one-forty-eighth of the shares subject to each option vests each month thereafter. The percent of the total options set forth below is based on an aggregate of 1,227,539 options granted to employees during 2003. All options were granted at fair market value as determined by our board of directors on the date of grant.

Potential realizable value represents hypothetical gains that could be achieved for the options if exercised at the end of the option term assuming that the initial public offering price of our common stock appreciates at 5% and 10% over the option term. The assumed 5% and 10% rates of stock price appreciation are provided in accordance with rules of the Securities and Exchange Commission and do not represent our estimate or projection of our future common stock price.

	Individual Grants				Potential Realizable Value at Assumed Annual Rates of Stock Appreciation for Option Term ($)	
Name	Number of Securities Underlying Options Granted	Percent of Total Options Granted to Employees During Period (%)	Exercise Price Per Share ($)	Expiration Date	5%	10%
James H. Sabry, M.D., Ph.D.	150,000	12.2%	$ 0.60	5/21/13	$	$
Robert I. Blum	75,000	6.1	0.60	5/21/13		
	283,850	23.1	1.00	12/18/13		
David J. Morgans, Jr., Ph.D.	109,000	8.9	0.60	5/21/13		
Jay K. Trautman, Ph.D.	55,000	4.5	0.60	5/21/13		

Aggregate Option Exercises in 2003 and Values at December 31, 2003

The following table sets forth information concerning exercisable and unexercisable stock options held by the executive officers named in the summary compensation table at December 31, 2003. The value of unexercised in-the-money options is based on an assumed initial offering price of $ per share minus the actual exercise prices. All options were granted under our 1997 Stock Option/ Stock Issuance Plan, as amended. Except as otherwise noted, these options vest over four years and otherwise generally conform to the terms of our 1997 Stock Option/ Stock Issuance Plan, as amended.

			Number of Securities Underlying Unexercised Options at December 31, 2003 (#)		Value of Unexercised In-the-Money Options at December 31, 2003 ($)(2)	
Name	Shares Acquired On Exercise	Value Realized ($) (1)	Exercisable	Unexercisable	Exercisable	Unexercisable
James H. Sabry, M.D., Ph.D.	—	—	1,375,000(3)	—		
Robert I. Blum	—	—	883,850(4)	—		
David J. Morgans, Jr., Ph.D.	35,000		364,000(5)	—		
Jay K. Trautman, Ph.D.	60,000		120,000(6)	—		

(1) Based upon the assumed initial public offering price of $ per share less the exercise price per share.

(2) Value is determined by subtracting the exercise price of an option from an assumed $ per share fair market value of our common stock.

(3) If Dr. Sabry's employment with us terminated, 703,543 of the shares issuable upon the exercise of Dr. Sabry's options would currently be subject to repurchase by us at the original purchase price.

(4) If Mr. Blum's employment with us terminated, 606,873 of the shares issuable upon the exercise of Mr. Blum's options would currently be subject to repurchase by us at the original purchase price.

(5) If Dr. Morgan's employment with us terminated, 196,272 of the shares issuable upon the exercise of Dr. Morgan's options would currently be subject to repurchase by us at the original purchase price.

(6) If Dr. Trautman's employment with us terminated, 122,813 of the shares issuable upon the exercise of Dr. Trautman's options would currently be subject to repurchase by us at the original purchase price.

Stock Plans

1997 Stock Option/ Stock Issuance Plan

Our board of directors adopted and our stockholders approved the 1997 Stock Option/ Stock Issuance Plan in December 1997 and January 1998, respectively. Our board of directors will not grant any additional options under the plan following the effective date of this offering. However, the plan will continue to govern the terms and conditions of the outstanding options previously granted under the plan.

A total of 8,832,345 shares of our common stock are authorized for issuance under the 1997 Stock Option/ Stock Issuance Plan. As of December 31, 2003, options to acquire a total of 4,488,773 shares of our common stock were issued and outstanding, and a total of 3,562,264 shares of our common stock had been issued upon the exercise of options granted under the plan.

The plan provides for the grant of nonstatutory stock options to our employees and consultants, and for the grant of incentive stock options within the meaning of Section 422 of the Internal Revenue Code to our employees. Our board of directors administers the 1997 Stock Option/ Stock Issuance Plan. The administrator has the authority to determine the terms and conditions of the options granted under the plan.

Generally, in the event of a "change of control," the successor corporation will assume each outstanding option or replace such options with a cash incentive program that preserves the spread between the strike price and fair market value associated with such option. If the outstanding options are not assumed, or if the successor corporation does not replace such options with a cash incentive program, the outstanding options will become fully exercisable immediately prior to such change of control and will terminate upon the consummation of the change of control. Generally, if options are assumed in connection with the change of control and an optionee's employment is terminated as the result of an "involuntary termination" within 24 months of the change of control, the options held by such optionee will immediately vest in full.

2004 Equity Incentive Plan

Our board of directors adopted our 2004 Equity Incentive Plan in January 2004 and our stockholders approved it in January 2004. Our 2004 Equity Incentive Plan provides for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to our employees and our parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, stock purchase rights, restricted stock, stock appreciation rights, performance units and performance shares to our employees, directors and consultants and our parent and subsidiary corporations' employees and consultants.

We have reserved a total of 3,200,000 shares of our common stock for issuance pursuant to the 2004 Equity Incentive Plan, of which no options have been issued. The 2004 Equity Incentive Plan will become effective on the day prior to the completion of this offering. In addition, the shares reserved for issuance under our 2004 Equity Incentive Plan include (a) shares reserved but unissued under the 1997 Stock Option/ Stock Issuance Plan as of the effective date of this offering, (b) shares returned to the 1997 Stock Option/ Stock Issuance Plan as the result of termination of options or the repurchase of shares issued under such plan, and (c) annual increases in the number of shares

available for issuance on the first day of each fiscal year beginning with our fiscal year beginning in 2005, equal to the lesser of:

- 3.5% of the outstanding shares of common stock on the first day of our fiscal year,
- 3,000,000 shares, or
- an amount our board may determine.

Our board of directors or a committee of our board administers our 2004 Equity Incentive Plan. In the case of options intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Internal Revenue Code, the committee will consist of two or more "outside directors" within the meaning of Section 162(m) of the Code. The administrator has the power to determine the terms of the awards, including the exercise price, the number of shares subject to each such award, the exercisability of the awards and the form of consideration, if any, payable upon exercise. The administrator also has the authority to institute an exchange program by which outstanding awards may be surrendered in exchange for awards with a lower exercise price.

The administrator determines the exercise price of options granted under our 2004 Equity Incentive Plan, but with respect to nonstatutory stock options intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code and all incentive stock options, the exercise price must at least be equal to the fair market value of our common stock on the date of grant. The term of an incentive stock option may not exceed ten years, except that with respect to any participant who owns 10% of the voting power of all classes of our outstanding stock, the term must not exceed five years and the exercise price must equal at least 110% of the fair market value on the grant date. The administrator determines the term of all other options.

No optionee may be granted an option to purchase more than 1,500,000 shares in any fiscal year. However, in connection with his or her initial service, an optionee may be granted an additional option to purchase up to 1,500,000 shares.

After termination of an employee, director or consultant, he or she may exercise his or her option for the period of time stated in the option agreement. Generally, if termination is due to death or disability, the option will remain exercisable for 12 months. In all other cases, the option will generally remain exercisable for three months. However, an option generally may not be exercised later than the expiration of its term.

Stock purchase rights, which represent the right to purchase our common stock, may be issued under our 2004 Equity Incentive Plan. The administrator determines the purchase price of stock purchase rights. Unless the administrator determines otherwise, we will retain a repurchase option on issued shares that we may exercise upon the termination of the purchaser's service with us for any reason. The administrator determines the rate at which our repurchase option will lapse.

Stock appreciation rights may be granted under our 2004 Equity Incentive Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the exercise date and the date of grant. The administrator determines the terms of stock appreciation rights, including when such rights become exercisable and whether to pay the increased appreciation in cash or with shares of our common stock, or a combination thereof.

Restricted stock may be granted under our 2004 Equity Incentive Plan. Restricted stock awards are shares of our common stock that vest in accordance with terms and conditions established by the administrator. The administrator will determine the number of shares of restricted stock granted to any employee. The administrator may impose whatever conditions to vesting it determines to be appropriate. For example, the administrator may set restrictions based on the achievement of specific performance goals. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

Performance units and performance shares may be granted under our 2004 Equity Incentive Plan. Performance units and performance shares are awards that will result in a payment to a participant only if performance goals established by the administrator are achieved or the awards otherwise vest. The administrator will establish organizational or individual performance goals in its discretion, which, depending on the extent to which they are met, will determine the number or the value of performance units and performance shares to be paid out to participants. Performance units shall have an initial dollar value established by the administrator prior to the grant date. Performance shares shall have an initial value equal to the fair market value of our common stock on the grant date.

Our 2004 Equity Incentive Plan also provides for the automatic grant of options to our non-employee directors. Each non-employee director appointed or elected to the board after the completion of this offering will receive an initial option to purchase 20,000 shares upon such appointment or election, except for those directors who become non-employee directors by ceasing to be employee directors. In addition, beginning in 2005, non-employee directors who have been directors for at least six months will receive a subsequent option to purchase 15,000 shares following each annual meeting of our stockholders. All options granted under the automatic grant provisions have a term of ten years and an exercise price equal to fair market value on the date of grant. Each initial option becomes exercisable as to one-third of the shares subject to such option on each anniversary of the date of grant, provided the non-employee director remains a service provider on such dates. Each subsequent option shall be exercisable in full on the date of grant.

Our 2004 Equity Incentive Plan generally does not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime.

Our 2004 Equity Incentive Plan provides that in the event of a "change of control," the successor corporation will assume or substitute an equivalent award for each outstanding option, stock appreciation right and stock purchase right. If there is no assumption or substitution of outstanding options, stock appreciation rights and stock purchase rights, the administrator will provide notice to the recipient that he or she has the right to exercise the option, stock appreciation right or stock purchase right as to all of the shares subject to the award, including shares which would not otherwise be exercisable, for a period of time as the administrator may determine from the date of the notice. The award will terminate upon the expiration of such period. In the event an outside director is terminated on or following a change in control, other than pursuant to a voluntary resignation, his or her options will fully vest and become immediately exercisable.

Our 2004 Equity Incentive Plan will automatically terminate in 2009, unless we terminate it sooner. In addition, our board of directors has the authority to amend, suspend or terminate the 2004 Equity Incentive Plan provided such action does not impair the rights of any participant.

2004 Employee Stock Purchase Plan

Concurrently with this offering, we intend to establish our 2004 Employee Stock Purchase Plan, and a total of 1,000,000 shares of our common stock will be made available for sale.

Our board of directors or a committee of our board administers our 2004 Employee Stock Purchase Plan. Our board of directors or its committee has full and exclusive authority to interpret the terms of our 2004 Employee Stock Purchase Plan and determine eligibility.

All of our employees are eligible to participate if they are customarily employed by us or any participating subsidiary for at least 20 hours per week and more than five months in any calendar year. However, an employee may not be granted an option to purchase stock if such employee:

- immediately after the grant owns stock possessing 5% or more of the total combined voting power or value of all classes of our capital stock, or
- has rights to purchase stock under our employee stock purchase plans that accrues at a rate that exceeds $25,000 worth of stock for each calendar year.

Our 2004 Employee Stock Purchase Plan is intended to qualify under Section 423 of the Internal Revenue Code and provides for consecutive, overlapping 24-month offering periods. Each offering period includes four six-month purchase periods. The offering periods generally start on the first trading day on or after May 1 and November 1 of each year, except for the first such offering period which will commence on the first trading day on or after the effective date of this offering and will end on the first trading day on or after the earlier of (a) May 1, 2006 or (b) 27 months from the beginning of the first offering period.

Our 2004 Employee Stock Purchase Plan permits participants to purchase common stock through payroll deductions of up to 15% of their eligible compensation which includes a participant's base salary, wages, overtime pay, shift premium and recurring commissions, but does not include payments for incentive compensation or bonuses. A participant may purchase a maximum of 2,500 shares during a six-month purchase period.

Amounts deducted and accumulated by the participant are used to purchase shares of our common stock at the end of each six-month purchase period. The price is 85% of the lower of the fair market value of our common stock at the beginning of an offering period or after a purchase period end. If the fair market value at the end of a purchase period is less than the fair market value at the beginning of the offering period, participants will be withdrawn from the current offering period following their purchase of shares on the purchase date and will be automatically re-enrolled in a new offering period. Participants may end their participation at any time during an offering period, and will be paid their payroll deductions to date. Participation ends automatically upon termination of employment with us.

A participant may not transfer rights granted under the 2004 Employee Stock Purchase Plan other than by will, the laws of descent and distribution or as otherwise provided under the 2004 Employee Stock Purchase Plan.

In the event of a "change of control," a successor corporation may assume or substitute each outstanding option. If the successor corporation refuses to assume or substitute for the outstanding options, the offering period then in progress will be shortened, and a new exercise date will be set.

Our board of directors has the authority to amend or terminate our 2004 Employee Stock Purchase Plan, except that, subject to certain exceptions described in the 2004 Employee Stock Purchase Plan, no such action may adversely affect any outstanding rights to purchase stock under our 2004 Employee Stock Purchase Plan.

401(k) Plan

In July 1998, we adopted a Retirement Savings and Investment Plan, the 401(k) Plan, covering our full-time employees located in the United States. The 401(k) Plan is intended to qualify under Section 401(k) of the Internal Revenues Code, so that contributions to the 401(k) Plan by employees or by us, and the investment earnings thereon, are not taxable to the employees until withdrawn. If our 401(k) Plan qualifies under Section 401(k) of the Internal Revenues Code, our contributions will be deductible by us when made. Our employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit of $13,000 if under 50 years old and $16,000 if over 50 years old in 2004 and to have those funds contributed to the 401(k) Plan. The 401(k) Plan permits us, but does not require us, to make additional matching contributions on behalf of all participants. To date, we have not made any contributions to the 401(k) Plan.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has at any time been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Stock Issuances to our Directors, Officers and Principal Stockholders

In April 1998, we sold 5,300,000 shares of our Series A preferred stock at $1.00 per share. In August 1999, we sold 6,896,545 shares of our Series B preferred stock at $2.90 per share. In November 2000, we sold 11,578,980 shares of our Series C preferred stock at $4.75 per share. In July 2001, we sold 2,333,334 shares of our Series D preferred stock at $6.00 per share. In March and April 2003, we sold 8,015,449 shares of our Series E preferred stock at $5.00 per share. Our Series A, Series B, Series C and Series E preferred stock is convertible into shares of our common stock on a 1-for-1 basis. Our Series D preferred stock is convertible into shares of our common stock on a 1-for-1.0321278 basis.

Upon the closing of this offering, all shares of our outstanding preferred stock will be automatically converted into shares of common stock. We have entered into an agreement pursuant to which our preferred stockholders will have registration rights with respect to their shares of common stock following this offering. For a description of these registration rights, see "Description of Capital Stock."

Since our inception, we have from time to time sold shares of our common stock pursuant to option exercises and restricted stock purchases, at per share prices ranging from $0.0075 per share to $1.00, to our directors, officers, founders and consultants, subject to repurchase rights in our favor that lapse over specified periods, typically four years. The repurchase right entitles us to repurchase the unvested shares at the original purchase price paid by the purchaser upon the termination of a purchaser's services with us.

Listed below are those persons who participated in the transactions described above who are our executive officers or directors or who beneficially own five percent or more of our securities.

	Common Stock		Convertible Preferred Stock					
Name of Purchaser	Shares (#)	Aggregate Consideration ($)	Series A (#)	Series B (#)	Series C (#)	Series D (#)	Series E (#)	Aggregate Consideration ($)
5% Stockholders								
Entities affiliated with Sevin Rosen Funds(1)	—	—	2,250,000	1,032,757	1,052,631	—	2,000,000	$ 20,244,993
Entities affiliated with Credit Suisse First Boston(2)	—	—	—	—	4,210,527	—	2,000,000	30,000,003
Vulcan Ventures, Inc.	—	—	—	1,724,137	2,105,264	—	800,000	19,000,001
Entities affiliated with Mayfield(3)	—	—	2,250,000	1,034,482	578,947	—	400,000	9,999,996
Glaxo Group Limited	—	—	—	—	—	2,333,334	600,000	17,000,004
Biomedicine, L.P.	—	—	—	1,724,137	210,526	—	200,000	6,999,996
Entities affiliated with Alta Biopharma Group(4)	—	—	—	—	1,263,158	—	800,000	10,000,001
Executive Officers and Directors								
James H. Sabry, M.D., Ph.D.(5)	500,000	$ 3,750	—	—	—	—	—	—
Robert I. Blum	225,000	22,500	—	—	—	—	—	—
Jay K. Trautman, Ph.D.	60,000		—	—	—	—	—	—
David J. Morgans, Jr., Ph.D.	35,000	10,150	—	—	—	—	—	—
James A. Spudich, Ph.D.(6)	550,000	8,750	—	—	—	—	—	—
Stephen Dow(7)	—	—	2,250,000	1,032,757	1,052,631	—	2,000,000	20,244,993
Grant Heidrich, III(8)	—	—	2,250,000	1,034,482	631,579	—	405,449	10,277,243
Michael Schmertzler(9)	—	—	—	—	4,210,527	—	2,000,000	30,000,003
William J. Rutter, Ph.D.(10)	7,000	700	—	344,827	—	—	—	999,998

(1) Represents: (a) 6,000 shares of Series A preferred stock and 1,380 shares of Series B preferred stock held by Sevin Rosen Bayless Management Company; (b) 2,080,188 shares of Series A preferred stock, 956,086 shares of Series B preferred stock and 195,158 shares of Series C preferred stock held by Sevin Rosen Fund VI L.P.; (c) 163,812 shares of Series A preferred stock, 75,291 shares of Series B preferred stock and 15,368 shares of Series C preferred stock held by Sevin Rosen VI Affiliates Fund L.P.; (d) 825,263 shares of Series C preferred stock and 686,000 shares of Series E preferred stock held by Sevin Rosen Fund VIII L.P.; (e) 16,842 shares of Series C preferred stock and 14,000 shares of Series E preferred stock held by Sevin Rosen VIII Affiliates Fund L.P.; (f) 1,251,900 shares of Series E preferred stock held by Sevin Rosen Fund VII L.P.; and (g) 48,100 shares of Series E preferred stock held by Sevin Rosen VII Affiliates Fund L.P.

(2) Represents: (a) 2,893,799 shares of Series C preferred stock and 1,561,993 shares of Series E preferred stock held by Credit Suisse First Boston Equity Partners, L.P.; (b) 808,891 shares of Series C preferred stock and 436,617 shares of Series E preferred stock held by Credit Suisse First Boston Equity Partners (Bermuda), L.P.; (c) 288,000 shares of Series C preferred stock held by EMA Private Equity Fund 2000, L.P.; (d) 217,263 shares of Series C preferred stock held EMA Partners Fund 2000, L.P.; and (e) 2,574 shares of Series C preferred stock and 1,390 shares of Series E preferred stock held by Credit Suisse First Boston U.S. Executive Advisors, L.P. An affiliate of Credit Suisse Group, of which Credit Suisse First Boston LLC is an indirect wholly-owned subsidiary, is either the general partner, managing general partner or investment manager of each of these entities. Credit Suisse Group and Credit Suisse First Boston LLC each disclaims beneficial ownership of the shares owned by such investment partnerships to the extent attributable to partnership interests therein held by persons other than Credit Suisse Group and its affiliates.

(3) Represents: (a) 2,137,500 shares of Series A preferred stock, 982,758 shares of Series B preferred stock, 278,499 shares of Series C preferred stock and 353,961 shares of Series E preferred stock held by Mayfield IX; (b) 112,500 shares of Series A preferred stock, 51,724 shares of Series B preferred stock, 14,658 shares of Series C preferred stock and 18,629 shares of Series E preferred stock held by Mayfield Associates Fund IV; (c) 285,790 shares of Series C preferred stock held by Cell Trust; and (d) 27,410 shares of Series E preferred stock by Cell Trust II.

(4) Represents: (a) 1,194,169 shares of Series C preferred stock and 771,614 shares of Series E preferred stock held by Alta BioPharma Partners II, L.P.; and (b) 68,989 shares of Series C preferred stock and 28,386 shares of Series E preferred stock held by Alta Embarcadero BioPharma II, LLC.

(5) Dr. Sabry purchased his shares of common stock in January 1998, at $0.0075 per share. Our right to repurchase those shares lapsed as to all of the shares as of January 2002.

(6) Dr. Spudich purchased 500,000 of his shares of common stock in January 1998, at $0.0075 per share, and 50,000 of his shares in June 1999, at $0.10 per share. Our right to repurchase those shares lapsed as to all of the shares as of January 2002 and September of 2002, respectively. Dr. Spudich subsequently transferred an aggregate of 70,000 shares of common stock.

(7) Represents: (a) 6,000 shares of Series A preferred stock and 1,380 shares of Series B preferred stock held by Sevin Rosen Bayless Management Company; (b) 2,080,188 shares of Series A preferred stock, 956,086 shares of Series B preferred stock and 195,158 shares of Series C preferred stock held by Sevin Rosen Fund VI L.P.; (c) 163,812 shares of Series A preferred stock, 75,291 shares of Series B preferred stock and 15,368 shares of Series C preferred stock held by Sevin Rosen VI Affiliates Fund L.P.; (d) 825,263 shares of Series C preferred stock and 686,000 shares of Series E preferred stock held by Sevin Rosen Fund VIII L.P.; (e) 16,842 shares of Series C preferred stock and 14,000 shares of Series E preferred stock held by Sevin Rosen VIII Affiliates Fund L.P.; (f) 1,251,900 shares of Series E preferred stock held by Sevin Rosen Fund VII L.P.; and (g) 48,100 shares of Series E preferred stock held by Sevin Rosen VII Affiliates Fund L.P. Stephen Dow is a general partner of the general partner of each of these entities except for Sevin Rosen Bayless Management Company, of which he is a Vice President. Mr. Dow disclaims beneficial ownership of these shares except to the extent of his proportionate partnership interest in these shares.

(8) Represents: (a) 2,137,500 shares of Series A preferred stock and 982,758 shares of Series B preferred stock held by Mayfield IX; (b) 285,790 shares of Series C preferred stock held by Cell Trust; (c) 14,658 shares of Series C preferred stock and 18,629 shares of Series E preferred stock held by Mayfield Associates Fund IV, L.P.; (f) 27,410 shares of Series E preferred stock held by Cell Trust II; (g) 112,500 shares of Series A preferred stock and 51,724 shares of Series B preferred stock held by Mayfield Associates Fund IV, A California Limited Partnership; (h) 278,499 shares of Series C preferred stock and 353,961 shares of Series E preferred stock held by Mayfield IX, L.P.; and (i) 52,632 shares of Series C preferred stock and 5,449 shares of Series E preferred stock held by The A. Grant III & Jeanette Yvonne Heidrich Community Property Trust. Grant Heidrich is a general partner of this entity or is a member of a limited liability company that serves as a general partner. Mr. Heidrich disclaims beneficial ownership of these shares except to the extent of his proportionate partnership or membership interest in these shares.

(9) Represents: (a) 2,893,799 shares of Series C preferred stock and 1,561,993 shares of Series E preferred stock held by Credit Suisse First Boston Equity Partners, L.P.; (b) 808,891 shares of Series C preferred stock and 436,617 shares of Series E preferred stock held by Credit Suisse First Boston Equity Partners (Bermuda), L.P.; (c) 288,000 shares of Series C preferred stock held by EMA Private Equity Fund 2000, L.P.; (d) 217,263 shares of Series C preferred stock held EMA Partners Fund 2000, L.P.; and (e) 2,574 shares of Series C preferred stock and 1,390 shares of Series E preferred stock held by Credit Suisse First Boston U.S. Executive Advisors, L.P. Michael Schmertzler is a general partner of this entity or is a member of a limited liability company that serves as a general partner. Mr. Schmertzler disclaims beneficial ownership of these shares except to the extent of his proportionate partnership or membership interest in these shares.

(10) Represents: 344,827 shares of Series B preferred stock and 7,000 shares of common stock. Dr. Rutter purchased 7,000 shares of common stock in December 2003 at $0.10 per share. Dr. Rutter subsequently transferred an aggregate of 7,000 shares of common stock. Our right to repurchase those shares lapsed as to all of the shares as of May 2003.

Strategic Alliance Agreement with GlaxoSmithKline

In June 2001, we entered into a strategic alliance agreement with Glaxo Group Limited, a wholly-owned subsidiary of GSK. In the agreement, GSK agreed to pay the Company an upfront cash payment of $14.0 million. GSK has also committed to reimburse our FTEs conducting research in connection with the strategic alliance and to make additional precommercialization milestone payments and pay

royalties based on product sales. As part of such transaction, Glaxo Wellcome International B.V., another wholly-owned subsidiary of GSK, purchased 2,333,334 shares of our Series D preferred stock at price per share of $6.00 and an aggregate price of $14,000,004. Pursuant to the terms of the stock purchase agreement, GSK has certain restrictions on its ability to buy and sell our securities for up to three years following this offering. As of September 30, 2003, we have recognized a total of $6.3 million, $3.2 million and $17.8 million in licensing fees, milestone payments, and FTE and project reimbursements respectively, from GSK under this strategic alliance. In the future, we may also receive significant precommercialization milestone payments, as well as royalties on product sales.

Investment of GlaxoSmithKline in Series E Preferred Stock Financing

In connection with our March and April 2003 Series E preferred stock financing, Glaxo Group Limited purchased 600,000 shares of Series E preferred stock at $5.00 per share for an aggregate purchase price of $3,000,000.

Investment of Credit Suisse Group Series C and Series E Preferred Stock Financing

In connection with our November 2000 Series C and March and April 2003 Series E preferred stock financings, affiliates of Credit Suisse Group purchased an aggregate of 4,210,527 shares of Series C preferred stock at $4.75 per share and 2,000,000 shares of Series E preferred stock at $5.00 per share for an aggregate purchase price of $20,000,003 and $10,000,000, respectively. An affiliate of Credit Suisse Group, of which Credit Suisse First Boston LLC is an indirect wholly owned subsidiary, one of the underwriters in the offering made by this prospectus, is either the general manager, managing general partner or investment manager of each of these entities.

Licensing Arrangement

Dr. James Spudich, one of our directors, is a Professor of Biochemistry and Developmental Biology at Stanford University. As such, he may receive compensation from the university in respect of inventions and intellectual property he has assigned to it, including certain patent rights which we licensed from the university in April 1998. We have paid technology licensing fees under this agreement, for which Dr. Spudich received no compensation. In the future, we may make additional payments upon achievement of milestones or sales of products we develop using the licensed patents.

Cash Bonus Agreements with Management

We have entered into Cash Bonus Agreements with certain of our executive officers. Robert I. Blum has an agreement dated September 1, 2002, amended and restated on December 1, 2003 whereby we agree to pay Mr. Blum cash bonuses in the amount of $9,000, $9,000, $40,100, $38,300, $36,500 and $3,600 on December 15, 2003 and June 30, 2004, 2005, 2006, 2007 and 2008, respectively, provided that Mr. Blum remains an employee in good standing.

We have entered into a Cash Bonus Agreement with David J. Morgans dated September 1, 2002, amended and restated on December 1, 2003, whereby we agree to pay Dr. Morgans cash bonuses in the amount of $7,400, $7,400, $33,100, $31,600, $30,200 and $3,000 on December 15, 2003 and June 30, 2004, 2005, 2006, 2007 and 2008, respectively, provided that Dr. Morgans remains an employee in good standing.

We have entered into a Cash Bonus Agreement with Jay K. Trautman dated September 1, 2002, amended and restated on December 1, 2003, whereby we agree to pay Dr. Trautman cash bonuses in the amount of $19,300, $19,300, $86,200, $82,300, $78,500 and $7,700 on December 15, 2003 and June 30, 2004, 2005, 2006, 2007 and 2008, respectively, provided that Dr. Trautman remains an employee in good standing.

Loans to Management

In connection with the employment of Robert I. Blum, we provided a letter of credit dated October 6, 1998, in the amount of $150,000 and with an interest rate of 6.65% per annum, secured by a certificate of deposit, as security for a personal loan obligation of Mr. Blum. We agreed to make all interest payments on the loan. As of September 30, 2003, the amount of the loan is $150,000, and we made interest payments totaling $9,256, $8,987 and $5,245 in 2001, 2002 and for the nine month period ended September 30, 2003, respectively.

On July 12, 2002, we provided Mr. Blum with a loan, secured by shares of our common stock held by Mr. Blum, per a promissory note dated July 12, 2002, in the amount of $100,000 and an interest rate of 5.75% per annum. Accrued interest is due and payable on July 12, 2003 and 2004. Accrued interest and twenty percent of the original principal balance is due on July 12, 2005, 2006, and 2007. Accrued interest and forty percent of the original principal balance is due on July 12, 2008.

In connection with the employment of David J. Morgans, Ph.D., we provided Dr. Morgans and Sandra Morgans with unsecured loans per promissory notes, dated May 20, 2002 and October 18, 2000, in the amounts of $37,400 and $150,000 and interest rates of 4.88% per annum, and 5.8% per annum, respectively. The total loan amounts, in conjunction with accrued interest, are forgivable over the course of Dr. Morgans' employment with us.

On July 12, 2002, we provided Dr. Morgans with a loan, secured by shares of our common stock held by Dr. Morgans, per a promissory note, dated July 12, 2002, in the amount of $82,600 and an interest rate of 5.75% per annum. Accrued interest is due and payable on July 12, 2003 and 2004. Accrued interest and twenty percent of the original principal balance is due on July 12, 2005, 2006, and 2007. Accrued interest and forty percent of the original principal balance is due on July 12, 2008.

In connection with the employment of Jay K. Trautman, Ph.D., we provided Dr. Trautman with a loan secured by shares of our common stock held by Dr. Trautman, per a promissory note, dated July 12, 2002, in the amount of $215,000 and an interest rate of 5.75% per annum. Accrued interest is due and payable on July 12, 2003 and 2004. Accrued interest and twenty percent of the original principal balance is due on July 12, 2005, 2006, and 2007. Accrued interest and forty percent of the original principal balance is due on July 12, 2008.

In connection with the employment of James H. Sabry, M.D., Ph.D., we provided Dr. Sabry and Sandra J. Spence with an unsecured loan per a promissory note, dated November 12, 2001, in the amount of $200,000 and an interest rate of 5.18% per annum. The total loan amount, in conjunction with accrued interest, is forgivable over the course of Dr. Sabry's employment with us.

Other Transactions

We have a verbal understanding with Dr. William J. Rutter, whereby Dr. Rutter agreed to spend an average of one day per week at the Company providing general business consulting and become a member of the board effective May 1999. In exchange for these services, we granted Dr. Rutter an option to purchase 125,000 shares of Common Stock at an exercise price of $0.10. The option was granted and approved at the July 27, 1999 board meeting.

On February 13, 2003, Dr. Charles Homcy became a member of the board of directors. In exchange for these services, we granted Dr. Homcy an option to purchase 60,000 shares of Common Stock at an exercise price of $0.60. The option was granted and approved at the March 19, 2003 board meeting.

On March 3, 2003, we entered into a consulting agreement with Dr. Charles Homcy, whereby Dr. Homcy agreed to provide the Company consulting in the specialized field of drug discovery and development. In exchange for these services, we granted Dr. Homcy an option to purchase 25,000 shares of Common Stock at an exercise price of $0.60. The option was granted and approved at the May 21, 2003 board meeting.

On July 10, 2002, we granted to Dr. James A. Spudich an option to purchase 20,000 shares of our common stock at an exercise price of $0.60 per share in connection with his services on our scientific advisory board. Such options vest monthly over a two-year period.

PRINCIPAL STOCKHOLDERS

The following table sets forth information known to us with respect to the beneficial ownership of our common stock as of January 15, 2004 and as adjusted to reflect the sale of common stock offered hereby by:

- each stockholder known by us to own beneficially more than five percent of our common stock;
- each of the named executive officers listed in the Summary Compensation Table;
- each of our directors; and
- all of our directors and the named executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. Shares of common stock subject to stock options and warrants currently exercisable or exercisable within 60 days are deemed to be outstanding for computing the percentage ownership of the person holding these options and the percentage ownership of any group of which the holder is a member, but are not deemed outstanding for computing the percentage of any other person. Except as indicated by footnote, and subject to community property laws where applicable, the persons named in the table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them. Some of the shares of common stock held by our directors, officers and consultants are subject to repurchase rights in our favor. For a discussion of these repurchase rights, see "Related Party Transactions."

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned Prior to The Offering	Percent of Shares Beneficially Owned	
		Before Offering(1)	After Offering
5% Stockholders			
Entities affiliated with Sevin Rosen Funds(2) Two Galleria Tower 13455 Noel Road Dallas, TX 75240	6,335,388	16.2%	
Entities affiliated with Credit Suisse First Boston(3) Eleven Madison Ave New York, NY 10010	6,210,527	15.9%	
Vulcan Ventures, Inc. 505 Union Station, 505 Fifth Ave. South, Suite 900 Seattle, WA 98104	4,629,401	11.9%	
Entities affiliated with Mayfield(4) 2800 Sand Hill Road Suite 250 Menlo Park, CA 94025	4,263,429	10.9%	
Glaxo Group Limited Glaxo Wellcome House Berkeley Avenue Greenford Middlesex England UB6 ONN	3,008,298	7.7%	

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned Prior to The Offering	Percent of Shares Beneficially Owned	
		Before Offering(1)	After Offering
Biomedicine, L.P. Cayman National Bldg., 4th Floor Elgin Ave P.O. Box 1790 George Town Grand Cayman Cayman Islands	2,134,663	5.5%	
Entities affiliated with Alta Biopharma Group(5) One Embarcadero Center Suite 4050 San Francisco, CA 94111	2,063,158	5.3%	
Executive Officers and Directors			
James H. Sabry, M.D., Ph.D(6)	1,875,000	4.6%	
Robert I. Blum(7)	1,108,850	2.8%	
David J. Morgans, Jr., Ph.D(8)	399,000	1.0%	
Jay K. Trautman, Ph.D(9)	180,000	*	
Stephen Dow(10) Two Galleria Tower 13455 Noel Road Dallas, TX 75240	6,335,388	16.2%	
A. Grant Heidrich, III(11) Mayfield Fund 2800 Sand Hill Road Suite 250 Menlo Park, CA 94025	4,321,510	11.1%	
William J. Rutter, Ph.D.(12) One Market Suite 1475 Steuart Tower San Francisco, CA 94105	462,827	1.2%	
Michael Schmertzler(13) Eleven Madison Ave New York, NY 10010	6,210,527	15.9%	
James A. Spudich, Ph.D.(14) Stanford School of Medicine Beckman Center Room B405 Stanford, CA 94305-5307	500,000	1.3%	
Charles Homcy, M.D.(15) Portola Pharmaceuticals 270 East Grand Avenue South San Francisco, CA 94080	85,000	*	
All directors and named executive officers as a group (10 persons)	21,478,102	51.2%	

* Represents beneficial ownership of less than one percent (1%) of the outstanding shares of our common stock.

(1) Percentage ownership before the offering is based on the 39,057,730 shares of common stock outstanding on January 15, 2004, after giving effect to the conversion of all of our preferred stock into shares of our common stock.

(2) Represents: (a) 7,380 shares of common stock held by Sevin Rosen Bayless Management Company; (b) 3,231,432 shares of common stock held by Sevin Rosen VI L.P.; (c) 254,471 shares of common stock held by Sevin Rosen Fund VI Affiliates Fund L.P.; (d) 1,511,263 shares of common stock held by Sevin Rosen Fund VIII L.P.; (e) 30,842 shares of common stock held by Sevin Rosen VIII Affiliates Fund L.P.; (f) 1,251,900 shares of common stock held by Sevin Rosen Fund VII L.P.; and (g) 48,100 shares of common stock held by Sevin Rosen VII Affiliates Fund L.P.

(3) Represents: (a) 4,455,792 shares of common stock held by Credit Suisse First Boston Equity Partners, L.P.; (b) 1,245,508 shares of common stock held by Credit Suisse First Boston Equity Partners (Bermuda), L.P.; (c) 288,000 shares of common stock held by EMA Private Equity Fund 2000, L.P.; (d) 217,263 shares of common stock held EMA Partners Fund 2000, L.P.; and (e) 3,964 shares of common stock held by Credit Suisse First Boston U.S. Executive Advisors, L.P. An affiliate of Credit Suisse Group, of which Credit Suisse First Boston LLC is an indirect wholly-owned subsidiary, is either the general partner, managing general partner or investment manager of each of those entities. Credit Suisse Group and Credit Suisse First Boston LLC each disclaims beneficial ownership of the shares owned by such investment partnerships to the extent attributable to partnership interests therein held by persons other than Credit Suisse Group and its affiliates.

(4) Represents: (a) 3,752,718 shares of common stock held by Mayfield IX; (b) 197,511 shares of common stock held by Mayfield Associates Fund IV, L.P.; (c) 285,790 shares of common stock held by Cell Trust; and (d) 27,410 shares of common stock held by Cell Trust II.

(5) Represents: (a) 1,965,783 shares of common stock held by Alta BioPharma Partners II, L.P.; and (b) 97,375 shares of common stock held by Alta Embarcadero BioPharma II, LLC.

(6) Represents: (a) 500,000 shares of common stock held by Dr. Sabry; and (b) options granted to Dr. Sabry to purchase 1,375,000 shares of common stock that are immediately exercisable. 682,085 shares underlying the option would remain subject to our repurchase right upon termination of Dr. Sabry's employment.

(7) Represents: (a) 185,000 shares of common stock held by Mr. Blum; (b) 20,000 shares of common stock held by The Brittany Blum 2003 Irrevocable Trust; (c) 20,000 shares of common stock held by The Bridget Blum 2003 Irrevocable Trust; and (d) options granted to Mr. Blum to purchase 883,850 shares of common stock that are immediately exercisable. 597,393 shares underlying the option would remain subject to our repurchase right upon termination of Mr. Blum's employment.

(8) Represents (a) 35,000 shares of common stock held by Dr. Morgans and (b) options granted to Dr. Morgans to purchase 364,000 shares of common stock that underlying the option immediately exercisable. 191,710 shares underlying the option would remain subject to our repurchase right upon termination of Dr. Morgans' employment.

(9) Represents: (a) 120,000 shares of common stock held by Dr. Trautman, 59,063 shares of which are subject to our right of repurchase; and (b) options granted to Dr. Trautman to purchase 60,000 shares of common stock that are immediately exercisable. 60,000 shares underlying the option would remain subject to our repurchase right upon termination of Dr. Trautman's employment.

(10) Represents: (a) 7,380 shares of common stock held by Sevin Rosen Bayless Management Company; (b) 3,231,432 shares of common stock held by Sevin Rosen VI L.P.; (c) 254,471 shares of common stock held by Sevin Rosen Fund VI Affiliates Fund L.P.; (d) 1,511,263 shares of common stock held by Sevin Rosen Fund VIII L.P.; (e) 30,842 shares of common stock held by Sevin Rosen VIII Affiliates Fund L.P.; (f) 1,251,900 shares of common stock held

by Sevin Rosen Fund VII L.P.; and (g) 48,100 shares of common stock held by Sevin Rosen VII Affiliates Fund L.P. Stephen Dow is a general partner of the general partner of each of these entities except for Sevin Rosen Bayless Management Company, of which he is a Vice President. Mr. Dow disclaims beneficial ownership of these shares except to the extent of his proportionate partnership interest in these shares.

(11) Represents: (a) 3,752,718 shares of common stock held by Mayfield IX; (b) 197,511 shares of common stock held by Mayfield Associates Fund IV; (c) 285,790 shares of common stock held by Cell Trust; (d) 27,410 shares of common stock held by Cell Trust II; and (d) 58,081 shares of common stock held by The A. Grant III & Jeanette Yvonne Heidrich Community Property Trust. Grant Heidrich is a Managing Director of Mayfield IX Management, L.L.C., the General Partner of Mayfield IX and Mayfield Associates Fund IV. Mr. Heidrich disclaims beneficial ownership of the shares held by affiliates of Mayfield, except to the extent of his proportionate partnership interest therein.

(12) Represents: (a) 230,533 shares of common stock owned by the William J. Rutter Revocable Trust; (b) 114,294 shares of common stock held by Rutter Investments, L.P.; and (c) options granted to Dr. Rutter to purchase 118,000 shares of common stock that are immediately exercisable.

(13) Represents: (a) 4,455,792 shares of common stock held by Credit Suisse First Boston Equity Partners, L.P.; (b) 1,245,508 shares of common stock held by Credit Suisse First Boston Equity Partners (Bermuda), L.P.; (c) 288,000 shares of common stock held by EMA Private Equity Fund 2000, L.P.; (d) 217,263 shares of common stock held EMA Partners Fund 2000, L.P.; and (e) 3,964 shares of common stock held by Credit Suisse First Boston U.S. Executive Advisors, L.P. Michael Schmertzler is a Managing Director of Aries Advisors, LLC, a sub-advisor to Credit Suisse First Boston Equity Partners, L.P. Mr. Schmertzler disclaims beneficial ownership of these shares except to the extent of his proportionate partnership or membership interest in shares.

(14) Represents: (a) 480,000 shares of common stock held by held by Dr. Spudich; and (b) options granted to Dr. Spudich to purchase 20,000 shares of common stock that are immediately exercisable. 3,334 shares underlying the option would remain subject to our repurchase right upon termination of Dr. Spudich's employment.

(15) Represents options granted to Dr. Homcy to purchase 85,000 shares of common stock that are immediately exercisable. 56,251 shares underlying the option would remain subject to repurchase right upon termination of Dr. Homcy's employment.

Except as otherwise noted above, the address of each person listed on the table is c/o Cytokinetics, Incorporated, 280 East Grand Avenue, South San Francisco, CA 94080.

DESCRIPTION OF CAPITAL STOCK

General

We are authorized to issue 120,000,000 shares of common stock, $0.001 par value, and 10,000,000 shares of undesignated preferred stock, $0.001 par value.

Common Stock

Assuming the conversion of all of our preferred stock into 34,199,272 shares of common stock, as of January 15, 2004, we had 39,057,730 shares of common stock outstanding that were held of record by approximately 139 stockholders.

The holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock are entitled to receive ratably any dividends that may be declared from time to time by the board of directors out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock then outstanding. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable, and the shares of common stock to be issued upon the closing of this offering will be fully paid and nonassessable.

Preferred Stock

Upon the closing of this offering, our board of directors will have the authority, without action by our stockholders, to designate and issue up to 10,000,000 shares of preferred stock in one or more series. The board of directors may also designate the rights, preferences and privileges of each series of preferred stock; any or all of which may be greater than the rights of the common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of the common stock until the board of directors determines the specific rights of the holders of the preferred stock. However, these effects might include:

- restricting dividends on the common stock;
- diluting the voting power of the common stock;
- impairing the liquidation rights of the common stock; and
- delaying or preventing a change in control of our company without further action by the stockholders.

We have no present plans to issue any shares of preferred stock.

Warrants

As of January 15, 2004, we had the following warrants outstanding to purchase a total of 367,500 shares of our capital stock:

- 200,000 shares of our common stock at an exercise price of $0.29 per share, terminating five years after the date of our initial public offering;
- 67,500 shares of our Series A preferred stock, which are convertible into 67,500 shares of our common stock, at an exercise price of $1.00 per share, terminating 2005;
- Up to 100,000 shares of our Series B preferred stock, which are convertible into 100,000 shares of our common stock, at an exercise price of $2.90 per share, terminating 2006; and

- 100,000 shares of our Series B preferred stock, which are convertible into 100,000 shares of our common stock, at an exercise price of $2.90 per share, terminating 2006.

Holders of Registration Rights Can Require Us to Register Shares of Our Stock for Resale

The holders of 34,199,272 shares of common stock issuable upon conversion of preferred stock and 367,500 shares of common stock issuable upon the exercise of warrants or conversion of preferred stock underlying warrants or their permitted transferees are entitled to rights with respect to registration of these shares under the Securities Act of 1933, as amended. These rights are provided under the terms of our agreement with the holders of registrable securities. Under these registration rights, holders of the then outstanding registrable securities may require on two occasions that we register their shares for public resale. The first such registration requires the election of the holders of registrable securities holding at least 51% of such registrable securities, and the second such registration requires the election of the holders of registrable securities holding at least twenty-five percent of such registrable securities. We are obligated to register these shares only if the requesting holders request the registration of at least 20% of the registrable securities held by such requesting holders. In addition, 12 months after the effective date of the first registration of our securities, holders of at least thirty percent of the registrable securities resulting from the conversion of shares of our Series C preferred stock may require on two occasions that we register their shares for public resale. We are obligated to register these shares resulting from the conversion of our Series C preferred stock only if the requesting holders request the registration of at least thirty percent of the registrable securities held by such requesting holders that resulted from the conversion of our Series C preferred stock. In addition, holders of registrable securities may require that we register their shares for public resale on Form S-3 or similar short-form registration, if we are eligible to use Form S-3 or similar short-form registration, and the value of the securities to be registered is at least $500,000. If we elect to register any of our shares of common stock for any public offering, the holders of registrable securities are entitled to include shares of common stock in the registration. However we may reduce the number of shares proposed to be registered in view of market conditions. We will pay all expenses in connection with any registration, other than underwriting discounts and commissions.

Anti-Takeover Effects of Some Provisions of Delaware Law

Provisions of Delaware law and our amended and restated certificate of incorporation and amended bylaws to be in effect upon the closing of this offering could make the acquisition of our company through a tender offer, a proxy contest or other means more difficult and could make the removal of incumbent officers and directors more difficult. We expect these provisions to discourage coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of our company to first negotiate with our board of directors. We believe that the benefits provided by our ability to negotiate with the proponent of an unfriendly or unsolicited proposal outweigh the disadvantages of discouraging these proposals. We believe the negotiation of an unfriendly or unsolicited proposal could result in an improvement of its terms.

We are subject to Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years following the date the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

- the stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers, and

(b) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting securities. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may also discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

Anti-Takeover Effects of Provisions of Our Charter Documents

Our amended and restated certificate of incorporation to be in effect upon the closing of this offering provides for our board of directors to be divided into three classes serving staggered terms. Approximately one-third of the board of directors will be elected each year. The provision for a classified board could prevent a party who acquires control of a majority of the outstanding voting stock from obtaining control of the board of directors until the second annual stockholders meeting following the date the acquirer obtains the controlling stock interest. The classified board provision could discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of our company and could increase the likelihood that incumbent directors will retain their positions. Our amended and restated certificate of incorporation to be in effect upon the closing of this offering provides that directors may be removed with cause by the affirmative vote of the holders of the outstanding shares of common stock.

Our amended bylaws to be in effect upon the closing of this offering establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to the board of directors. At an annual meeting, stockholders may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors. Stockholders may also consider a proposal or nomination by a person who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given to our Secretary timely written notice, in proper form, of his or her intention to bring that business before the meeting. The amended bylaws do not give the board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting of the stockholders. However, our bylaws may have the effect of precluding the conduct of business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

Under Delaware law, a special meeting of stockholders may be called by the board of directors or by any other person authorized to do so in the amended and restated certificate of incorporation or the amended bylaws. Our amended bylaws authorize a majority of our board of directors, the chairman of the board or the chief executive officer to call a special meeting of stockholders. Because our stockholders do not have the right to call a special meeting, a stockholder could not force stockholder consideration of a proposal over the opposition of the board of directors by calling a special meeting of stockholders prior to such time as a majority of the board of directors believed

or the chief executive officer believed the matter should be considered or until the next annual meeting provided that the requestor met the notice requirements. The restriction on the ability of stockholders to call a special meeting means that a proposal to replace the board also could be delayed until the next annual meeting.

Delaware law provides that stockholders may execute an action by written consent in lieu of a stockholder meeting. However, Delaware law also allows us to eliminate stockholder actions by written consent. Elimination of written consents of stockholders may lengthen the amount of time required to take stockholder actions since actions by written consent are not subject to the minimum notice requirement of a stockholder's meeting. However, we believe that the elimination of stockholders' written consents may deter hostile takeover attempts. Without the availability of stockholder's actions by written consent, a holder controlling a majority of our capital stock would not be able to amend our bylaws or remove directors without holding a stockholders' meeting. The holder would have to obtain the consent of a majority of the board of directors, the chairman of the board or the chief executive officer to call a stockholders' meeting and satisfy the notice periods determined by the board of directors. Our amended and restated certificate of incorporation to be in effect upon the closing of this offering provides for the elimination of actions by written consent of stockholders upon the closing of this offering.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is .

Nasdaq Stock Market Listing

We have applied to have our common stock listed on the Nasdaq National Market for quotation under the symbol "CYTK".

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our stock. Future sales of substantial amounts of our common stock in the public market following this offering or the possibility of these sales occurring could adversely affect prevailing market prices for our common stock or could impair our ability to raise capital through an offering of equity securities.

After this offering, we will have outstanding shares of common stock, based upon shares outstanding as of January 15, 2004. All of the shares sold in this offering will be freely tradable without restriction under the Securities Act except for any shares purchased by our "affiliates" as that term is defined in Rule 144 under the Securities Act. The remaining 39,057,730 shares of common stock held by existing stockholders are "restricted" shares as that term is defined in Rule 144 under the Securities Act. We issued and sold the restricted shares in private transactions in reliance upon exemptions from registration under the Securities Act. Restricted shares may be sold in the public market only if they are registered under the Securities Act or if they qualify for an exemption from registration, such as Rule 144 or 701 under the Securities Act, which are summarized below.

Our officers, directors and some of our stockholders, including business partners, who collectively hold an aggregate of shares, and the underwriters have entered into lock-up agreements in connection with this offering. These lock-up agreements provide that, with limited exceptions, our officers, directors and other stockholders have agreed not to offer, sell, contract to sell, grant any option to purchase or otherwise dispose of any of our shares for a period of 180 days after the effective date of this offering. Goldman, Sachs & Co. may, in its sole discretion and at any time without prior notice, release all or any portion of the shares subject to these lock-up agreements.

Taking into account the lock-up agreements, the number of shares, other than shares sold in the offering, that will be available for sale in the public market under the provisions of Rules 144 and 701, will be as follows:

- shares that become eligible for sale at various times between the date of this offering and the date 90 days after the effective date of this offering;
- an additional shares that become eligible for sale beginning 180 days after the effective date of this offering;
- an additional shares that become eligible for sale upon exercise of vested options 90 days after the date of this prospectus and an additional shares that become eligible for sale upon the exercise of vested options 180 days after the date of this prospectus; and
- an additional shares that become eligible for sale at various times thereafter upon the expiration of applicable holding periods.

Following the expiration of the lock-up period, shares issued upon exercise of options granted by us prior to the completion of this offering will also be available for sale in the public market pursuant to Rule 701 under the Securities Act unless those shares are held by one of our affiliates, directors or officers.

Rule 701 permits resale of shares in reliance upon Rule 144 but without compliance with restrictions of Rule 144, including the holding period requirement. In general, under Rule 144 as currently in effect, a person, or persons whose shares are aggregated, who has beneficially owned restricted shares for at least one year, including the holding period of any prior owner except an

affiliate, would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- one percent of the number of shares of common stock then outstanding, which will equal approximately shares immediately after the offering, or

- the average weekly trading volume of the common stock during the four calendar weeks preceding the filing of a Form 144 with respect to such sale.

Sales under Rule 144 are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us. Under Rule 144(k), a person who is not deemed to have been an affiliate of our company at any time during the three months preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years including the holding period of any prior owner except an affiliate, is entitled to sell the shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144.

Rule 701, as currently in effect, permits our employees, officers, directors or consultants who purchased shares under a written compensatory plan or contract to resell these shares in reliance upon Rule 144 but without compliance with specific restrictions. Rule 701 provides that affiliates may sell their Rule 701 shares under Rule 144 without complying with the holding period requirement and that non-affiliates may sell these shares in reliance on Rule 144 without complying with the holding period, public information, volume limitation or notice provisions of Rule 144.

We intend to file, shortly after the effectiveness of this offering, a registration statement on Form S-8 under the Securities Act covering all shares of common stock reserved for issuance under the stock plans and subject to outstanding options under our 1997 Stock Option/ Stock Issuance Plan. See “Management — Stock Plans”. Shares of common stock issued upon exercise of options under the Form S-8 will be available for sale in the public market, subject to Rule 144 volume limitations applicable to affiliates and subject to the contractual restrictions described above. As of January 15, 2004, options to purchase 4,373,465 shares of common stock were outstanding. Beginning 90 and 180 days after the effective date of this offering, approximately shares and shares, respectively, issuable upon the exercise of vested stock options will become eligible for sale in the public market, if the options are exercised.

Following this offering, the holders of an aggregate of 34,199,272 shares of outstanding common stock and 367,500 shares of common stock issuable upon the exercise of warrants or conversion of preferred stock underlying warrants have the right to require us to register their shares for sale upon meeting specific requirements. See “Description of Capital Stock — Registration Rights” for additional information regarding registration rights.

MATERIAL UNITED STATES FEDERAL TAX CONSIDERATIONS

FOR NON-UNITED STATES HOLDERS OF COMMON STOCK

This section summarizes certain material United States federal income and estate tax considerations relating to the ownership and disposition of common stock. This summary does not provide a complete analysis of all potential tax considerations. The information provided below is based on existing authorities. These authorities may change, possibly retroactively, or the IRS might interpret the existing authorities differently. In either case, the tax considerations of owning or disposing of common stock could differ from those described below. For purposes of this summary, a "non-U.S. holder" is any holder other than a citizen or resident of the United States, a corporation created or organized under the laws of the United States or any political subdivision thereof, a trust that is (i) subject to the primary supervision of a United States court and the control of one of more U.S. persons or (ii) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person or an estate whose income is subject to U.S. income tax regardless of source. If a partnership is a beneficial owner of common stock, the tax treatment of a partner in the partnership will depend upon the status of the partner and the activities of the partnership. The summary generally does not address tax considerations that may be relevant to particular investors because of their specific circumstances (such as U.S. expatriates, insurance companies, tax-exempt organizations, dealers in securities, banks or other financial institutions, "controlled foreign corporations," "passive foreign investment companies," "foreign personal holding companies," corporations that accumulate earnings to avoid United States federal income tax and investors that hold our common stock as part of a hedge, straddle or conversion transaction), or because they are subject to special rules. Finally, the summary does not describe the effects of any applicable foreign, state, or local laws.

INVESTORS CONSIDERING THE PURCHASE OF COMMON STOCK SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL INCOME AND ESTATE TAX LAWS TO THEIR PARTICULAR SITUATIONS AND THE CONSEQUENCES OF FOREIGN, STATE, OR LOCAL LAWS, AND TAX TREATIES.

Dividends

Payments on the common stock will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and will first be applied against and reduce a holder's adjusted basis in the common stock, but not below zero, and then the excess, if any, will be treated as gain from the sale of the common stock.

Amounts treated as dividends paid to a non-U.S. holder on our common stock will generally be subject to U.S. withholding tax at a 30 percent rate. The withholding tax might not apply, however, or might apply at a reduced rate, under the terms of an applicable income tax treaty between the United States and the non-U.S. holder's country of residence. A non-U.S. holder must demonstrate its entitlement to treaty benefits by certifying its, among other facts, nonresident status. A non-U.S. holder can meet this certification requirement by providing a Form W-8BEN or appropriate substitute form to us or our paying agent. If the holder holds the stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to the agent. The holder's agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries. For payments made to a foreign partnership or other foreign flowthrough entity, the certification requirements generally apply to the partners or other owners, and the foreign partnership or foreign intermediary will also be required to comply with additional certification requirements. Special rules, described below, apply if a dividend is effectively connected with a U.S. trade or business conducted by the non-U.S. holder.

Sale of Common Stock

Non-U.S. holders will generally not be subject to U.S. federal income tax on any gains realized on the sale, exchange, or other disposition of common stock. This general rule, however, is subject to several exceptions. For example, the gain would be subject to U.S. federal income tax if:

- the gain is effectively connected with the conduct by the non-U.S. holder of a U.S. trade or business (in which case the special rules described below apply);
- the non-U.S. holder was a citizen or resident of the United States and thus is subject to special rules that apply to expatriates;
- the non-U.S. holder is an individual who holds his or her common stock as a capital asset (generally, an asset held for investment purposes) and who is present in the United States for a period or periods aggregating 183 days or more during the taxable year in which the sale or disposition occurs and other conditions are met; or
- the rules of the Foreign Investment in Real Property Tax Act (or FIRPTA) (described below) treat the gain as effectively connected with a U.S. trade or business.

The FIRPTA rules may apply to a sale, exchange or other disposition of common stock if we are, or were within the shorter of five years before the transaction or the non-U.S. holder's holding period for the common stock, a "U.S. real property holding corporation" (or USRPHC). In general, we would be a USRPHC if interests in U.S. real estate comprised most of our assets. We do not believe that we are a USRPHC or that we will become one in the future. Even if we become a USRPHC, as long as our common stock is regularly traded on an established securities market, however, such common stock will be subject to U.S. federal income tax under the FIRPTA rules only if the non-U.S. holder actually or constructively held more than 5 percent of such regularly traded common stock.

Dividends or Gain Effectively Connected With a U.S. Trade or Business

If any dividend on common stock, or gain from the sale, exchange or other disposition of common stock, is effectively connected with a U.S. trade or business conducted by the non-U.S. holder, then the dividend or gain will be subject to U.S. federal income tax at the regular graduated rates. If the non-U.S. holder is eligible for the benefits of a tax treaty between the United States and the holder's country of residence, any "effectively connected" dividend or gain would generally be subject to U.S. federal income tax only if it is also attributable to a permanent establishment or fixed base maintained by the holder in the United States. Payments of dividends that are effectively connected with a U.S. trade or business, and therefore included in the gross income of a non-U.S. holder, will not be subject to the 30 percent withholding tax. To claim exemption from withholding, the holder must certify its qualification, which can be done by filing a Form W-8ECI. If the non-U.S. holder is a corporation, that portion of its earnings and profits that is effectively connected with its U.S. trade or business would generally be subject to a "branch profits tax." The branch profits tax rate is generally 30 percent, although an applicable income tax treaty might provide for a lower rate.

U.S. Federal Estate Tax

The estates of nonresident alien individuals are generally subject to U.S. federal estate tax on property with a U.S. situs. Because we are a U.S. corporation, our common stock will be U.S. situs property and therefore will be included in the taxable estate of a nonresident alien decedent. The U.S. federal estate tax liability of the estate of a nonresident alien may be affected by a tax treaty between the United States and the decedent's country of residence.

Backup Withholding and Information Reporting

The Code and the Treasury regulations require those who make specified payments to report the payments to the IRS. Among the specified payments are dividends and proceeds paid by brokers to their customers. The required information returns enable the IRS to determine whether the recipient properly included the payments in income. This reporting regime is reinforced by "backup withholding" rules. These rules require the payors to withhold tax from payments subject to information reporting if the recipient fails to cooperate with the reporting regime by failing to provide his taxpayer identification number to the payor, furnishing an incorrect identification number, or repeatedly failing to report interest or dividends on his returns. The withholding tax rate is currently 28 percent. The backup withholding rules do not apply to payments to corporations, whether domestic or foreign.

Payments to non-U.S. holders of dividends on common stock will generally not be subject to backup withholding, and payments of proceeds made to non-U.S. holders by a broker upon a sale of common stock will not be subject to information reporting or backup withholding, in each case so long as the non-U.S. holder certifies its nonresident status. Some of the common means of certifying nonresident status are described under "— Dividends." We must report annually to the IRS any dividends paid to each non-U.S. holder and the tax withheld, if any, with respect to such dividends. Copies of these reports may be made available to tax authorities in the country where the non-U.S. holder resides.

Any amounts withheld from a payment to a holder of common stock under the backup withholding rules can be credited against any U.S. federal income tax liability of the holder.

THE PRECEDING DISCUSSION OF U.S. FEDERAL INCOME TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY AND IT IS NOT TAX ADVICE. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE PARTICULAR U.S. FEDERAL, STATE, LOCAL, AND FOREIGN TAX CONSEQUENCES OF PURCHASING, HOLDING, AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAWS.

UNDERWRITING

Cytokinetics and the underwriters named below have entered into an underwriting agreement with respect to the shares being offered. Subject to certain conditions, each underwriter has severally agreed to purchase the number of shares indicated in the following table. Goldman, Sachs & Co., Credit Suisse First Boston LLC, Pacific Growth Equities, LLC and Lazard Frères & Co. LLC are the representatives of the underwriters.

Underwriters	Number of Shares
Goldman, Sachs & Co.	
Credit Suisse First Boston LLC	
Pacific Growth Equities, LLC	
Lazard Frères & Co. LLC	
Total	

The underwriters are committed to take and pay for all of the shares being offered, if any are taken, other than the shares covered by the option described below unless and until this option is exercised.

If the underwriters sell more shares than the total number set forth in the table above, the underwriters have an option to buy up to an additional shares from Cytokinetics to cover such sales. They may exercise that option for 30 days. If any shares are purchased pursuant to this option, the underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

The following tables show the per share and total underwriting discounts and commissions to be paid to the underwriters by Cytokinetics. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Paid by Cytokinetics	
	No Exercise	Full Exercise
Per Share	$	$
Total	$	$

Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount of up to $ per share from the initial public offering price. Any such securities dealers may resell any shares purchased from the underwriters to certain other brokers or dealers at a discount of up to $ per share from the initial public offering price. If all the shares are not sold at the initial public offering price, the representatives may change the offering price and the other selling terms.

Subject to limited exceptions, Cytokinetics, its directors, officers and stockholders have agreed with the underwriters not to dispose of or hedge any of their common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior written consent of the representatives. This agreement does not apply to Cytokinetics with respect to options or shares of its common stock issued pursuant to any existing employee benefit plans or to new shares of Cytokinetics' common stock issued or sold in connection with any corporate strategic development transaction or any merger or acquisition transaction up to an aggregate amount of ten percent (10%) of the outstanding shares of Cytokinetics' common stock following completion of the offering of shares offered by this prospectus. See "Shares Eligible for Future Sale" for a discussion of certain transfer restrictions.

Prior to the offering, there has been no public market for the shares. The initial public offering price has been negotiated among Cytokinetics and the representatives. Among the factors to be considered in determining the initial public offering price of the shares, in addition to prevailing market conditions, will be Cytokinetics' historical performance, estimates of the business potential and earnings prospects of Cytokinetics, an assessment of Cytokinetics' management and the consideration of the above factors in relation to market valuation of companies in related businesses.

An application has been made to quote the common stock on the Nasdaq National Market under the symbol "CYTK".

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Shorts sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares from Cytokinetics in the offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase additional shares pursuant to the option granted to them. "Naked" short sales are any sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions may have the effect of preventing or retarding a decline in the market price of Cytokinetics' stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued at any time. These transactions may be effected on the Nasdaq National Market, in the over-the-counter market or otherwise.

Each underwriter has represented, warranted and agreed that (i) it has not offered or sold and, prior to the expiry of a period of six months from the Closing date, will not offer or sell any shares to persons in the United Kingdom except to persons whose ordinary activities involve them acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or otherwise in circumstances which have not resulted and will not result in an offer to the public in the United Kingdom within the meaning of the Public Offers of Securities Regulations 1995; (ii) it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000 ("FSMA")) received by it in connection with the issue or sale of any shares in circumstances in which section 21(1) of the FSMA does not apply to the Issuer; and (iii) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

The shares may not be offered or sold, transferred or delivered, as part of their initial distribution or at any time thereafter, directly or indirectly, to any individual or legal entity in the Netherlands other than to individuals or legal entities who or which trade or invest in securities in the conduct of their profession or trade, which includes banks, securities intermediaries, insurance companies, pension funds, other institutional investors and commercial enterprises which, as an ancillary activity, regularly trade or invest in securities.

The shares being offered may not be offered or sold by means of any document other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent, or in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32) of Hong Kong, and no advertisement, invitation or document relating to the shares being offered may be issued, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares being offered which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made thereunder.

This prospectus has not been and will not be registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each syndicate member acknowledges that the shares may not be offered or sold, or be made the subject of an invitation for subscription or purchase, nor may this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares being offered be circulated or distributed, whether directly or indirectly, to the public or any member of the public in Singapore other than (i) to an institutional investor or other person specified Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "Securities and Futures Act") (ii) to a sophisticated investor, and in accordance with the conditions, specified in Section 275 of the Securities and Futures Act, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the Securities and Futures Act.

Each underwriter has acknowledged and agreed that the shares being offered have not been registered under the Securities and Exchange Law of Japan and are not being offered or sold and may not be offered or sold, directly or indirectly, in Japan or to or for the account of any resident of Japan, except (1) pursuant to an exemption from the registration requirements of the Securities and Exchange Law of Japan and (ii) in compliance with any other applicable requirements of Japanese law. As part of this offering, the underwriters may offer securities in Japan to a list of 49 offerees in accordance with the above provisions.

The underwriters do not expect sales to discretionary accounts to exceed five percent of the total number of shares offered.

Cytokinetics estimates that its share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately $.

Cytokinetics has agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

After this offering, certain affiliates of Credit Suisse First Boston LLC will own approximately % of Cytokinetics' outstanding common stock.

A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters. The underwriters may agree to allocate a number of shares to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters that may make Internet distributions on the same basis as other allocations.

VALIDITY OF SECURITIES

The validity of the common stock offered hereby will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California, and for the underwriters by Latham & Watkins LLP, Menlo Park, California. A member of Wilson Sonsini Goodrich & Rosati and an investment partnership comprised of current and former members of Wilson Sonsini Goodrich & Rosati beneficially own an aggregate of 8,620 shares of our common stock.

EXPERTS

The financial statements as of December 31, 2001 and 2002 and for each of the three years in the period ended December 31, 2002 included in this Prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the Securities and Exchange Commission, a registration statement on Form S-1 under the Securities Act with respect to the common stock offered hereby. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information with respect to Cytokinetics and the common stock offered hereby, you should refer to the registration statement and to the exhibits and schedules filed therewith. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. A copy of the registration statement and the exhibits and schedules therewith may be inspected without charge at the public reference room maintained by the SEC located at 450 Fifth Street, N.W., Washington, D.C. 20549. Copies of all or any portion of the registration statement may be obtained from such offices upon payment of prescribed fees. The public may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. The SEC maintains a website at http://www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC.

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Index to Financial Statements

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

REPORT OF INDEPENDENT AUDITORS

To the Board of Directors and Stockholders of

Cytokinetics, Incorporated
(a development stage enterprise):

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of Cytokinetics, Incorporated (a development stage enterprise) at December 31, 2001 and 2002, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2002 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PRICEWATERHOUSECOOPERS LLP

San Jose, California

March 21, 2003, except for note 13,
as to which the date is January 21, 2004

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Balance Sheets

(in thousands, except share and per share data)

	December 31,		September 30,	Pro forma Stockholders' Equity at September 30,
	2001	2002	2003	2003
			(unaudited)	
Assets				
Current assets:				
Cash and cash equivalents	$ 11,244	$ 16,388	$ 9,259	
Short-term investments	40,686	10,425	27,176	
Accounts receivable, net of allowance of $386, none and none in 2001, 2002 and at September 30, 2003 (unaudited), respectively	875	16	76	
Restricted cash	6,236	13,106	13,904	
Prepaids and other current assets	775	1,117	1,346	
Total current assets	59,816	41,052	51,761	
Long-term investments	10,384	3,648	7,962	
Property and equipment, net	8,018	9,742	8,614	
Related party notes receivable	396	1,146	1,146	
Other assets	405	580	716	
Total assets	$ 79,019	$ 56,168	$ 70,199	
Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)				
Current liabilities:				
Accounts payable	$ 4,766	$ 1,609	$ 2,375	
Accrued liabilities	1,069	2,225	1,011	
Short-term portion of equipment financing lines	1,107	2,415	2,104	
Short-term portion of deferred revenue	2,800	3,110	2,800	
Total current liabilities	9,742	9,359	8,290	
Long-term portion of equipment financing lines	3,525	7,077	7,384	
Long-term portion of deferred revenue	9,800	7,000	4,900	
Total liabilities	23,067	23,436	20,574	
Commitments (Note 7)				
Convertible preferred stock, $0001 par value:				
Authorized: 37,300,000 shares				
Issued and outstanding: 26,108,859 shares in 2001 and 2002, 34,124,308 shares in 2003 (unaudited) and none pro forma (unaudited)				
(Liquidation preference: $94,300 in 2001 and 2002 and $134,377 in 2003 (unaudited))	93,304	93,304	133,175	$ —
	93,304	93,304	133,175	—
Stockholders' equity (deficit):				
Common stock, $0.001 par value:				
Authorized: 45,000,000 shares at December 31, 2001 and 2002 and 61,500,000 at September 30, 2003				
Issued and outstanding: 3,597,982 and 3,853,206 shares at December 31, 2001 and 2002, respectively and 3,990,393 at September 30, 2003; 38,189,665 shares pro forma	4	4	4	38

Additional paid-in capital	743	823	4,106	137,247
Deferred stock-based compensation	(58)	(50)	(2,652)	(2,652)
Accumulated other comprehensive income	268	40	76	76
Deficit accumulated during the development stage	(38,309)	(61,389)	(85,084)	(85,084)
Total stockholders' equity (deficit)	(37,352)	(60,572)	(83,550)	$ 49,625
Total liabilities, convertible preferred stock and stockholders' equity (deficit)	$ 79,019	$ 56,168	$ 70,199	

The accompanying notes are an integral part of these financial statements.

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Statements of Operations

(in thousands, except per share data)

	Years Ended December 31,			Nine Months Ended September 30,		Period from August 5, 1997 (date of inception) to September 30,
	2000	2001	2002	2002	2003	2003
				(unaudited)		(unaudited)
Revenues:						
Research and development and grant revenues	$ —	$ 7,066	$ 8,596	$ 6,134	$ 5,770	$ 21,432
License revenues	—	1,400	2,800	2,100	2,100	6,300
Total revenues	—	8,466	11,396	8,234	7,870	27,732
Operating expenses:						
Research and development(1)	10,403	20,961	28,424	19,661	24,140	90,953
General and administrative(1)	3,390	5,897	6,953	5,903	7,451	26,424
Total operating expenses	13,793	26,858	35,377	25,564	31,591	117,377
Operating loss	(13,793)	(18,392)	(23,981)	(17,330)	(23,721)	(89,645)
Interest and other income	902	3,232	2,232	1,838	1,797	8,673
Interest and other expense	(188)	(714)	(1,331)	(1,102)	(1,771)	(4,112)
Net loss	(13,079)	(15,874)	(23,080)	(16,594)	(23,695)	(85,084)
Net loss per share:						
Basic and diluted	$ (6.78)	$ (5.59)	$ (6.62)	$ (4.83)	$ (6.28)	
Weighted-average number of shares used in per share calculations:						
Basic and diluted	1,930	2,840	3,484	3,437	3,772	
Pro forma net loss per share (unaudited):						
Basic and diluted			$ (0.78)		$ (0.67)	
Weighted-average number of shares used in pro forma per share calculations (unaudited):						
Basic and diluted			29,668		35,336	
(1) Includes the following stock-based compensation charges:						
Research and development	$ 101	$ 86	$ 4	$ (4)	$ 376	$ 690
General and administrative	—	27	2	(1)	230	259
	$ 101	$ 113	$ 6	$ (5)	$ 606	$ 949

The accompanying notes are an integral part of these financial statements.

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Statements of Stockholder's Deficit

(in thousands, except share and per share data)

	Common Stock		Additional Paid-In	Deferred Stock-Based	Accumulated Other Comprehensive Income	Deficit Accumulated During the Development	Total Stockholders'
	Shares	Amount	Capital	Compensation	(Loss)	Stage	Deficit
Issuance of common stock upon exercise of stock options for cash at $0.0075 per share	295,250	$ —	$ 2	$ —	$ —	$ —	$ 2
Issuance of common stock to founders at $0.0075 per share in exchange for cash in January 1998.	1,126,110	1	7	—	—	—	8
Net loss	—	—	—	—	—	(2,015)	(2,015)
Balances, December 31, 1998.	1,421,360	1	9	—	—	(2,015)	(2,005)
Issuance of common stock upon exercise of stock options for cash at $0.0075-$0.29 per share	575,000	1	68	—	—	—	69
Issuance of warrants, valued using Black- Scholes model	—	—	41	—	—	—	41
Deferred stock-based compensation	—	—	237	(237)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	123	—	—	123
Components of comprehensive loss:							
Unrealized loss on investments	—	—	—	—	(8)	—	(8)
Net loss	—	—	—	—	—	(7,341)	(7,341)
Total comprehensive loss	—	—	—	—	—	—	(7,349)
Balances, December 31, 1999	1,996,360	2	355	(114)	(8)	(9,356)	(9,121)
Issuance of common stock upon exercise of stock options for cash at $0.0075-$0.29 per share	1,463,327	2	193	—	—	—	195
Deferred stock-based compensation	—	—	93	(93)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	101	—	—	101
Components of comprehensive loss:							
Net change in unrealized loss on investments	—	—	—	—	86	—	86
Net loss	—	—	—	—	—	(13,079)	(13,079)
Total comprehensive loss	—	—	—	—	—	—	(12,993)
Balances, December 31, 2000	3,459,687	4	641	(106)	78	(22,435)	(21,818)
Issuance of common stock upon exercise of stock options for cash at $0.0075-$0.60 per share	204,962	—	56	—	—	—	56
Repurchase of common stock	(66,667)	—	(19)	—	—	—	(19)
Compensation expense for acceleration of options	—	—	20	—	—	—	20
Deferred stock-based compensation	—	—	45	(45)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	93	—	—	93
Components of comprehensive loss:							
Net change in unrealized gain on investments	—	—	—	—	190	—	190
Net loss	—	—	—	—	—	(15,874)	(15,874)
Total comprehensive loss	—	—	—	—	—	—	(15,684)

The accompanying notes are an integral part of these financial statements.

	Common Stock		Additional Paid-In Capital	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage	Total Stockholders' Deficit
	Shares	Amount					
Balances, December 31, 2001	3,597,982	4	743	(58)	268	(38,309)	(37,352)
Issuance of common stock upon exercise of stock options for cash at $0.0075-$0.60 per share	262,381	—	84	—	—	—	84
Repurchase of common stock	(7,157)	—	(2)	—	—	—	(2)
Deferred stock-based compensation	—	—	(2)	2	—	—	—
Amortization of deferred compensation	—	—	—	6	—	—	6
Components of comprehensive loss:							
Net change in unrealized gain on investments	—	—	—	—	(228)	—	(228)
Net loss	—	—	—	—	—	(23,080)	(23,080)
Total comprehensive loss	—	—	—	—	—	—	(23,308)
Balances, December 31, 2002	3,853,206	4	823	(50)	40	(61,389)	(60,572)
Issuance of common stock upon exercise of stock options for cash at $0.0075-$0.60 per share (unaudited)	137,187	—	75	—	—	—	75
Stock-based compensation (unaudited)	—	—	83	—	—	—	83
Deferred stock-based compensation (unaudited)	—	—	3,125	(3,125)	—	—	—
Amortization of deferred stock-based compensation (unaudited)	—	—	—	523	—	—	523
Components of comprehensive loss:							
Net change in unrealized gain on investments (unaudited)	—	—	—	—	36	—	36
Net loss (unaudited)	—	—	—	—	—	(23,695)	(23,695)
Total comprehensive loss	—	—	—	—	—	—	(23,659)
Balances, September 30, 2003 (unaudited)	3,990,393	$ 4	$ 4,106	$ (2,652)	$ 76	$ (85,084)	$ (83,550)

The accompanying notes are an integral part of these financial statements.

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Statements of Cash Flows

(in thousands)

	Years Ended December 31,			Nine Months Ended September 30,		Period from August 5, 1997 (date of inception) to September 30,
	2000	2001	2002	2002	2003	2003
				(unaudited)		(unaudited)
Cash flows from operating activities:						
Net loss	$(13,079)	$(15,874)	$(23,080)	$(16,594)	$(23,695)	$ (85,084)
Adjustments to reconcile net loss to net cash used in operating activities:						
Depreciation and amortization	860	1,614	2,849	2,088	2,399	8,113
Loss on disposal of equipment	—	156	14	—	82	252
Gain on sale of investments	—	(84)	—	—	—	(84)
Allowance for doubtful accounts	—	386	(195)	(195)	—	191
Non-cash expense related to warrants issued for equipment financing lines and facility lease	11	15	7	6	—	41
Non-cash compensation expense for acceleration of options	—	20	—	—	—	20
Stock-based compensation	101	93	6	(6)	606	929
Changes in operating assets and liabilities:						
Accounts receivable	—	(1,261)	1,054	1,061	(60)	(267)
Prepaids and other assets	(101)	(515)	(342)	75	(229)	(1,424)
Accounts payable	148	1,280	(3,675)	(3,115)	766	(646)
Accrued liabilities	693	132	1,206	(253)	(1,214)	1,011
Other assets	—	(343)	(175)	(125)	(136)	(638)
Deferred revenue	—	12,600	(2,490)	(2,100)	(2,410)	7,700
Net cash used in operating activities	(11,367)	(1,781)	(24,821)	(19,158)	(23,891)	(69,886)
Cash flows from investing activities:						
Increase in restricted cash	—	(6,011)	(6,870)	(7,140)	(798)	(13,905)
Purchases of property and equipment	(2,194)	(3,808)	(4,068)	(3,723)	(1,353)	(13,981)
Proceeds from sale of equipment	—	24	—	—	—	24
Issuance of notes receivable	—	(200)	(750)	—	—	(1,146)
Purchases of investments	(36,083)	(65,422)	—	(585)	—	(116,260)
Proceeds from sales and maturities of investments	13,153	51,889	36,768	43,479	(21,029)	81,281
Net cash provided by (used in) investing activities	(25,124)	(23,528)	25,080	32,031	(23,180)	(63,987)
Cash flows from financing activities:						
Proceeds from issuance of preferred stock, net of issuance costs	54,907	13,842	(50)	—	39,871	133,175
Proceeds from issuance of common stock	195	56	84	70	75	489
Repurchase of common stock	—	(19)	(2)	(2)	—	(21)
Proceeds from equipment financing lines	628	3,545	6,373	5,837	1,357	13,189
Repayment of equipment financing lines	(293)	(396)	(1,520)	(893)	(1,361)	(3,700)
Net cash provided by financing activities	55,437	17,028	4,885	5,012	39,942	143,132
Net increase (decrease) in cash and cash equivalents	18,946	(8,281)	5,144	17,885	(7,129)	9,259
Cash and cash equivalents, beginning of period	577	19,525	11,244	11,244	16,388	—

Cash and cash equivalents, end of period	$ 19,523	$ 11,244	$ 16,388	$ 29,129	$ 9,259	$ 9,259
Supplemental disclosure of cash flow information:						
Cash paid for interest	$ 165	$ 180	$ 697	$ 478	$ 638	$ 1,514
Cash paid for taxes	$ 11	$ 6	$ 63	$ 62	$ 9	$ 79
Supplemental disclosure of significant non-cash investing and financing activities:						
Deferred stock-based compensation	$ 93	$ 45	$ (2)	$ (2)	$ 3,125	$ 3,498

The accompanying notes are an integral part of these financial statements.

Note 1 — Formation and Business of the Company:

Cytokinetics, Incorporated, (the "Company") was incorporated in Delaware on August 5, 1997 to discover, develop and commercialize novel small molecule drugs specifically targeting the cytoskeleton. Through September 30, 2003, the Company has been primarily engaged in conducting research, developing drug candidates and product technologies, recruiting personnel and raising capital. The activity from August 5, 1997 to December 31, 1997 was insignificant.

Note 2 — Summary of Significant Accounting Policies:

Unaudited Interim Financial Data

The accompanying balance sheet as of September 30, 2003, the statements of operations and of cash flows for the nine months ended September 30, 2002 and 2003, and the statement of stockholders' equity (deficit) for the nine months ended September 30, 2003 are unaudited. The unaudited interim financial statements have been prepared on the same basis as the annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to present fairly the Company's financial position and results of operations and cash flows for the nine months ended September 30, 2002 and 2003. The financial data and other information disclosed in these notes to financial statements related to the nine month periods are unaudited. The results for the nine months ended September 30, 2003 are not necessarily indicative of the results to be expected for the year ending December 31, 2003 or for any other interim period or for any future year.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments which potentially subject the Company to concentrations of risk consist principally of cash and cash equivalents, investments and accounts receivable. The Company's cash and cash equivalents are invested in deposits with two major banks in the United States. Deposits in these banks may exceed the amount of insurance provided on such deposits. The Company has not experienced any losses on its deposits of cash, cash equivalents, and investments.

The Company performs an ongoing credit evaluation of its' customers' financial conditions and generally does not require collateral to secure accounts receivable. The Company's exposure to credit risk associated with non-payment is affected principally by conditions or occurrences within GlaxoSmithKline ("GSK"). The Company historically has not experienced significant losses relating to accounts receivable from its primary customer. 96% and 99% of the Company's revenues for the years ended December 31, 2001 and 2002 respectively were derived from GSK.

Drug candidates developed by the Company may require approvals or clearances from the Food and Drug Administration ("FDA") or other international regulatory agencies prior to commercialized sales. There can be no assurance that the Company's drug candidates will receive any of the required approvals or clearances. If the Company was denied approval or clearance or such approval was delayed, it may have a material adverse impact on the Company.

Cash and Cash Equivalents

Cash equivalents are stated at cost, which approximates market value. The Company considers all highly liquid investments with an original maturity of three months or less at the time of purchase to be cash equivalents.

Investments

Investments consist of US Corporate Bonds and commercial paper with maturities ranging from three months to two years. The Company has classified all investments as available-for-sale and, as a result, carries such amounts at fair value. Unrealized gains and losses are included in accumulated other comprehensive income (loss) in stockholders' equity until realized. Realized gains and losses on sales of all such securities are reported in earnings and computed using the specific identification cost method. Realized gains or losses and charges for other-than-temporary declines in value, if any, on available-for-sale securities are reported in other income or expense as incurred. The Company periodically evaluates these investments for other-than-temporary impairment.

Fair Value of Financial Instruments

For financial instruments consisting of cash and cash equivalents, accounts payable and accrued liabilities included in the Company's financial statements, the carrying amounts are reasonable estimates of fair value due to their short maturities. Estimated fair values for marketable securities, which are separately disclosed elsewhere, are based on quoted market prices for the same or similar instruments. Based on borrowing rates currently available to the Company, the carrying value of the equipment financing lines approximate fair value.

Property and Equipment

Property and equipment are stated at cost and depreciated on a straight-line basis over the estimated useful lives of the related assets, which is generally three to five years. Amortization of leasehold improvements is computed using the straight-line method over the shorter of the remaining lease term or the estimated useful life of the related assets, typically five years. Upon sale or retirement of assets, the costs and related accumulated depreciation and amortization are removed from the balance sheet and the resulting gain or loss is reflected in operations. Maintenance and repairs are charged to operations as incurred.

Impairment of long-lived assets

In accordance with the provisions of Statement of Financial Accounting Standards Board ("SFAS") No. 144, "Accounting for the Impairment or Disposal of Long-lived Assets," the Company reviews long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Under SFAS No. 144, an impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition is less than its carrying amount. Impairment, if any, is measured as the amount by which the carrying amount of a long-lived asset exceeds its fair value. Through December 31, 2002, there have been no such impairments.

Revenue Recognition

The Company recognizes revenue in accordance with Securities and Exchange Commission Staff Accounting Bulletin, or SAB, No. 101, Revenue Recognition in Financial Statements, as amended by SAB Nos. 101A and 101B. SAB No. 101 requires that four basic criteria must be met before revenue can be recognized: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the fee is fixed and determinable; and collectibility is reasonably assured. Determination of whether persuasive evidence of an arrangement exists and whether delivery has occurred or services have been rendered are based on management's judgments regarding the fixed nature of the fee charged for research performed and milestones met, and the collectibility of those fees. Should changes in conditions cause management to determine these criteria are not met for certain future transactions, revenue recognized for any reporting period could be adversely affected.

Research and development revenues, which are earned under agreements with third parties for contract research and development activities, are recorded as the related expenses are incurred. Charges to the third parties are based upon negotiated rates for full time equivalent employees of the Company and actual out-of-pocket costs. Rates for full time equivalent employees are intended to approximate the Company's anticipated costs. Milestone payments are non-refundable and recognized as revenue when earned, as evidenced by achievement of the specified milestones and the absence of ongoing performance obligations. Any amounts received in advance of performance are recorded as deferred revenue. None of the revenues recognized to date are refundable if the relevant research effort is not successful.

Grant revenues are recorded as research is performed. Grant revenues are not refundable.

License revenues received in connection with strategic alliance agreements are deferred and recognized on a straight-line basis over the term of the agreement.

Research and Development Expenditures

Research and development costs are charged to operations as incurred.

Income Taxes

The Company accounts for income taxes under the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

Net Loss Per Common Share

Basic net loss per share is computed by dividing net loss by the weighted average number of vested common shares outstanding during the period. Diluted net loss per share is computed by giving effect to all potential dilutive common shares, including options, common stock subject to repurchase, warrants and convertible preferred stock. A reconciliation of

the numerator and denominator used in the calculation of basic and diluted net loss per share follows (in thousands):

	Years Ended December 31,			Nine Months Ended September 30,	
	2000	2001	2002	2002	2003
				(unaudited)	
Numerator:					
Net loss	$(13,079)	$(15,874)	$(23,080)	$(16,594)	$(23,695)
Denominator:					
Weighted-average number of common shares outstanding	2,494	3,531	3,754	3,732	3,902
Less: Weighted-average shares subject to repurchase	(564)	(691)	(270)	(295)	(130)
Weighted-average number of common shares outstanding used in computing basic and diluted net loss per share	1,930	2,840	3,484	3,437	3,772

Anti-dilutive Securities

The following outstanding options, common stock subject to repurchase, convertible preferred stock and warrants were excluded from the computation of diluted net loss per common share for the periods presented because including them would have had an antidilutive effect (in thousands):

	Years Ended December 31,			Nine Months Ended September 30,	
	2000	2001	2002	2002	2003
				(unaudited)	
Convertible preferred stock (as if converted)	23,776	26,109	26,109	26,109	34,124
Options to purchase common stock	2,194	2,823	4,121	4,124	4,841
Common stock subject to repurchase	999	433	178	208	91
Warrants to purchase common stock	200	200	200	200	200
Warrants to purchase convertible preferred stock	68	168	168	168	168
	27,237	29,733	30,776	30,809	39,424

Stock-based Compensation

The Company accounts for stock-based employee compensation arrangements in accordance with the provisions of Accounting Principles Board Opinion No. 25 (“APB 25”), “Accounting for Stock Issued to Employees,” Statement of Financial Accounting Standards No. 123 (“SFAS No. 123”), “Accounting for Stock-Based Compensation” and complies with the disclosure requirements of Statement of Financial Accounting Standards (“SFAS”) No. 148, “Accounting for Stock-Based Compensation and Disclosure an Amendment of FASB Statement No. 123.” Under APB 25,

compensation expense is based on the difference, if any, on the date of grant, between the estimated fair value of the Company's common stock and the exercise price. SFAS No. 123 defines a "fair value" based method of accounting for an employee stock option or similar equity investment.

The Company accounts for equity instruments issued to nonemployees in accordance with the provisions of SFAS No. 123 and Emerging Issues Task Force ("EITF") Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling Goods, or Services."

As the determination of fair value of all options granted to employees after such time the Company becomes a public company will include an expected volatility factor in addition to the factors described in the following table, the following results may not be representative of future periods.

The following table illustrates the effect on net loss if the Company had applied the fair value recognition provisions of SFAS 123 to stock-based employee compensation arrangements (in thousands):

	Years Ended December 31,			Nine Months Ended September 30,	
	2000	2001	2002	2002	2003
				(unaudited)	
Net loss, as reported	$(13,079)	$(15,874)	$(23,080)	$(16,594)	$(23,695)
Add: Stock-based employee compensation expense included in reported net loss	—	20	—	—	362
Deduct: Total stock-based employee compensation determined under fair value based method for all awards	(33)	(88)	(79)	(57)	(440)
Adjusted net loss	$(13,112)	$(15,942)	$(23,159)	$(16,651)	$(23,773)
Net loss per common share, basic and diluted:					
As reported	$ (6.78)	$ (5.59)	$ (6.62)	$ (4.83)	$ (6.28)
Adjusted	$ (6.79)	$ (5.61)	$ (6.65)	$ (4.84)	$ (6.30)

The value of each option granted is estimated on the date of grant using the minimum value method with the following weighted average assumptions:

	Years Ended December 31,			Nine Months Ended September 30,	
	2000	2001	2002	2002	2003
				(unaudited)	
Risk-free interest rate	6.33%	6.33%	2.78%	2.78%	4.31%
Expected life (in years)	5	5	5	5	5
Dividend yield	0.00%	0.00%	0.00%	0.00%	0.00%

Based on the above assumptions, the weighted average estimated minimum values of options granted were $0.07, $0.11 and $0.26 per share for the years ended December 31, 2000, 2001 and 2002, respectively, and $0.20 and $3.18 for the nine months ended September 30, 2002 (unaudited) and 2003 (unaudited), respectively.

Recent Accounting Pronouncements

In January 2003, the Financial Accounting Standards Board ("FASB") issued FASB Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51." FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. During December 2003, the FASB issued FIN 46R, a revision to FIN 46. FIN 46R provides a broad deferral of the latest date by which all public entities must apply FIN 46 to certain variable interest entities, to the first reporting period ending after March 15, 2004. We do not expect the adoption of FIN 46 to have a material impact upon our financial position, cash flows or results of operations.

In May, 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." SFAS No. 150 establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability or an asset in some circumstances. Many of those instruments were previously classified as equity. SFAS No. 150 is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. It is to be implemented by reporting the cumulative effect of a change in an accounting principle for financial instruments created before the issuance date of SFAS No. 150 and still existing at the beginning of the interim period of adoption. While the effective date of certain elements of SFAS No. 150 has been deferred, we do not expect the adoption of SFAS No. 150 to have a material impact upon our financial position, cash flows or results of operations.

Note 3 — Investments:

The amortized cost and fair value of short-term and long-term investments at December 31, 2001 and 2002 are as follows (in thousands):

	December 31, 2001				
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Maturity Dates
US Corporate Bonds	$33,408	$ 139	$ (2)	$33,545	01/02 - 11/02
US Government Bonds	6,620	13	—	6,633	08/02 - 10/02
Foreign Corporate Bonds	503	5	—	508	5/02
Total short-term investments	$40,531	$ 157	$ (2)	$40,686	
US Corporate Bonds	$ 8,999	$ 103	$ —	$ 9,102	01/03 - 04/03
Foreign Corporate Bonds	1,272	10	—	1,282	02/03
Total long-term investments	$10,271	$ 113	$ —	$10,384	

	December 31, 2002				
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Maturity Dates
US Corporate Bonds	$ 9,147	$ 32	$ (10)	$ 9,169	01/03 - 11/03
Foreign Corporate Bonds	1,253	3	—	1,256	02/03
Total short-term investments	$10,400	$ 35	$ (10)	$10,425	
US Corporate Bonds	$ 3,633	$ 15	$ —	$ 3,648	02/04
Total long-term investments	$ 3,633	$ 15	$ —	$ 3,648	

There was a realized gain of $84,000 for the year ended December 31, 2001. There were no realized gains or losses in 2000 or 2002.

Note 4 — Balance Sheet Components (in thousands):

	December 31,	
	2001	2002
Property and equipment, net:		
Computer and laboratory equipment	$ 9,368	$13,830
Furniture and fixtures	381	387
Leasehold improvements	889	982
	10,638	15,199
Less: Accumulated depreciation and amortization	(2,620)	(5,457)
	$ 8,018	$ 9,742

	December 31,	
	2001	2002
Accrued liabilities:		
Payroll related	$ 488	$ 928
Consulting and professional fees	477	452
Deposits from sublessor	104	—
Other accrued expenses	—	845
	$1,069	$2,225

Note 5 — Related Party Transactions:

In 1998, the Company entered into a licensing agreement with certain universities where the Company's founding scientists are also affiliates of the universities. The Company agreed to pay technology license fees, as well as milestone payments for technology developed under the licensing agreement. The Company is also obligated to make minimum royalty payments, as specified in the agreement commencing the year of product market introduction or upon an agreed upon anniversary of the licensing agreement. In 2000, 2001 and 2002, $44,000, $125,000 and $56,000 was paid to the universities under this agreement, respectively.

In 2001, the Company entered into a strategic alliance agreement with the holders of Series D Convertible Preferred Stock. In the agreement, the stockholders agreed to pay the Company an upfront licensing fee of $14,000,000 for rights to certain technologies. In addition, the stockholders agreed to pay the Company milestone payments regarding performance and developments within agreed upon projects. In conjunction with these projects, the stockholders agreed to reimburse the Company's costs associated with the strategic alliance. In 2001, the Company received $14,000,000 for the licensing fee, which is being recognized ratably over the term of the agreement. For the years ended December 31, 2001 and 2002, $1,400,000 and $2,800,000 respectively, has been recognized as license revenue under this agreement. At December 31, 2001 and 2002, license revenue of $12,600,000 and $9,800,000, respectively, was deferred. The Company also received and recognized as revenue $2,000,000 and $1,000,000 in performance milestone payments and $4,764,000 and $7,470,000 in project reimbursements for the years ended December 31, 2001 and 2002 respectively, as no ongoing performance obligations exist. At December 31, 2002, deferred revenue related to research and development was $310,000.

In 2001 and 2002, the Company extended loans for $200,000 and $100,000, respectively, to officers of the Company. The loans accrue interest at 5.18% and 5.75% and mature on November 12, 2010 and July 12, 2008, respectively. In 2000, 2001 and 2002, the Company extended loans totaling $150,000, none and $650,000, respectively, to various executives and employees of the Company. The loans accrue interest at rates ranging from 4.88% to 5.80% and will mature at various dates between 2005 and 2011. Certain of the loans will be forgiven if the officers or executives remain with the Company through the maturation of their respective loans. At December 31, 2002, $1.1 million is included in related party notes receivable.

The Company co-signed a loan with a major bank in the United States on the behalf of an executive of the Company. The Company has a restricted cash investment in the amount of $150,000 to collateralize the note in case of officer default (included in restricted cash), and agreed to make all interest payments on the loan. As of December 31, 2002, the amount of the loan is

$150,000, and the Company made interest payments totaling $9,000, $8,000 and $9,000 in 2000, 2001 and 2002 respectively.

Note 6 — Equipment Financing Line:

In September of 1998, the Company obtained an equipment line of credit. The Company could borrow an amount not to exceed $1,500,000, available in minimum installments of $250,000 until September 1999, upon which the line expired. In 1999, the Company made three draws on this line of credit for $663,000, $253,000 and $370,000 with effective interest rates of 13.24%, 13.3% and 13.09%, respectively. All of these loans are payable in 48 monthly installments with an additional 15% ending balloon payment. In addition, in connection with this line, the Company issued warrants (see Note 8).

In December 1999, the Company obtained an additional equipment line of credit. The Company could borrow an amount not to exceed $5,000,000, available until December 2000, upon which the line expired. In 2000, the Company made two draws on this line of credit for $549,000 and $78,000 with effective interest rates of 13.17% and 15.18%, respectively. These loans are payable in 48 and 36 monthly installments, respectively, with an additional 15% ending balloon payment.

In January 2001, the Company entered into a new financing agreement under which the Company may borrow up to $6,000,000 through a financing line of credit. In 2001, the Company made four draws on this line of credit for $1,702,000, $140,000, $997,000, and $706,000 with effective interest rates of 10.34%, 10.4%, 10.34%, and 10.4%, respectively, and with financing terms of 60 months, 36 months, 60 months, and 36 months, respectively. In 2002, the Company made one additional draw on this line of credit for $2,448,000 with an effective interest rate of 10.34% and with financing terms of 60 months. In connection with this line, the Company is obligated to maintain a $5,550,000 letter of credit as collateral against the line of credit (see Note 7).

On July 1, 2002, the Company entered into a new financing agreement under which the Company may borrow up to $7,500,000 through a financing line of credit. In 2002, the Company made three draws on this line of credit for $1,568,000, $1,821,000, and $535,000 with effective interest rates of 8.77%, 7.61%, and 7.64%, respectively, and with financing terms of 60 months for all draws. In connection with this line, the Company is obligated to maintain a $7,500,000 letter of credit as collateral against the line of credit (see Note 7).

Minimum equipment lease line principal payments are as follows (in thousands):

2003	$ 2,415
2004	2,283
2005	2,000
2006	2,081
2007	708
2008	5
Total minimum principal payments	$9,492

Note 7 — Commitments:

Leases

The Company leases office space and equipment under noncancelable operating leases with various expiration dates through 2013. Rent expense was $845,000, $2,250,000 and $2,220,000 for the years ended December 31, 2000, 2001 and 2002 respectively. The terms of the facility lease provide for rental payments on a graduated scale. The Company recognizes rent expense on a straight-line basis over the lease period, and has deferred the rent expense paid but not incurred.

During 2001, the Company subleased a portion of their building. Sublease income for the year ended December 31, 2001 was $313,000 which has been offset against rent expense.

Future minimum lease payments under noncancelable operating leases are as follows (in thousands):

Year Ending December 31,	Operating Leases
2003	$ 1,793
2004	1,689
2005	1,656
2006	1,552
2007	1,598
2008 through end of lease	8,698
	$ 16,986

Restricted Cash

During 1999, $75,000 of cash was pledged as collateral for the corporate employee credit cards issued to employees for travel and other expenses and is classified as restricted cash on the balance sheet. During 2001, this amount was increased by $10,500 due to the increase in headcount. As of December 31, 2002, the total amount of cash pledged as collateral was $85,500.

The Company also had a restricted certificate of deposit in the amount of $150,000 during 2002 and 2001 (see Note 5) pledged as collateral on a loan.

In 2001, the Company purchased a $6,000,000 certificate of deposit to secure a letter of credit in conjunction with an equipment financing line (see Note 6). This amount was classified as restricted cash at December 31, 2001. In October 2002, the Company renegotiated the terms of the letter of credit and pledged $5,550,000 of its investment account to secure the renegotiated letter of credit. The balance pledged shall automatically be reduced by $90,000 each month until October 31, 2003. At December 31, 2002 $5,370,000 is included in restricted cash.

The Company further pledged $7,500,000 of its investment account in July 2002 to secure a new letter of credit in conjunction with the new financing line obtained on July 1, 2002 (Note 6). The balance pledged shall automatically be reduced by $125,000 each month until December 31, 2003. At December 31, 2002 $7,500,000 is included in restricted cash.

Note 8 — Convertible Preferred Stock:

Under the Company's Certificate of Incorporation, the Company's Convertible Preferred Stock is issuable in series.

In April 1998, the Company sold 5,300,000 shares of Series A Convertible Preferred Stock at $1.00 per share to new investors for net cash proceeds of $5,269,000.

In August 1999, the Company sold 6,896,545 shares of Series B Convertible Preferred Stock at $2.90 per share to new and existing investors for net cash proceeds of $19,336,000.

In November 2000, the Company sold 11,578,980 shares of Series C Convertible Preferred Stock at $4.75 per share to new and existing investors for net cash proceeds of $54,857,000.

In July 2001, the Company sold 2,333,334 shares of Series D Convertible Preferred Stock at $6.00 per share to new investors for net cash proceeds of $13,842,000.

In March and April 2003, the Company sold 8,015,449 shares of Series E Convertible Preferred Stock at $5.00 per share to new and existing investors for net cash proceeds of $39,871,000.

As of December 31, 2000, the Convertible Preferred Stock comprised:

	Number of Shares Authorized	Number of Shares Issued and Outstanding	Proceeds, Net of Issuance Cost	Liquidation Preference per Share	Annual Dividends per Share
Series A	5,550,000	5,300,000	$ 5,269	$ 1.00	$ 0.10
Series B	7,000,000	6,896,545	19,336	$ 2.90	$ 0.29
Series C	12,250,000	11,578,980	54,857	$ 4.75	$ 0.475
	24,800,000	23,775,525	$ 79,462		

As of December 31, 2001 and 2002, the Convertible Preferred Stock comprised (in thousands, except share and per share data):

	Number of Shares Authorized	Number of Shares Issued and Outstanding	Proceeds, Net of Issuance Cost	Liquidation Preference per Share	Annual Dividends per Share
Series A	5,550,000	5,300,000	$ 5,269	$ 1.00	$ 0.10
Series B	7,000,000	6,896,545	19,336	$ 2.90	$ 0.29
Series C	12,250,000	11,578,980	54,857	$ 4.75	$ 0.475
Series D	2,500,000	2,333,334	13,842	$ 6.00	$ 0.60
	27,300,000	26,108,859	$ 93,304		

As of September 30, 2003, the Convertible Preferred Stock comprised (in thousands, except share and per share data, unaudited):

	Number of Shares Authorized	Number of Shares Issued and Outstanding	Proceeds, Net of Issuance Cost	Liquidation Preference per Share	Annual Dividends per Share
Series A	5,550,000	5,300,000	$ 5,269	$ 1.00	$ 0.10
Series B	7,000,000	6,896,545	19,336	$ 2.90	$ 0.29
Series C	12,250,000	11,578,980	54,857	$ 4.75	$ 0.475
Series D	2,500,000	2,333,334	13,842	$ 6.00	$ 0.60
Series E	10,000,000	8,015,449	39,871	$ 5.00	$ 0.50
	37,300,000	34,124,308	$ 133,175		

The holders of Convertible Preferred Stock have various rights and preferences as follows:

Voting

Each share of Series A, Series B, Series C, Series D and Series E Convertible Preferred Stock has voting rights equal to an equivalent number of shares of Common Stock into which it is convertible and votes together as one class with the Common Stock.

Dividends

Holders of Convertible Preferred Stock are entitled to receive noncumulative dividends at the rates specified above when and if declared by the Board of Directors. The holders of Series A, Series B, Series C, Series D and Series E Convertible Preferred Stock will also be entitled to participate in dividends on Common Stock, when and if declared by the Board of Directors, based on the number of shares of Common Stock held on an as-if converted basis. Such dividends shall not be cumulative. No dividends on Convertible Preferred Stock or Common Stock have been declared by the Board from inception through December 31, 2002.

Liquidation

In the event of any liquidation, dissolution or winding up of the Company, including a merger, acquisition or sale of assets where the beneficial owners of the Company's Common Stock and Convertible Preferred Stock own less than 50% of the resulting voting power of the surviving entity, the holders of Series A Convertible Preferred Stock are entitled to receive an amount equal to the liquidation preference specified above plus any declared but unpaid dividends prior to and in preference to any distribution to the holders of Common Stock. If, upon the occurrence of such event, the assets and funds thus distributed among the holders of the Convertible Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then the entire assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of the Convertible Preferred Stock in proportion to the per share preferential amount each such holder is otherwise entitled to receive.

Redemption

The Series A, Series B, Series C, Series D and Series E Convertible Preferred Stock are not mandatorily redeemable.

Conversion

Each share of Convertible Preferred Stock, at the option of the holder, is convertible into the number of fully paid and nonassessable shares of Common Stock which results from dividing the conversion price per share in effect for the shares of such series of Convertible Preferred Stock at the time of conversion into the original issue price per share of such series of Convertible Preferred Stock. The initial conversion price per share of Series A, Series B, Series C, Series D and Series E Convertible Preferred Stock shall be the original issue price. The initial conversion price of Series A, Series B, Series C, Series D and Series E Convertible Preferred Stock is subject to adjustment from time to time, as described in the Company's Restated Certificate of Incorporation.

Conversion is automatic for the holders of Series A, Series B, Series C, Series D and Series E Convertible Preferred Stock at the then effective conversion rate immediately upon the closing of a firm commitment underwritten initial public offering pursuant to an effective registration statement

under the Securities Act of 1933 covering the offer and sale of common stock in which the aggregate proceeds raised equals or exceeds $40,000,000. If the aggregate proceeds are less than $40,000,000 conversion is automatic upon the approval of at least 51% of the then outstanding shares of Preferred Stock, with all series voting together as a single class. The Company has reserved 34,199,272 shares of Common Stock for issuance upon conversion of Convertible Preferred Stock.

The Company's Convertible Preferred Stock is subject to an antidilution conversion price adjustment feature which was triggered for Series D when the Company issued Series E for a consideration per share less than the initial conversion price for Series D. The conversion price for Series D shall be adjusted downward from its initial conversion price of $6.00 per share. As of September 30, 2003 the Company has issued 8,015,449 shares of Series E Convertible Preferred Stock for consideration of $5.00 per share. As a result, the Series D stockholders would receive an additional 74,964 shares of Common Stock upon conversion of the Convertible Preferred Stock.

As of September 30, 2003 each share of Series A, Series B, Series C and Series E Convertible Preferred stock is convertible into one share of common stock on a 1-for-1 basis and each share of Series D Convertible Preferred Stock is convertible into common stock on a 1-for-1.0321278 basis.

Warrants for Convertible Preferred Stock

In connection with an equipment line of credit, the Company issued warrants to purchase 67,500 shares of Series A Convertible Preferred Stock for $1.00 per share in September 1999. The Company valued the warrants by using the Black-Scholes pricing model in fiscal 1999 when the line was drawn upon using the full term of seven years, a risk-free interest rate of 6.33%, a dividend yield of 0%, and volatility of 60%. The fair value was netted against the equipment line and charged to interest expense over the life of the equipment line. The amount charged to interest expense was $8,000, $7,000 and $7,000 for the years ended December 31, 2000, 2001 and 2002, respectively. Upon the effective date of the registration statement for the Company's initial public offering of its equity securities, the shares purchaseable under these warrants will be shares of the Company's common stock, in the same number that the holder otherwise would have been entitled to purchase had these warrants remained exercisable for shares of convertible preferred stock.

In connection with obtaining Series B Convertible Preferred Stock financing in August 1999, the Company agreed to issue warrants to purchase an amount of Series B Convertible Preferred Stock at $2.90 per share. The Company determined in July 2001 that the amount issued was 100,000 warrants. The warrants were valued at $467,000 using the Black-Scholes pricing model using the contractual term of seven years, a risk-free interest rate of 5.37%, a dividend yield of 0%, and volatility of 60%. As the warrants relate to preferred stock issuance costs, the valuation was recorded as an issuance cost as an offset to Convertible Preferred Stock.

Note 9 — Stockholders' Deficit:

Common Stock

The Company's Articles of Incorporation, as amended, authorize the Company to issue 61,500,000 shares of $0.001 par value Common Stock. A portion of the shares sold are subject to a right of repurchase by the Company subject to vesting, which is generally over a four year period from the earlier of the grant date or employee hire date, as applicable, until vesting is complete. As

of December 31, 2002, 177,659 shares had been exercised under the employee stock option plan and are subject to repurchase.

In connection with the building lease, the Company issued warrants to purchase 200,000 shares of Common Stock for $0.29 per share in July 1999. The Company valued the warrants by using the Black-Scholes pricing model in 1999 using the contractual term of five years, a risk-free interest rate of 6.33%, a dividend yield of 0%, and volatility of 60%. The fair value was capitalized in other assets and amortized over the life of the building lease, which expired in August 2000. The amount charged to rent expense was $4,000, $0 and $0 for the years ended December 31, 2000, 2001 and 2002, respectively.

Stock Option Plans

In 1997, the Company adopted the 1997 Stock Option/ Stock Issuance Plan (the "Plan"). The Plan provides for the granting of stock options to employees and consultants of the Company. Options granted under the Plan may be either incentive stock options or nonqualified stock options. Incentive stock options ("ISO") may be granted only to Company employees (including officers and directors who are also employees). Nonqualified stock options ("NSO") may be granted to Company employees and consultants. The Company has reserved 8,832,345 shares of Common Stock for issuance under the Plan.

Options under the Plan may be granted for periods of up to ten years and at prices no less than 85% of the estimated fair value of the shares on the date of grant as determined by the Board of Directors, provided, however, that (i) the exercise price of an ISO and NSO shall not be less than 100% and 85% of the estimated fair value of the shares on the date of grant, respectively, and (ii) with respect to any 10% shareholder, the exercise price of an ISO or NSO shall not be less than 110% of the estimated fair market value of the shares on the date of grant and the term of the grant shall not exceed five years. Options may be exercisable immediately and are subject to repurchase options held by the Company which lapse over a maximum period of ten years at such times and under such conditions as determined by the Board of Directors. To date, options granted generally vest over four or five years (generally 25% after one year and monthly thereafter). Activity under the Plan is as follows:

	Options Available for Grant	Options Outstanding and Exercisable	Weighted Average Exercise Price per Share
Options authorized	2,923,890	—	$ —
Options granted	(1,666,390)	1,666,390	0.05
Options exercised	—	(295,250)	0.0075
Options canceled	—	—	—
Balances at December 31, 1998	1,257,500	1,371,140	0.06
Options granted	(1,090,500)	1,090,500	0.11
Options exercised	—	(575,000)	0.12
Options canceled	26,250	(26,250)	0.10
Balances at December 31, 1999	193,250	1,860,390	0.12
Increase in authorized shares	3,408,455	—	—
Options granted	(1,935,000)	1,935,000	0.29
Options exercised	—	(1,463,327)	0.13
Options canceled	137,688	(137,688)	0.14

	Options Available for Grant	Options Outstanding and Exercisable	Weighted Average Exercise Price per Share
Balances at December 31, 2000	1,804,393	2,194,375	0.26
Options granted	(1,051,915)	1,051,915	0.56
Options exercised	—	(204,962)	0.27
Options canceled	218,312	(218,312)	0.23
Balances at December 31, 2001	970,790	2,823,016	0.37
Increase in authorized shares	2,500,000	—	
Options granted	(1,865,234)	1,865,234	0.60
Options exercised	—	(262,381)	0.32
Options canceled	304,651	(304,651)	0.39
Balances at December 31, 2002	1,910,207	4,121,218	0.47
Options granted (unaudited)	(933,689)	933,689	0.60
Options exercised (unaudited)	—	(137,187)	0.54
Options canceled (unaudited)	76,708	(76,708)	0.40
Balances at September 30, 2003 (unaudited)	1,053,226	4,841,012	$ 0.54

The options outstanding and currently exercisable by exercise price at December 31, 2002 are as follows:

	Options Outstanding at December 31, 2002		
Exercise Price	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Number Vested
$0.10	206,500	6.41	189,228
$0.29	1,272,916	7.63	718,345
$0.50	228,608	8.10	99,271
$0.60	2,413,194	9.33	402,721
	4,121,218		1,409,565

The options outstanding and currently exercisable by exercise price at September 30, 2003 are as follows:

	Options Outstanding at September 30, 2003		
Exercise Price	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Number Vested
$0.10	186,500	5.85	186,500
$0.29	1,233,625	6.89	871,046
$0.50	215,866	7.36	137,673
$0.60	3,205,021	8.86	896,446
	4,841,012		2,091,665

Stock-based Compensation

In anticipation of the Company's initial public offering, the Company has determined that, for financial reporting purposes, the estimated value of its common stock was in excess of the exercise prices. Accordingly, for stock options issued to employees, the Company has recorded deferred stock-based compensation, and is amortizing the related expense on a straight line basis over the service period, which is generally four years. During the nine months ended September 30, 2003 (unaudited), the Company recorded deferred stock compensation in the amount of $2.8 million. During the nine months ended September 30, 2003 (unaudited), the Company recorded amortization of stock-based compensation of $362,000 in connection with options granted to employees.

In 2001, the Company accelerated the vesting of options to two employees in connection with related severance packages. The acceleration was accounted for in accordance with FIN No. 44 "Accounting for Certain Transactions Involving Stock Compensation" as a one-time charge to the statement of operations. The charge for the year ended December 31, 2001 was $20,000. The charge was equal to the intrinsic value difference between the exercise price of the accelerated options and the fair value of the common stock on the date of acceleration.

Stock-based compensation expense related to stock options granted to non-employees is recognized, on a straight-line basis, as the stock options are earned. The Company believes that the fair value of the stock options is more reliably measurable than the fair value of the services received. The fair value of the stock options granted is calculated at each reporting date using the Black-Scholes option-pricing model as prescribed by SFAS No. 123 using the following assumptions:

	Year Ended December 31,			Nine Months Ended September 30,	
	2000	2001	2002	2002	2003
				(unaudited)	
Risk-free interest rate	6.33%	5.07%	4.48%	4.48%	4.31%
Expected life (in years)	10	10	10	10	10
Dividend yield	0.00%	0.00%	0.00%	0.00%	0.00%
Volatility	60%	60%	70%	70%	70%

Based on the above assumptions, the weighted average fair values of options granted were $0.17, and $2.07 per share for the years ended December 31, 2000 and 2002, respectively. There were no options granted to non-employees in 2001. The weighted average fair values of options granted were $2.07 and $3.04 for the nine months ended September 30, 2002 (unaudited) and 2003 (unaudited), respectively.

The stock-based compensation expense will fluctuate as the fair market value of the common stock fluctuates. From August 5, 1997 (date of inception) to September 30, 2003, the Company has recorded $716,000 of deferred stock-based compensation related to options granted to non-employees. In connection with the grant of stock options to non-employees through 2002, the Company has amortized $101,000, $93,000 and $6,000 of stock-based compensation to expense in 2000, 2001 and 2002 respectively, $(5,000) and $161,000 for the nine months ended September 30, 2002 (unaudited) and 2003 (unaudited), respectively, and $484,000 for the period from August 5, 1997 (date of inception) through September 30, 2003. The Company recorded $83,000 of stock-

based compensation expense for the nine months ended September 30, 2003 for options granted to non-employees in 2003.

Note 10 — Pro Forma Common Shares Outstanding and Pro Forma Net Loss Per Share (Unaudited)

The pro forma common shares outstanding at September 30, 2003, the pro forma weighted-average common shares outstanding during the year ended December 31, 2002 and the pro forma weighted-average common shares outstanding during the nine months ended September 30, 2003 reflect the automatic conversion of all shares of convertible preferred stock outstanding into 34,199,272 shares of common stock as if such conversion had occurred on January 1, 2002 or the date of issuance, if later.

A reconciliation of the numerator and denominator used in the calculation of pro forma net loss per share follows (in thousands):

	Year Ended December 31, 2002	Nine Months Ended September 30, 2003
		(unaudited)
Numerator:		
Net loss	$ (23,080)	$ (23,695)
Denominator:		
Weighted-average number of shares outstanding used in computing basic net loss per share	3,484	3,772
Adjustments to reflect the effect of the assumed conversion of the preferred stock from the date of issuance	26,184	31,564
Weighted-average number of shares used in computing basic and diluted pro forma net income per share	29,668	35,336

Note 11 — Employee Benefit Plans:

The Company sponsors a 401(k) defined contribution plan covering all employees. There were no employer contributions in 2000, 2001 or 2002.

Note 12 — Taxes:

The Company did not record an income tax provision in the years ended December 31, 2000, 2001 and 2002 since the Company had a net taxable loss in each of those periods.

Deferred tax assets and liabilities consist of the following (in thousands):

	December 31,	
	2001	2002
Deferred tax assets:		
Net operating loss carryforwards	$ 8,552	$ 16,119
Deferred revenue	5,040	4,027
Research and development credit	2,262	3,658
Capitalized start-up costs	2,042	4,114
Other	212	6
	18,108	27,924
Less: Valuation allowance	(18,108)	(27,924)
	$ —	$ —

Management believes that, based on a number of factors, it is more likely than not that the deferred tax assets will not be realized, such that a full valuation allowance has been recorded.

The Company has federal and state net operating loss carryforwards and tax credit carryforwards of approximately $44,621,000 and $16,249,000 at December 31, 2002. The federal and state operating loss carryforwards expire in 2022 and 2012, respectively, if not utilized.

The Tax Reform Act of 1986 limits the use of operating loss tax credit carryforwards in certain situations where charges occur in stock ownership of a company. In the event the Company has a change in ownership; utilization of the carryforwards could be restricted.

Note 13 — Subsequent Events:

Authorized number of shares

In March 2003, the Company amended its Certificate of Incorporation to increase the authorized shares of common stock to 61,500,000 and to increase the authorized shares of convertible preferred stock to 37,300,000 of which 5,550,000, 7,000,000, 12,250,000, 2,500,000 and 10,000,000 are designated Series A, Series B, Series C, Series D and Series E, respectively.

Equipment Financing Line of Credit

In March 2003, the Company executed an additional draw of approximately $1,110,000 on the July 2002 line of credit with an effective interest rate of 7.59% and a term of 60 months. In May 2003, the Company refinanced the outstanding balance of approximately $4,800,000 under the January 2001 line of credit and drew an additional $248,000, with an interest rate of 7.56% and a term of 60 months. In October 2003, the Company refinanced the outstanding balance of approximately $9,300,000 under the January 2001 line of credit (as previously refinanced) and the July 2002 line of credit, with an interest rate of 4.25% and a term of 60 months. In November 2003, the Company executed an additional draw on the $7,500,000 line of credit totaling $614,165 with an effective interest rate of 4.25% and a term of 60 months.

Initial Public Offering

On January 21, 2004, the Board of Directors authorized management of the Company to file a registration statement with the Securities and Exchange Commission permitting the Company to sell shares of its common stock to the public. If the initial public offering is closed under the terms presently anticipated, all of the convertible preferred stock outstanding will automatically convert into shares of common stock. Unaudited pro forma stockholders' equity, as adjusted for the assumed conversion of the preferred stock, is set forth on the balance sheet.

Authorized number of shares

On January 21, 2004, the Board of Directors approved an amendment to the Company's amended and restated certificate of incorporation increasing the authorized number of shares to 130,000,000, of which 120,000,000 are designated as common stock and 10,000,000 are designated as preferred stock. The amendment is subject to stockholder approval and the closing of the Company's initial public offering.

2004 Equity Incentive Plan

On January 21, 2004, the Board of Directors adopted the 2004 Equity Incentive Plan ("the 2004 Plan"), subject to stockholder approval. The 2004 Plan provides for the granting of incentive stock options, nonstatutory stock options and restricted stock purchase rights and stock bonuses to employees, and consultants.

A total of 3,200,000 shares of common stock have been authorized for issuance pursuant to the 2004 Plan. On January 1, 2005, and annually thereafter, the authorized shares will automatically be increased by a number of shares equal to the lesser of:

- 3,000,000 shares;
- 3.5% of the outstanding shares on such date; or
- an amount determined by the Board of Directors.

Employee Stock Purchase Plan

On January 21, 2004, the Board of Directors adopted the 2004 Employee Stock Purchase Plan (the "Purchase Plan"), subject to shareholder approval. 1,000,000 shares of common stock were reserved for issuance pursuant to the Purchase Plan.

No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

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Through and including , 2004 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Shares

Cytokinetics, Incorporated

Common Stock

CYTOKINETICS

Goldman, Sachs & Co.

Credit Suisse First Boston
Pacific Growth Equities, LLC
Lazard

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. ***Other Expenses of Issuance and Distribution.***

The following table sets forth the costs and expenses, other than the underwriting discounts, payable by the Registrant in connection with the sale of the securities being registered. All amounts are estimates except the SEC registration fee, the NASD filing fee and the Nasdaq/NMS listing fee.

SEC Registration Fee	$6,977.63
NASD Filing Fee	*
Nasdaq National Market Listing Fee	*
Printing Costs	*
Legal Fees and Expenses	*
Accounting Fees and Expenses	*
Blue Sky Fees and Expenses	*
Transfer Agent and Registrar Fees	*
Miscellaneous	*
Total	$ *

* to be completed by amendment

Item 14. ***Indemnification of Directors and Officers.***

Section 145 of the Delaware General Corporation Law ("Section 145") permits indemnification of officers and directors of the Company under certain conditions and subject to certain limitations. Section 145 also provides that a corporation has the power to maintain insurance on behalf of its officers and directors against any liability asserted against such person and incurred by him or her in such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability under the provisions of Section 145.

Article IX of the Registrant's Bylaws provides for mandatory indemnification of its directors and officers and permissible indemnification of employees and other agents to the maximum extent not prohibited by the Delaware General Corporation Law. The rights to indemnity thereunder continue as to a person who has ceased to be a director, officer, employee or agent. In addition, expenses incurred by a director or executive officer in defending any civil, criminal, administrative or investigative action, suit or proceeding by reason of the fact that he or she is or was a director or officer of the Registrant (or was serving at the Registrant's request as a director or officer of another corporation) shall be paid by the Registrant in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that he or she is not entitled to be indemnified by the Registrant as authorized by the relevant section of the Delaware General Corporation Law.

As permitted by Section 102(b)(7) of the Delaware General Corporation Law, the Registrant's Certificate of Incorporation provides that, pursuant to Delaware law, its directors shall not be personally liable for monetary damages for breach of the directors' fiduciary duty as directors to the Registrant and its stockholders. This provision in the Certificate of Incorporation does not eliminate the directors' fiduciary duty, and in appropriate circumstances equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to the Registrant for acts or omission not in good faith or involving international misconduct, for knowing violations of law, for actions leading to improper personal benefit to the director, and for payment of

dividends or approval of Stock repurchases or redemptions that are unlawful under Section 174 of the Delaware General Corporation Law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

The Registrant has entered into indemnification agreements with each of its directors and executive officers. Generally, the indemnification agreements attempt to provide the maximum protection permitted by Delaware law as it may be amended from time to time. Moreover, the indemnification agreements provide for certain additional indemnification. Under such additional indemnification provisions, however, an individual will not receive indemnification for judgments, settlements or expenses if he or she is found liable to the Registrant (except to the extent the court determines he or she is fairly and reasonably entitled to indemnity for expenses), for settlements not approved by the Registrant or for settlements and expenses if the settlement is not approved by the court. The indemnification agreements provide for the Registrant to advance to the individual any and all reasonable expenses (including legal fees and expenses) incurred in investigating or defending any such action, suit or proceeding. In order to receive an advance of expenses, the individual must submit to the Registrant copies of invoices presented to him or her for such expenses. Also, the individual must repay such advances upon a final judicial decision that he or she is not entitled to indemnification.

The Registrant intends to enter into additional indemnification agreements with each of its directors and executive officers to effectuate these indemnity provisions and to purchase directors' and officers' liability insurance.

In addition to the foregoing, the Underwriting Agreement contains certain provisions by which the Underwriters have agreed to indemnify the Registrant, each person, if any, who controls the Registrant within the meaning of Section 15 of the Securities Act, each director of the Registrant, each officer of the Registrant who signs the Registration Statement, with respect to information furnished in writing by or on behalf of the Underwriters for use in the Registration Statement.

At present, there is no pending litigation or proceeding involving a director, officer, employee or other agent of the Registrant in which indemnification is being sought, nor is the Registrant aware of any threatened litigation that may result in a claim for indemnification by any director, officer, employee or other agent of the Registrant.

Item 15. ***Recent Sales of Unregistered Securities.***

Since December 31, 2000, we have sold and issued the following securities:

Preferred Stock

(1) In July 2001, we sold an aggregate of 2,333,334 shares of our Series D preferred stock to an investor at a price of $6.00 per share for an aggregate purchase price of $14,000,004.

(2) In March and April 2003, we sold an aggregate of 8,015,449 shares of our Series E preferred stock to investors at a price of $5.00 per share for an aggregate purchase price of $40,077,245.

The sales of the above securities were deemed to be exempt from registration in reliance on Section 4(2) of the Securities Act or Regulation D promulgated thereunder as transactions by an issuer not involving any public offering. All recipients were either accredited or sophisticated investors, as those terms are defined in the Securities Act and the regulations promulgated thereunder. The recipients of securities in each such transaction represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the share certificates and other instruments issued in such transactions. All recipients either received adequate information about us or had access, through employment or other relationships, to such information.

Stock Options and Stock Purchase Rights

(1) From December 31, 2000 through January 15, 2004, we granted stock options and stock purchase rights to acquire an aggregate of 4,273,288 shares of our common stock at prices ranging from $0.50 to $1.00 per share to employees, consultants and directors pursuant to our 1997 Stock Option/ Stock Issuance Plan.

(2) From December 31, 2000 through January 15, 2004, we issued an aggregate of 1,472,595 shares of our common stock to employees, consultants and directors pursuant to the exercise of stock options and stock purchase rights under our 1997 Stock Option/ Stock Issuance Plan, for aggregate consideration of $671,461.

The sales of the above securities were deemed to be exempt from registration in reliance on Rule 701 promulgated under Section 3(b) under the Securities Act as transactions pursuant to a compensatory benefit plan or a written contract relating to compensation.

Item 16. ***Exhibits and Financial Statement Schedules***

(a) Exhibits

Exhibit Number	Description	Sequential Page Number
1.1*	Form of Underwriting Agreement.	
3.1	Form of Certificate of Incorporation of the Registrant to be filed after the closing of the offering made under this Registration Statement.	
3.2	Form of Bylaws of the Registrant to be in effect after the closing of the offering made under this Registration Statement.	
4.1*	Specimen Common Stock Certificate.	
4.2	Fourth Amended and Restated Investors Rights Agreement, dated March 21, 2003, by and among the Registrant and certain stockholders of the Registrant.	
4.3	Master Security Agreement, dated September 25, 1998, by and between the Registrant and Comdisco.	
4.4	Warrant for the purchase of shares of Series A preferred stock, dated September 25, 1998, issued by the Registrant to Comdisco.	
4.5	Master Security Agreement, dated December 16, 1999, by and between the Registrant and Comdisco	
4.6	Warrant for the purchase of shares of Series B preferred stock, dated December 16, 1999, issued by the Registrant to Comdisco.	
4.7	Master Security Agreement, dated February 2, 2001, by and between the Registrant and General Electric Capital Corporation.	
4.8	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to Bristow Investments, L.P.	
4.9	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to the Laurence and Magdalena Shushan Family Trust.	
4.10	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to Slough Estates USA Inc.	
4.11	Warrant for the purchase of shares of Series B preferred stock, dated August 30, 1999, issued by the Registrant to The Magnum Trust.	
5.1*	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation	
10.1*	Form of Indemnification Agreement between the Registrant and each of its directors and officers.	

Exhibit Number	Description	Sequential Page Number
10.2	1997 Stock Option/ Stock Issuance Plan.	
10.3	2004 Equity Incentive Plan.	
10.4	2004 Employee Stock Purchase Plan.	
10.5	Build-to-Suit Lease, dated May 27, 1997, by and between Britannia Pointe Grand Limited Partnership and Metaxen, LLC.	
10.6	First Amendment to Lease, dated April 13, 1998, by and between Britannia Pointe Grand Limited Partnership and Metaxen, LLC.	
10.7	Sublease Agreement, dated May 1, 1998, by and between the Registrant and Metaxen LLC.	
10.8	Sublease Agreement, dated March 1, 1999, by and between Metaxen, LLC and Exelixis Pharmaceuticals, Inc.	
10.9	Assignment and Assumption Agreement and Consent, dated July 11, 1999, by and among Exelixis Pharmaceuticals, Metaxen, LLC, Xenova Group PLC and Britannia Pointe Grande Limited Partnership.	
10.10	Second Amendment to Lease, dated July 11, 1999, by and between Britannia Pointe Grand Limited Partnership and Exelixis Pharmaceuticals, Inc.	
10.11	First Amendment to Sublease Agreement, dated July 20, 1999, by and between the Registrant and Metaxen.	
10.12	Agreement and Consent, dated July 20, 1999, by and among Exelixis Pharmaceuticals, Inc., the Registrant and Britannia Pointe Grand Limited Partnership.	
10.13	Amendment to Agreement and Consent, dated July 31, 2000, by and between the Registrant, Exelixis, Inc., and Britannia Pointe Grande Limited Partnership.	
10.14	Assignment and Assumption of Lease, dated September 28, 2000, by and between Exelixis, Inc. and the Registrant.	
10.15	Sublease Agreement, dated September 28, 2000, by and between the Registrant and Exelixis, Inc.	
10.16	Sublease Agreement, dated December 29, 1999, by and between the Registrant and COR Therapeutics, Inc.	
10.17(1)	Collaboration and License Agreement, dated June 20, 2001, by and between the Registrant and Glaxo Group Limited.	
10.18(1)	Memorandum, dated June 20, 2001, by and between the Registrant and Glaxo Group Limited.	
10.19(1)	Letter Amendment to Collaboration Agreement, dated October 28, 2002, by and between the Registrant and Glaxo Group Limited.	
10.20(1)	Letter Amendment to Collaboration Agreement, dated November 5, 2002, by and between the Registrant and Glaxo Group Limited.	
10.21(1)	Letter Amendment to Collaboration Agreement, dated December 13, 2002, by and between the Registrant and Glaxo Group Limited.	
10.22(1)	Letter Amendment to Collaboration Agreement, dated July 11, 2003, by and between the Registrant and Glaxo Group Limited.	
10.23(1)	Letter Amendment to Collaboration Agreement, dated July 28, 2003, by and between the Registrant and Glaxo Group Limited.	
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Exhibit Number	Description	Sequential Page Number
10.26	Series D Preferred Stock Purchase Agreement, dated June 20, 2001, by and between the Registrant and Glaxo Wellcome International B.V.	
10.27	Amendment No. 1 to Series D Preferred Stock Purchase Agreement, dated April 2, 2003, by and among the Registrant, Glaxo Wellcome International B.V. and Glaxo Group Limited.	
10.28(1)	Exclusive License Agreement between The Regents of the University of California, The Board of Trustees of the Leland Stanford Junior University and the Registrant, dated April 21, 1998.	
10.29	Modification Agreement between The Regents of the University of California, The Board of Trustees of the Leland Stanford Junior University and the Registrant, dated September 1, 2000.	
10.30(1)	Collaboration and License Agreement, dated December 15, 2003, by and between AstraZeneca AB and the Registrant.	
10.31(1)	Collaboration Agreement, dated December 28, 2001, by and between Exelixis, Inc. and the Registrant.	
10.32(1)	First Letter Amendment of Collaboration Agreement, dated April 10, 2003, by and between Exelixis, Inc. and the Registrant.	
10.33	Robert I. Blum Promissory Note, dated July 12, 2002.	
10.34	David J. Morgans and Sandra Morgans Promissory Note, dated May 20, 2002.	
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10.40	Robert I. Blum Amended and Restated Cash Bonus Agreement, dated December 1, 2003.	
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10.42	David J. Morgans Amended and Restated Cash Bonus Agreement, dated December 1, 2003.	
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10.44	Jay K. Trautman Amended and Restated Cash Bonus Agreement, dated December 1, 2003.	
23.1	Consent of PricewaterhouseCoopers LLP, Independent Accountants.	
23.2*	Consent of Counsel (included in Exhibit 5.1).	
24.1	Power of Attorney (see Page II-7 of the original filing).	

* To be filed by amendment.

† Previously filed.

(1) Pursuant to a request for confidential treatment, portions of the Exhibit have been redacted from the publicly filed document and have been furnished separately to the SEC as required by Rule 406 under the Securities Act.

(b) *Financial statement schedules*

REPORT OF INDEPENDENT AUDITORS ON FINANCIAL STATEMENT SCHEDULE

To the Board of Directors of Cytokinetics, Incorporated:

Our audits of the financial statements referred to in our report dated March 21, 2003 except for Note 13 as to which the date is January 21, 2004, appearing in the Registration Statement on Form S-1 of Cytokinetics, Incorporated also included an audit of the financial statement schedule listed in Item 16(b) on Page II-5 of this Form S-1. In our opinion, the financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related financial statements.

/s/ PRICEWATERHOUSECOOPERS LLP

San Jose, California

March 21, 2003

Schedule II

CYTOKINETICS, INCORPORATED

VALUATION AND QUALIFYING ACCOUNTS

	Balance at Beginning of Period	Additions (reductions) to Costs and Expenses	Write-offs	Balance at End of Period
Allowance for doubtful accounts:				
Year ended December 31, 2000	$ —	$ —	$ —	$ —
Year ended December 31, 2001	—	386	—	386
Year ended December 31, 2002	$ 386	$ (195)	$ (191)	$ —

All other financial statement schedules have been omitted because the information required to be set forth herein is not applicable or is shown either in the financial statements or the notes thereto.

Item 17. ***Undertakings.***

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of South San Francisco, state of California, on January 27, 2004.

CYTOKINETICS, INCORPORATED

By: /s/ JAMES H. SABRY, M.D., PH.D.

James H. Sabry, M.D., Ph.D.
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints James H. Sabry, M.D., Ph.D. and Robert I. Blum and each of them singly, as true and lawful attorneys-in-fact and agents with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities to sign the Registration Statement filed herewith and any or all amendments to said Registration Statement (including post-effective amendments and registration statements filed pursuant to Rule 462 and otherwise), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission granting unto said attorneys-in-fact and agents the full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the foregoing, as to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
/s/ JAMES H. SABRY, M.D., PH.D. James H. Sabry, M.D., Ph.D.	Director, President and Chief Executive Officer *(Principal Executive Officer)*	January 27, 2004
/s/ ROBERT I. BLUM Robert I. Blum	Executive Vice President, Finance & Corporate Development and Chief Financial Officer *(Principal Financial and Accounting Officer)*	January 27, 2004
/s/ STEPHEN DOW Stephen Dow	Director	January 27, 2004
/s/ A. GRANT HEIDRICH, III A. Grant Heidrich, III	Director	January 27, 2004
/s/ CHARLES HOMCY, M.D. Charles Homcy, M.D.	Director	January 27, 2004

Signature	Title	Date
/s/ WILLIAM J. RUTTER, PH.D. William J. Rutter, Ph.D.	Director	January 27, 2004
/s/ MICHAEL SCHMERTZLER Michael Schmertzler	Director	January 27, 2004
/s/ JAMES A. SPUDICH, PH.D. James A. Spudich, Ph.D.	Director	January 27, 2004

EXHIBIT INDEX

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* To be filed by amendment.

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Exhibit 3.1

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

CYTOKINETICS, INCORPORATED

Cytokinetics, Incorporated, a corporation organized and existing under the laws of the State of Delaware, hereby certifies as follows:

A. The original Certificate of Incorporation of the corporation was filed with the Secretary of State of the State of Delaware on August 5, 1997.

B. Pursuant to Sections 242 and 245 of the General Corporation Law of the State of Delaware (the "DGCL"), this Amended and Restated Certificate of Incorporation restates and amends the provisions of the Amended and Restated Certificate of Incorporation of the corporation.

C. This Amended and Restated Certificate of Incorporation has been duly approved by the Board of Directors of the corporation in accordance with Sections 242 and 245 of the DGCL.

D. This Amended and Restated Certificate of Incorporation has been duly approved by the written consent of the stockholders of the corporation in accordance with Sections 228, 242 and 245 of the DGCL.

E. The Certificate of Incorporation of the corporation is hereby amended and restated in its entirety to read as follows:

ARTICLE I

The name of the corporation is Cytokinetics, Incorporated.

ARTICLE II

The address of the corporation's registered office in the State of Delaware is 30 Old Rudnick Lane, City of Dover, County of Kent 19901. The name of its registered agent at such address is CorpAmerica, Inc.

ARTICLE III

The purpose of the corporation is to engage in any lawful act or activity for which corporations may be organized under the DGCL.

ARTICLE IV

The corporation shall have authority to issue shares as follows:

120,000,000 shares of Common Stock, par value $0.001 per share. Each share of Common Stock shall entitle the holder thereof to one (1) vote on each matter submitted to a vote at a meeting of stockholders.

10,000,000 shares of Preferred Stock, par value $0.001 per share, which may be issued from time to time in one or more series pursuant to a resolution or resolutions providing for such issue duly adopted by the Board of Directors (authority to do so being hereby expressly vested in the Board of Directors). The Board of Directors is further authorized, subject to limitations prescribed by law, to fix by resolution or resolutions the designations, powers, preferences and rights, and the qualifications, limitations or restrictions thereof, of any wholly unissued series of Preferred Stock, including without limitation authority to fix by resolution or resolutions the dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), redemption price or prices, and liquidation preferences of any such series, and the number of shares constituting any such series and the designation thereof, or any of the foregoing.

The Board of Directors is further authorized to increase (but not above the total number of authorized shares of the class) or decrease (but not below the number of shares of any such series then outstanding) the number of shares of any series, the number of which was fixed by it, subsequent to the issuance of shares of such series then outstanding, subject to the powers, preferences and rights, and the qualifications, limitations and restrictions thereof stated in the Certificate of Incorporation or the resolution of the Board of Directors originally fixing the number of shares of such series. If the number of shares of any series is so decreased, then the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.

ARTICLE V

The number of directors that constitutes the entire Board of Directors of the corporation shall be determined in the manner set forth in the Bylaws of the corporation. At each annual meeting of stockholders, directors of the corporation shall be elected to hold office until the expiration of the term for which they are elected and until their successors have been duly elected and qualified; except that if any such election shall not be so held, such election shall take place at a stockholders' meeting called and held in accordance with the DGCL.

The directors of the corporation shall be divided into three classes as nearly equal in size as is practicable, hereby designated Class I, Class II and Class III. The term of office of the initial Class I directors shall expire at the first regularly-scheduled annual meeting of the stockholders following the effective date of this corporation's initial public offering (the "EFFECTIVE DATE"), the term of office of the initial Class II directors shall expire at the second annual meeting of the stockholders following the Effective Date and the term of office of the initial Class III directors shall expire at the third annual meeting of the stockholders following the Effective Date. At each annual meeting of stockholders, commencing with the first regularly-scheduled annual meeting of stockholders following the Effective Date, each of the successors elected to replace the directors of a Class whose term shall have expired at such annual meeting shall be elected to hold office until the third annual meeting next succeeding his or her election and until his or her respective successor shall have been duly elected and qualified.

Notwithstanding the foregoing provisions of this Article, each director shall serve until his or her successor is duly elected and qualified or until his or her death, resignation, or removal. If the number of directors is hereafter changed, any newly created directorships or decrease in directorships shall be so apportioned among the classes as to make all classes as nearly equal in number as is practicable, provided that no decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

Any director may be removed from office by the stockholders of the corporation only for cause. Vacancies occurring on the Board of Directors for any reason and newly created directorships resulting from an increase in the authorized number of directors may be filled only by vote of a majority of the remaining members of the Board of Directors, although less than a quorum, at any meeting of the Board of Directors. A person so elected by the Board of Directors to fill a vacancy or newly created directorship shall hold office until the next election of the Class for which such director shall have been chosen and until his or her successor shall have been duly elected and qualified.

ARTICLE VI

In furtherance and not in limitation of the powers conferred by statute, the Board of Directors of the corporation is expressly authorized to adopt, amend or repeal the Bylaws of the corporation.

ARTICLE VII

The election of directors need not be by written ballot unless the Bylaws of the corporation shall so provide.

ARTICLE VIII

No action shall be taken by the stockholders of the corporation except at an annual or special meeting of the stockholders called in accordance with the Bylaws, and no action shall be taken by the stockholders by written consent. The affirmative vote of sixty-six and two-thirds percent (66 2/3%) of the then outstanding voting securities of the corporation, voting together as a single class, shall be required for the amendment, repeal or modification of the provisions of Article V, Article VI or Article VIII of this Certificate of Incorporation or Sections 2.1 (Place of Meetings), 2.2 (Annual Meeting), 2.3 (Special Meeting), 2.4 (Advance Notice Procedures; Notice of Stockholders' Meetings), 2.9 (Voting), or 3.2 (Number of Directors) of the corporation's Bylaws.

ARTICLE IX

The corporation shall indemnify and hold harmless, to the fullest extent permitted by the DGCL as it presently exists or may hereafter be amended, any director or officer of the corporation who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "PROCEEDING") by reason of the fact that he or she, or a person for whom he or she is the legal representative, is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust,

enterprise or non-profit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses reasonably incurred by such person in connection with any such Proceeding. The corporation shall be required to indemnify a person in connection with a Proceeding initiated by such person only if the Proceeding was authorized by the Board.

The corporation shall have the power to indemnify and hold harmless, to the extent permitted by applicable law as it presently exists or may hereafter be amended, any employee or agent of the corporation who was or is made or is threatened to be made a party or is otherwise involved in any Proceeding by reason of the fact that he or she, or a person for whom he or she is the legal representative, is or was an employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or non-profit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses reasonably incurred by such person in connection with any such Proceeding.

Neither any amendment nor repeal of this Article IX, nor the adoption of any provision of this corporation's Certificate of Incorporation inconsistent with this Article IX, shall eliminate or reduce the effect of this Article IX in respect of any matter occurring, or any cause of action, suit or claim accruing or arising or that, but for this Article IX, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

ARTICLE X

Except as provided in Article IX above, the corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.

IN WITNESS WHEREOF, Cytokinetics, Incorporated has caused this Amended and Restated Certificate of Incorporation to be signed by the President and Chief Executive Officer of the corporation on this ____ day of _____ 2004.

By:

James Sabry
President and Chief Executive Officer

Exhibit 3.2

AMENDED AND RESTATED BYLAWS OF

CYTOKINETICS, INCORPORATED

(as amended on January 21, 2004 effective as of the closing of the corporation's initial public offering)

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AMENDED AND RESTATED BYLAWS OF CYTOKINETICS, INCORPORATED

ARTICLE I - CORPORATE OFFICES

1.1 REGISTERED OFFICE.

The registered office of Cytokinetics, Incorporated shall be fixed in the corporation's certificate of incorporation, as the same may be amended from time to time.

1.2 OTHER OFFICES.

The corporation's Board of directors (the "Board") may at any time establish other offices at any place or places where the corporation is qualified to do business.

ARTICLE II - MEETINGS OF STOCKHOLDERS

2.1 PLACE OF MEETINGS.

Meetings of stockholders shall be held at any place, within or outside the State of Delaware, designated by the Board. The Board may, in its sole discretion, determine that a meeting of stockholders shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211(a)(2) of the Delaware General Corporation Law (the "DGCL"). In the absence of any such designation or determination, stockholders' meetings shall be held at the corporation's principal executive office.

2.2 ANNUAL MEETING.

The annual meeting of stockholders shall be held each year. The Board shall designate the date and time of the annual meeting. In the absence of such designation the annual meeting of stockholders shall be held on the second Tuesday of May of each year at 10:00 a.m. However, if such day falls on a legal holiday, then the meeting shall be held at the same time and place on the next succeeding business day. At the annual meeting, directors shall be elected and any other proper business may be transacted.

2.3 SPECIAL MEETING.

A special meeting of the stockholders may be called at any time by the Board, chairperson of the Board, chief executive officer or president (in the absence of a chief executive officer), but such special meetings may not be called by any other person or persons.

No business may be transacted at such special meeting other than the business specified in such notice to stockholders. Nothing contained in this paragraph of this Section 2.3 shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board may be held.

2.4 ADVANCE NOTICE PROCEDURES; NOTICE OF STOCKHOLDERS' MEETINGS.

(i) At an annual meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. To be properly brought before an annual meeting, business must be: (A) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the board of directors, (B) otherwise properly brought before the meeting by or at the direction of the board of directors, or (C) otherwise properly brought before the meeting by a stockholder. For business to be properly brought before an annual meeting by a stockholder, the stockholder must have given timely notice thereof in writing to the secretary of the corporation. To be timely, a stockholder's notice must be delivered to or mailed and received at the principal executive offices of the corporation not less than one hundred twenty (120) calendar days before the one year anniversary of the date on which the corporation first mailed its proxy statement to stockholders in connection with the previous year's annual meeting of stockholders; provided, however, that in the event that no annual meeting was held in the previous year or the date of the annual meeting has been changed by more than thirty (30) days from the date of the prior year's meeting, notice by the stockholder to be timely must be so received not later than the close of business on the later of one hundred twenty (120) calendar days in advance of such annual meeting and ten (10) calendar days following the date on which public announcement of the date of the meeting is first made. A stockholder's notice to the secretary shall set forth as to each matter the stockholder proposes to bring before the annual meeting: (a) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (b) the name and address, as they appear on the corporation's books, of the stockholder proposing such business, (c) the class and number of shares of the corporation that are beneficially owned by the stockholder, (d) any material interest of the stockholder in such business, and (e) any other information that is required to be provided by the stockholder pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the "1934 Act"), in his capacity as a proponent to a stockholder proposal. Notwithstanding the foregoing, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholder's meeting, stockholders must

provide notice as required by the regulations promulgated under the 1934 Act. Notwithstanding anything in these bylaws to the contrary, no business shall be conducted at any annual meeting except in accordance with the procedures set forth in this paragraph (i). The chairman of the annual meeting shall, if the facts warrant, determine and declare at the meeting that business was not properly brought before the meeting and in accordance with the provisions of this paragraph (i), and, if he should so determine, he shall so declare at the meeting that any such business not properly brought before the meeting shall not be transacted.

(ii) Only persons who are nominated in accordance with the procedures set forth in this paragraph (ii) shall be eligible for election as directors. Nominations of persons for election to the board of directors of the corporation may be made at a meeting of stockholders by or at the direction of the board of directors or by any stockholder of the corporation entitled to vote in the election of directors at the meeting who complies with the notice procedures set forth in this paragraph (ii). Such nominations, other than those made by or at the direction of the board of directors, shall be made pursuant to timely notice in writing to the secretary of the corporation in accordance with the provisions of paragraph (i) of this Section 2.4. Such stockholder's notice shall set forth (a) as to each person, if any, whom the stockholder proposes to nominate for election or re-election as a director: (A) the name, age, business address and residence address of such person, (B) the principal occupation or employment of such person, (C) the class and number of shares of the corporation that are beneficially owned by such person, (D) a description of all arrangements or understandings between the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder, and (E) any other information relating to such person that is required to be disclosed in solicitations of proxies for elections of directors, or is otherwise required, in each case pursuant to Regulation 14A

under the 1934 Act (including without limitation such person's written consent to being named in the proxy statement, if any, as a nominee and to serving as a director if elected); and (b) as to such stockholder giving notice, the information required to be provided pursuant to paragraph (i) of this Section 2.4. At the request of the board of directors, any person nominated by a stockholder for election as a director shall furnish to the secretary of the corporation that information required to be set forth in the stockholder's notice of nomination which pertains to the nominee. No person shall be eligible for election as a director of the corporation unless nominated in accordance with the procedures set forth in this paragraph (ii). The chairman of the meeting shall, if the facts warrant, determine and declare at the meeting that a nomination was not made in accordance with the procedures prescribed by these bylaws, and if he should so determine, he shall so declare at the meeting, and the defective nomination shall be disregarded.

These provisions shall not prevent the consideration and approval or disapproval at an annual meeting of reports of officers, directors and committees of the board of directors, but in connection therewith no new business shall be acted upon at any such meeting unless stated, filed and received as herein provided. Notwithstanding anything in these bylaws to the contrary, no business brought before a meeting by a stockholder shall be conducted at an annual meeting except in accordance with procedures set forth in this Section 2.4.

All notices of meetings of stockholders shall be sent or otherwise given in accordance with either Section 2.5 or Section 8.1 of these bylaws not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting. The notice shall specify the place, if any, date and hour of the meeting, the means of remote communication, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called.

2.5 MANNER OF GIVING NOTICE; AFFIDAVIT OF NOTICE.

Notice of any meeting of stockholders shall be given:

(i) if mailed, when deposited in the United States mail, postage prepaid, directed to the stockholder at his or her address as it appears on the corporation's records; or

(ii) if electronically transmitted as provided in Section 8.1 of these bylaws.

An affidavit of the secretary or an assistant secretary of the corporation or of the transfer agent or any other agent of the corporation that the notice has been given by mail or by a form of electronic transmission, as applicable, shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

2.6 QUORUM.

The holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders. If, however, such quorum is not present or represented at any meeting of the stockholders, then either (i) the chairperson of the meeting, or (ii) the stockholders entitled to vote at the meeting, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present or represented. At such adjourned meeting at which a quorum is present or represented, any business may be transacted that might have been transacted at the meeting as originally noticed.

2.7 ADJOURNED MEETING; NOTICE.

When a meeting is adjourned to another time or place, unless these bylaws otherwise require, notice need not be given of the adjourned meeting if the time, place if any thereof, and the means of remote communications if any by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than 30 days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

2.8 CONDUCT OF BUSINESS.

The chairperson of any meeting of stockholders shall determine the order of business and the procedure at the meeting, including such regulation of the manner of voting and the conduct of business.

2.9 VOTING.

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.11 of these bylaws, subject to Section 217 (relating to voting rights of fiduciaries, pledgors and joint owners of stock) and Section 218 (relating to voting trusts and other voting agreements) of the DGCL.

Except as may be otherwise provided in the certificate of incorporation or these bylaws, each stockholder shall be entitled to one vote for each share of capital stock held by such stockholder.

2.10 STOCKHOLDER ACTION BY WRITTEN CONSENT WITHOUT A MEETING.

Subject to the rights of the holders of the shares of any series of

Preferred Stock or any other class of stock or series thereof having a preference over the Common Stock as dividend or upon liquidation, any action required or permitted to be taken by the stockholders of the corporation must be effected at a duly called annual or special meeting of stockholders of the corporation and may not be effected by any consent in writing by such stockholders.

2.11 RECORD DATE FOR STOCKHOLDER NOTICE; VOTING; GIVING CONSENTS.

In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board may fix, in advance, a record date, which record date shall not precede the date on which the resolution fixing the record date is adopted and which shall not be more than 60 nor less than 10 days before the date of such meeting, nor more than 60 days prior to any other such action.

If the Board does not so fix a record date:

(i) The record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

(ii) The record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board adopts the resolution relating thereto.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board may fix a new record date for the adjourned meeting.

2.12 PROXIES.

Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by proxy authorized by an instrument in writing or by a transmission permitted by law filed in accordance with the procedure established for the meeting, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212 of the DGCL.

2.13 LIST OF STOCKHOLDERS ENTITLED TO VOTE.

The officer who has charge of the stock ledger of the corporation shall prepare and make, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. The corporation shall not be required to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting for a period of at least 10 days prior to the meeting: (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the corporation's principal executive office. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during

the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting. Such list shall presumptively determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

2.14 INSPECTORS OF ELECTION

A written proxy may be in the form of a telegram, cablegram, or other means of electronic transmission which sets forth or is submitted with information from which it can be determined that the telegram, cablegram, or other means of electronic transmission was authorized by the person.

Before any meeting of stockholders, the board of directors shall appoint an inspector or inspectors of election to act at the meeting or its adjournment. The number of inspectors shall be either one (1) or three (3). If any person appointed as inspector fails to appear or fails or refuses to act, then the chairperson of the meeting may, and upon the request of any stockholder or a stockholder's proxy shall, appoint a person to fill that vacancy.

Such inspectors shall:

(i) determine the number of shares outstanding and the voting power of each, the number of shares represented at the meeting, the existence of a quorum, and the authenticity, validity, and effect of proxies;

(ii) receive votes, ballots or consents;

(iii) hear and determine all challenges and questions in any way arising in connection with the right to vote;

(iv) count and tabulate all votes or consents;

(v) determine when the polls shall close;

(vi) determine the result; and

(vii) do any other acts that may be proper to conduct the election or vote with fairness to all stockholders.

The inspectors of election shall perform their duties impartially, in good faith, to the best of their ability and as expeditiously as is practical. If there are three (3) inspectors of election, the decision, act or certificate of a majority is effective in all respects as the decision, act or certificate of all. Any report or certificate made by the inspectors of election is prima facie evidence of the facts stated therein.

ARTICLE III - DIRECTORS

3.1 POWERS.

Subject to the provisions of the DGCL and any limitations in the certificate of incorporation or these bylaws relating to action required to be approved by the stockholders or by the outstanding shares, the business and affairs of the corporation shall be managed and all corporate powers shall be exercised by or under the direction of the Board.

3.2 NUMBER OF DIRECTORS.

The authorized number of directors shall be determined from time to time by resolution of the Board, provided the Board shall consist of at least one member. No reduction of the authorized number of directors shall have the effect

of removing any director before that director's term of office expires.

3.3 ELECTION, QUALIFICATION AND TERM OF OFFICE OF DIRECTORS.

Except as provided in Section 3.4 of these bylaws, each director, including a director elected to fill a vacancy, shall hold office until the expiration of the term for which elected and until such director's successor is elected and qualified or until such director's earlier death, resignation or removal. Directors need not be stockholders unless so required by the certificate of incorporation or these bylaws. The certificate of incorporation or these bylaws may prescribe other qualifications for directors.

If so provided in the certificate of incorporation, the directors of the corporation shall be divided into three classes.

3.4 RESIGNATION AND VACANCIES.

Any director may resign at any time upon notice given in writing or by electronic transmission to the corporation. When one or more directors so resigns and the resignation is effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office as provided in this section in the filling of other vacancies.

Unless otherwise provided in the certificate of incorporation or these bylaws, vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director. If the directors are divided into classes, a person so elected by the directors then in office to fill a vacancy or newly created directorship shall hold office until the next election of the class for which such director shall have been chosen and until his or her successor shall have been duly elected and qualified.

If at any time, by reason of death or resignation or other cause, the corporation should have no directors in office, then any officer or any stockholder or an executor, administrator, trustee or guardian of a stockholder, or other fiduciary entrusted with like responsibility for the person or estate of a stockholder, may call a special meeting of stockholders in accordance with the provisions of the certificate of incorporation or these bylaws, or may apply to the Court of Chancery for a decree summarily ordering an election as provided in Section 211 of the DGCL.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole Board (as constituted immediately prior to any such increase), then the Court of Chancery may, upon application of any stockholder or stockholders holding at least 10% of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the DGCL as far as applicable.

3.5 PLACE OF MEETINGS; MEETINGS BY TELEPHONE.

The Board may hold meetings, both regular and special, either within or outside the State of Delaware.

Unless otherwise restricted by the certificate of incorporation or these bylaws, members of the Board, or any committee designated by the Board, may

participate in a meeting of the Board, or any committee, by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

3.6 REGULAR MEETINGS.

Regular meetings of the Board may be held without notice at such time and at such place as shall from time to time be determined by the Board.

3.7 SPECIAL MEETINGS; NOTICE.

Special meetings of the Board for any purpose or purposes may be called at any time by the chairperson of the Board, the chief executive officer, the president, the secretary or a majority of the authorized number of directors.

Notice of the time and place of special meetings shall be:

(i) delivered personally by hand, by courier or by telephone;

(ii) sent by United States first-class mail, postage prepaid;

(iii) sent by facsimile; or

(iv) sent by electronic mail,

directed to each director at that director's address, telephone number, facsimile number or electronic mail address, as the case may be, as shown on the corporation's records.

If the notice is (i) delivered personally by hand, by courier or by telephone, (ii) sent by facsimile or (iii) sent by electronic mail, it shall be delivered or sent at least 24 hours before the time of the holding of the meeting. If the notice is sent by United States mail, it shall be deposited in the United States mail at least four days before the time of the holding of the meeting. Any oral notice may be communicated to the director. The notice need not specify the place of the meeting (if the meeting is to be held at the corporation's principal executive office) nor the purpose of the meeting.

3.8 QUORUM.

At all meetings of the Board, a majority of the authorized number of directors shall constitute a quorum for the transaction of business. The vote of a majority of the directors present at any meeting at which a quorum is present shall be the act of the Board, except as may be otherwise specifically provided by statute, the certificate of incorporation or these bylaws. If a quorum is not present at any meeting of the Board, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present.

A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

3.9 BOARD ACTION BY WRITTEN CONSENT WITHOUT A MEETING.

Unless otherwise restricted by the certificate of incorporation or these bylaws, any action required or permitted to be taken at any meeting of the Board, or of any committee thereof, may be taken without a meeting if all members of the Board or committee, as the case may be, consent thereto in writing or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the Board or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

3.10 FEES AND COMPENSATION OF DIRECTORS.

Unless otherwise restricted by the certificate of incorporation or these bylaws, the Board shall have the authority to fix the compensation of directors.

3.11 APPROVAL OF LOANS TO OFFICERS.

The corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiary, including any officer or employee who is a director of the corporation or its subsidiary, whenever, in the judgment of the Board, such loan, guaranty or assistance may reasonably be expected to benefit the corporation. The loan, guaranty or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board shall approve, including, without limitation, a pledge of shares of stock of the corporation.

3.12 REMOVAL OF DIRECTORS.

Any director may be removed from office by the stockholders of the corporation only for cause.

No reduction of the authorized number of directors shall have the effect of removing any director prior to the expiration of such director's term of office.

ARTICLE IV - COMMITTEES

4.1 COMMITTEES OF DIRECTORS.

The Board may, by resolution passed by a majority of the authorized number of directors, designate one or more committees, each committee to consist of one or more of the directors of the corporation. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board or in these bylaws, shall have and may exercise all the powers and

authority of the Board in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority to (i) approve or adopt, or recommend to the stockholders, any action or matter expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopt, amend or repeal any bylaw of the corporation,

4.2 COMMITTEE MINUTES.

Each committee shall keep regular minutes of its meetings and report the same to the Board when required.

4.3 MEETINGS AND ACTION OF COMMITTEES.

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of:

(i) Section 3.5 (place of meetings and meetings by telephone);

(ii) Section 3.6 (regular meetings);

(iii) Section 3.7 (special meetings and notice);

(iv) Section 3.8 (quorum);

(v) Section 7.12 (waiver of notice); and

(vi) Section 3.9 (action without a meeting)

with such changes in the context of those bylaws as are necessary to substitute the committee and its members for the Board and its members. However:

(i) the time of regular meetings of committees may be determined either by resolution of the Board or by resolution of the committee;

(ii) special meetings of committees may also be called by resolution of the Board; and

(iii) notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The Board may adopt rules for the government of any committee not inconsistent with the provisions of these bylaws.

ARTICLE V - OFFICERS

5.1 OFFICERS.

The officers of the corporation shall be a president and a secretary. The corporation may also have, at the discretion of the Board, a chairperson of the Board, a vice chairperson of the Board, a chief executive officer, a chief financial officer or treasurer, one or more vice presidents, one or more assistant vice presidents, one or more

assistant treasurers, one or more assistant secretaries, and any such other officers as may be appointed in accordance with the provisions of these bylaws. Any number of offices may be held by the same person.

5.2 APPOINTMENT OF OFFICERS.

The Board shall appoint the officers of the corporation, except such officers as may be appointed in accordance with the provisions of Sections 5.3 and 5.5 of these bylaws, subject to the rights, if any, of an officer under any contract of employment.

5.3 SUBORDINATE OFFICERS.

The Board may appoint, or empower the chief executive officer or, in the absence of a chief executive officer, the president, to appoint, such other officers and agents as the business of the corporation may require. Each of such officers and agents shall hold office for such period, have such authority, and perform such duties as are provided in these bylaws or as the Board may from time to time determine.

5.4 REMOVAL AND RESIGNATION OF OFFICERS.

Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by an affirmative vote of the majority of the Board at any regular or special meeting of the Board or, except in the case of an officer chosen by the Board, by any officer upon whom such power of removal may be conferred by the Board.

Any officer may resign at any time by giving written notice to the corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice. Unless otherwise specified in the notice of resignation, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the officer

is a party.

5.5 VACANCIES IN OFFICES.

Any vacancy occurring in any office of the corporation shall be filled by the Board or as provided in Section 5.2.

5.6 REPRESENTATION OF SHARES OF OTHER CORPORATIONS.

The chairperson of the Board, the president, any vice president, the treasurer, the secretary or assistant secretary of this corporation, or any other person authorized by the Board or the president or a vice president, is authorized to vote, represent, and exercise on behalf of this corporation all rights incident to any and all shares of any other corporation or corporations standing in the name of this corporation. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

5.7 AUTHORITY AND DUTIES OF OFFICERS.

All officers of the corporation shall respectively have such authority and perform such duties in the management of the business of the corporation as may be designated from time to time by the Board or the

stockholders and, to the extent not so provided, as generally pertain to their respective offices, subject to the control of the Board.

ARTICLE VI - RECORDS AND REPORTS

6.1 MAINTENANCE AND INSPECTION OF RECORDS.

The corporation shall, either at its principal executive office or at such place or places as designated by the Board, keep a record of its stockholders listing their names and addresses and the number and class of shares held by each stockholder, a copy of these bylaws as amended to date, accounting books, and other records.

Any stockholder of record, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the corporation's stock ledger, a list of its stockholders, and its other books and records and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a stockholder. In every instance where an attorney or other agent is the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or such other writing that authorizes the attorney or other agent so to act on behalf of the stockholder. The demand under oath shall be directed to the corporation at its registered office in Delaware or at its principal executive office.

6.2 INSPECTION BY DIRECTORS.

Any director shall have the right to examine the corporation's stock ledger, a list of its stockholders, and its other books and records for a purpose reasonably related to his or her position as a director. The Court of Chancery is hereby vested with the exclusive jurisdiction to determine whether a director is entitled to the inspection sought. The Court may summarily order the corporation to permit the director to inspect any and all books and records, the stock ledger, and the stock list and to make copies or extracts therefrom. The Court may, in its discretion, prescribe any limitations or conditions with reference to the inspection, or award such other and further relief as the Court may deem just and proper.

ARTICLE VII - GENERAL MATTERS

7.1 EXECUTION OF CORPORATE CONTRACTS AND INSTRUMENTS.

The Board, except as otherwise provided in these bylaws, may authorize any officer or officers, or agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the corporation; such authority may be general or confined to specific instances. Unless so authorized or ratified by the Board or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

7.2 STOCK CERTIFICATES; PARTLY PAID SHARES.

The shares of the corporation shall be represented by certificates, provided that the Board may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares.

Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Notwithstanding the adoption of such a resolution by the Board, every holder of stock represented by certificates and upon request every holder of uncertificated shares shall be entitled to have a certificate signed by, or in the name of the corporation by the chairperson or vice-chairperson of the Board, or the president or vice-president, and by the treasurer or an assistant treasurer, or the secretary or an assistant secretary of such corporation representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he were such officer, transfer agent or registrar at the date of issue.

The corporation may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly paid shares, upon the books and records of the corporation in the case of uncertificated partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully paid shares, the corporation shall declare a dividend upon partly paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

7.3 SPECIAL DESIGNATION ON CERTIFICATES.

If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock; provided, however, that, except as otherwise provided in Section 202 of the DGCL, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class or series of stock a statement that the corporation will furnish without charge to each stockholder who so requests the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

7.4 LOST CERTIFICATES.

Except as provided in this Section 7.5, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is

surrendered to the corporation and cancelled at the same time. The corporation may issue a new certificate of stock or uncertificated shares in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the corporation may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to give the corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

7.5 CONSTRUCTION; DEFINITIONS.

Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the DGCL shall govern the construction of these bylaws. Without limiting the generality of this provision, the

singular number includes the plural, the plural number includes the singular, and the term "person" includes both a corporation and a natural person.

7.6 DIVIDENDS.

The Board, subject to any restrictions contained in either (i) the DGCL, or (ii) the certificate of incorporation, may declare and pay dividends upon the shares of its capital stock. Dividends may be paid in cash, in property, or in shares of the corporation's capital stock.

The Board may set apart out of any of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve. Such purposes shall include but not be limited to equalizing dividends, repairing or maintaining any property of the corporation, and meeting contingencies.

7.7 FISCAL YEAR.

The fiscal year of the corporation shall be fixed by resolution of the Board and may be changed by the Board.

7.8 SEAL.

The corporation may adopt a corporate seal, which shall be adopted and which may be altered by the Board. The corporation may use the corporate seal by causing it or a facsimile thereof to be impressed or affixed or in any other manner reproduced.

7.9 TRANSFER OF STOCK.

Upon surrender to the corporation or the transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate, and record the transaction in its books.

7.10 STOCK TRANSFER AGREEMENTS.

The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

7.11 REGISTERED STOCKHOLDERS.

The corporation:

(i) shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote

as such owner;

(ii) shall be entitled to hold liable for calls and assessments the person registered on its books as the owner of shares; and

(iii) shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of another person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

7.12 WAIVER OF NOTICE.

Whenever notice is required to be given under any provision of the DGCL, the certificate of incorporation or these bylaws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time of the event for which notice is to be given, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the certificate of incorporation or these bylaws.

ARTICLE VIII - NOTICE BY ELECTRONIC TRANSMISSION

8.1 NOTICE BY ELECTRONIC TRANSMISSION.

Without limiting the manner by which notice otherwise may be given effectively to stockholders pursuant to the DGCL, the certificate of incorporation or these bylaws, any notice to stockholders given by the corporation under any provision of the DGCL, the certificate of incorporation or these bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice to the corporation. Any such consent shall be deemed revoked if:

(i) the corporation is unable to deliver by electronic transmission two consecutive notices given by the corporation in accordance with such consent; and

(ii) such inability becomes known to the secretary or an assistant secretary of the corporation or to the transfer agent, or other person responsible for the giving of notice.

However, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.

Any notice given pursuant to the preceding paragraph shall be deemed given:

(i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice;

(ii) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice;

(iii) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting,

upon the later of (A) such posting and (B) the giving of such separate notice; and

(iv) if by any other form of electronic transmission, when directed to the stockholder.

An affidavit of the secretary or an assistant secretary or of the transfer agent or other agent of the corporation that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

8.2 DEFINITION OF ELECTRONIC TRANSMISSION.

An "electronic transmission" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved, and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

8.3 INAPPLICABILITY.

Notice by a form of electronic transmission shall not apply to Sections 164, 296, 311, 312 or 324 of the DGCL.

ARTICLE IX - INDEMNIFICATION

9.1 INDEMNIFICATION OF DIRECTORS AND OFFICERS

The corporation shall indemnify and hold harmless, to the fullest extent permitted by the DGCL as it presently exists or may hereafter be amended, any director or officer of the corporation who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "PROCEEDING") by reason of the fact that he or she, or a person for whom he or she is the legal representative, is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or non-profit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses reasonably incurred by such person in connection with any such Proceeding. The corporation shall be required to indemnify a person in connection with a Proceeding initiated by such person only if the Proceeding was authorized by the Board.

9.2 INDEMNIFICATION OF OTHERS

The corporation shall have the power to indemnify and hold harmless, to the extent permitted by applicable law as it presently exists or may hereafter be amended, any employee or agent of the corporation who was or is made or is threatened to be made a party or is otherwise involved in any Proceeding by reason of the fact that he or she, or a person for whom he or she is the legal representative, is or was an employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or non-profit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses reasonably incurred by such person in connection with any such Proceeding.

9.3 PREPAYMENT OF EXPENSES

The corporation shall pay the expenses incurred by any officer or director of the corporation, and may pay the expenses incurred by any employee or agent of the corporation, in defending any Proceeding in advance of its final disposition; provided, however, that the payment of expenses incurred by a person in advance of the final disposition of the Proceeding shall be made only

upon receipt of an undertaking by the person to repay all amounts advanced if it should be ultimately determined that the person is not entitled to be indemnified under this Article IX or otherwise.

9.4 DETERMINATION; CLAIM

If a claim for indemnification or payment of expenses under this Article IX is not paid in full within sixty days after a written claim therefor has been received by the corporation the claimant may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the corporation shall have the burden of proving that the claimant was not entitled to the requested indemnification or payment of expenses under applicable law.

9.5 NON-EXCLUSIVITY OF RIGHTS

The rights conferred on any person by this Article IX shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the certificate of incorporation, these bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

9.6 INSURANCE

The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability under the provisions of the DGCL.

9.7 OTHER INDEMNIFICATION

The corporation's obligation, if any, to indemnify any person who was or is serving at its request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, enterprise or non-profit entity shall be reduced by any amount such person may collect as indemnification from such other corporation, partnership, joint venture, trust, enterprise or non-profit enterprise.

9.8 AMENDMENT OR REPEAL

Any repeal or modification of the foregoing provisions of this Article IX shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification."

ARTICLE X - AMENDMENTS

These bylaws may be adopted, amended or repealed by the stockholders entitled to vote. However, the corporation may, in its certificate of incorporation, confer the power to adopt, amend or repeal bylaws upon the directors. The fact that such power has been so conferred upon the directors shall not divest the stockholders of the power, nor limit their power to adopt, amend or repeal bylaws.

CYTOKINETICS, INCORPORATED

CERTIFICATE OF AMENDMENT OF BYLAWS

The undersigned hereby certifies that he or she is the duly elected,

qualified, and acting Secretary or Assistant Secretary of Cytokinetics, Incorporated, a Delaware corporation and that the foregoing bylaws, comprising 18 pages, were amended and restated, contingent upon the closing of the corporation's initial public offering, on [July __, 2004] by the corporation's board of directors.

IN WITNESS WHEREOF, the undersigned has hereunto set his or her hand this ___ day of _____, 2004.

_____
Robert Blum
Secretary

Exhibit 4.2

CYTOKINETICS, INCORPORATED

FOURTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

This Fourth Amended and Restated Investors' Rights Agreement (the "Agreement") is made as of the 21st day of March, 2003 by and among Cytokinetics, Incorporated, a Delaware corporation (the "Company") and the investors listed on Exhibit A hereto, each of which is herein referred to as an "Investor."

RECITALS

WHEREAS, certain of the Investors (the "Prior Parties") hold shares of the Company's Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and/or shares of Common Stock issued upon conversion thereof (the "Prior Shares") and possess, registration rights, information rights, rights of first refusal, and other rights pursuant to that certain Third Amended and Restated Investor Rights Agreement dated as July 26, 2001 between the Company and such Prior Parties (the "Prior Agreement"); and

WHEREAS, the Prior Parties desire to amend and restate in its entirety the Prior Agreement and to accept the rights created pursuant hereto in lieu of the rights granted to them under the Prior Agreement; and

WHEREAS, certain Investors are parties to the Series E Preferred Stock Purchase Agreement, dated as of March 21, 2003, between the Company and such Investors (the "Purchase Agreement"), such Investors' obligations under which are conditioned upon the execution and delivery of this Agreement by such Investors, the Company and the execution of this Agreement or a written consent to amend and restate the Prior Agreement by the Prior Parties holding in excess of sixty percent (60%), on an as converted basis, of the Prior Shares:

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth herein, the parties to the Prior Agreement hereby and pursuant to written consent agree that the Prior Agreement shall be superseded, amended and restated in its entirety by this Agreement, and the parties hereto further agree as follows:

AGREEMENT

The parties hereby agree as follows:

1. REGISTRATION RIGHTS. The Company and the Investors covenant and agree as follows:

1.1 DEFINITIONS. For purposes of this Section 1:

(a) The terms "register," "registered," and "registration" refer to a registration effected by preparing and filing a registration statement or similar document in compliance with the Securities Act of 1933, as amended (the "Securities Act"), the declaration or ordering of effectiveness of such registration statement or document and the continuation in effect of

such registration statement, not subject to any stop order issued by the Securities and Exchange Commission ("SEC"), for the period set forth in Section 1.5(a) hereof;

(b) The term "Registrable Securities" means (i) the shares of Common Stock issuable or issued upon conversion of the Series A Preferred Stock ("Series A Stock"), Series B Preferred Stock ("Series B Stock"), Series C Preferred Stock ("Series C Stock") Series D Preferred Stock (the

"Series D Stock"), and the Series E Preferred Stock ("Series E Stock", together with the Series A Stock, Series B Stock, Series C Stock and Series D Stock, collectively, the "Preferred Stock") and (ii) any other shares of Common Stock of the Company issued as (or issuable upon the conversion or exercise of any warrant, right or other security which is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares listed in this Section 1.1(b)(i); provided, however, that the foregoing definition shall exclude in all cases any Registrable Securities sold by a person in a transaction in which his or her rights under this Agreement are not assigned. Notwithstanding the foregoing, Common Stock or other securities shall only be treated as Registrable Securities if and so long as they have not been (A) sold to or through a broker or dealer or underwriter in a public distribution or a public securities transaction, or (B) sold in a transaction exempt from the registration and prospectus delivery requirements of the Securities Act under Section 4(l) thereof so that all transfer restrictions, and restrictive legends with respect thereto, if any, are removed upon the consummation of such sale; and provided further, that any reference in this agreement to a specific number of Registrable Securities shall be subject to adjustment for any stock splits, reverse stock splits, stock dividends, combinations, recapitalizations and similar transactions;

(c) The number of shares of "Registrable Securities then outstanding" shall be determined by the number of shares of Common Stock outstanding which are, and the number of shares of Common Stock issuable pursuant to then exercisable or convertible securities which are, Registrable Securities;

(d) The term "Holder" means any person owning or having the right to acquire Registrable Securities or any assignee thereof in accordance with Section 1.12 of this Agreement;

(e) The term "Form S-3" means such form under the Securities Act as in effect on the date hereof or any successor form under the Securities Act;

(f) The term "SEC" means the Securities and Exchange Commission; and

(g) The term "Qualified IPO" means a firm commitment underwritten public offering by the Company of shares of its Common Stock pursuant to a registration statement on Form S-1 under the Securities Act, in which the aggregate cash proceeds to the Company are not less than $40,000,000 (net of underwriting discounts and commissions).

1.2 REQUEST FOR REGISTRATION.

(a) Demand Rights.

(i) If the Company shall receive at any time after the earlier of (A) December 31, 2003 or (B) six (6) months after the effective date of the first registration statement for a public offering of securities of the Company (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to a stock option, stock purchase or similar plan or an SEC Rule 145 transaction), a written request from the Holders of (x) at least fifty-one percent (51%) of the Registrable Securities then outstanding in the case of the first such request, or (y) at least twenty-five percent (25%) of the Registrable Securities then outstanding in the case of the second such request, that the Company file a registration statement under the Securities Act covering the sale of at least twenty percent (20%) of the Registrable Securities held by the Holders requesting such registration, then the Company shall, within ten (10) days of the receipt thereof, give written notice of such request in accordance with Section 3.3 hereof to all Holders and shall, subject to the limitations of subsection 1.2(b), use its best commercially reasonable efforts to effect as

soon as practicable, and in any event within 90 days of the receipt of such request, the registration under the Securities Act of all Registrable Securities which the Holders request to be registered within twenty (20) days of the mailing of such notice by the Company.

(ii) If the Company shall receive at any time after twelve (12) months from the effective date of the first registration statement for a public offering of securities of the Company (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to a stock option, stock purchase or similar plan or an SEC Rule 145 transaction), a written request from the holders of at least thirty percent (30%) of the aggregate number of shares of Common Stock heretofore issued upon conversion of the Series C Stock and shares of Common Stock issuable upon conversion of the Series C Stock then outstanding that the Company file a registration statement under the Securities Act covering the registration of at least thirty percent (30%) of the aggregate number of shares of Common Stock heretofore issued upon conversion of the Series C Stock and shares of Common Stock issuable upon conversion of Series C Stock then outstanding the Company shall, within ten (10) days of the receipt thereof, give written notice in accordance with Section 3.3 of such request to all holders of Common Stock issued or issuable upon conversion of Series C Stock and shall, subject to the limitations of subsection 1.2(b), use its best commercially reasonable efforts to effect as soon as practicable, and in any event within 90 days of the receipt of such request, the registration under the Securities Act of all Common Stock issued or issuable upon conversion of the Series C Stock which the holders of such Common Stock request to be registered within twenty (20) days of the mailing of such notice by the Company, provided that any registration carried out pursuant to this Section 1.2 (a)(ii) shall be on Form S-3 if such form is available for such offering.

(b) If the Holders initiating the registration request hereunder (collectively, the "Initiating Holders") intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to this Section 1.2 and the Company shall include such information in the written notice referred to in subsection 1.2(a). The underwriter will be selected by a majority in interest of the Initiating Holders and shall be reasonably acceptable to the Company. In such event, the right of any Holder to include their Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting (unless otherwise mutually agreed by a majority in interest of the Initiating Holders and such Holder) to the extent provided herein. All Holders proposing to distribute their

securities through such underwriting shall (together with the Company as provided in subsection 1.5(e)) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting, provided, however, that (A) no Holder shall be required to make any representations or warranties to, or agreements with, the Company or any underwriter other than representations, warranties or agreements regarding the identity of such Holder, the title to the Registrable Securities being sold by such Holder, the power and authority of such Holder to enter into the underwriting agreement, the amount and ownership of the securities of the Company held by such Holder, such Holder's intended method of distribution and any other customary representations and warranties concerning the Holder and its Registrable Securities reasonably requested by the Company or the underwriters and (B) no Holder shall be required to make any representations or warranties concerning the Company or its business, properties, prospects, financial condition or related matters. Notwithstanding any other provision of this Section 1.2, if the underwriter advises the Initiating Holders in writing that marketing factors require a limitation of the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities which would otherwise be underwritten pursuant hereto, and the number of shares of Registrable Securities that may be included in the

underwriting shall be allocated among all Holders thereof, including the Initiating Holders, in proportion (as nearly as practicable) to the amount of Registrable Securities of the Company owned by each Holder; provided, however, that the number of shares of Registrable Securities to be included in such underwriting shall not be reduced unless all other securities, other than shares sold by the Company which are included in such underwriting with the consent of a majority in interest of the Initiating Holders, are first entirely excluded from the underwriting.

(c) Notwithstanding the foregoing, if the Company shall furnish to Holders requesting a registration statement pursuant to this Section 1.2, a certificate signed by the President of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be seriously detrimental to the Company and its stockholders for such registration statement to be filed and it is therefore essential to defer the filing of such registration statement, the Company shall have the right to defer such filing for a period of not more than 120 days after receipt of the request of the Initiating Holders; provided, however, that the Company may not utilize this right more than once in any twelve-month period.

(d) In addition, the Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to this Section 1.2:

(i) For purposes of registrations requested pursuant to Section 1.2 (a)(i), (A) after the Company has effected two (2) such registrations pursuant to Section 1.2(a)(i) and such registrations have been declared or ordered effective and remained in effect, not subject to any stop order issued by the SEC, in accordance with the provisions of Section 1.5(a) hereof or (B) within six (6) months of the effective date of another registration;

(ii) For purposes of registrations requested pursuant to Section 1.2 (a)(ii), (A) after the Company has effected two (2) such registrations pursuant to Section 1.2(a)(ii) and such registrations have been declared or ordered effective and remained in effect, not subject to any stop order issued by the SEC, in accordance with the provisions of Section 1.5(a) hereof or (B) within six (6) months of the effective date of another registration;

(iii) During the period starting with the date ninety (90) days prior to the Company's good faith estimate of the date of filing of, and ending on a date one hundred eighty (180) days after the effective date of, a registration subject to Section 1.3 hereof; provided that the Company is actively employing in good faith all reasonable efforts to cause such registration statement to become effective; or

(iv) If the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 1.4 below.

1.3 COMPANY REGISTRATION. If (but without any obligation to do so) the Company proposes to register (including for this purpose a registration effected by the Company for stockholders other than the Holders) any of its stock under the Securities Act in connection with the public offering of such securities solely for cash (other than a registration relating solely to the sale of securities to participants in a Company stock plan or a transaction covered by Rule 145 under the Securities Act, a registration in which the only stock being registered is Common Stock issuable upon conversion of debt securities which are also being registered, or any registration on any form which does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities), the Company shall, at such time, promptly give each Holder written notice of such registration in accordance with Section 3.3. Upon the written

request of each Holder given within twenty (20) days after mailing of such notice by the Company, the Company shall, subject to the provisions of Section 1.8, cause to be registered under the Securities Act all of the Registrable Securities that each such Holder has requested to be registered.

1.4 FORM S-3 REGISTRATION. In case the Company shall receive from Holders of the Registrable Securities then outstanding a written request or requests that the Company effect a registration on Form S-3 and any related qualification or compliance with respect to all or a part of the Registrable Securities owned by such Holder or Holders, the Company will:

(a) promptly give written notice of the proposed registration, and any related qualification or compliance, to all other Holders; and

(b) as soon as practicable, effect such registration and all such qualifications and compliances as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Holder's or Holders' Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any other Holder or Holders joining in such request as are specified in a written request given within 15 days after receipt of such written notice from the Company; provided, however, that the Company shall not be obligated to effect any such registration, qualification or compliance, pursuant to this Section 1.4: (i) if Form S-3 is not available for such offering by the Holders; (ii) if the Holders, together with the holders of any other securities of the Company entitled to inclusion in such registration, propose to sell Registrable Securities and such other securities (if any) at an aggregate price to the public (net of any underwriters' discounts or commissions) of less than $500,000; (iii) if the Company shall furnish to the Holders a certificate signed by the President of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be seriously detrimental to the

Company and its stockholders for such Form S-3 Registration to be effected at such time, in which event the Company shall have the right to defer the filing of the Form S-3 registration statement for a period of not more than 90 days after receipt of the request of the Holder or Holders under this Section 1.4; provided, however, that the Company shall not utilize this right more than once in any twelve month period; (iv) if the Company has, within the twelve (12) month period preceding the date of such request, already effected one registration on Form S-3 for the Holders pursuant to this Section 1.4 or within six (6) months of the effective date of another registration; (v) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance; or (vi) during the period ending one hundred eighty (180) days after the effective date of a registration statement subject to Section 1.2 or Section 1.3.

(c) Subject to the foregoing, the Company shall file a registration statement covering the Registrable Securities and other securities so requested to be registered as soon as practicable after receipt of the request or requests of the Holders. Registrations effected pursuant to this Section 1.4 shall not be counted as demands for registration or registrations effected pursuant to Sections 1.2 or 1.3, respectively.

(d) All Holders proposing to distribute their securities through an underwriting under this Section 1.4 shall (together with the Company as provided in subsection 1.5(e)) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting, provided, however, that (A) no Holder shall be required to make any representations or warranties to, or agreements with, the Company or any underwriter other than representations, warranties or agreements regarding the identity of such Holder, the title to the Registrable Securities being sold by such Holder, the power and authority of such Holder to enter into the

underwriting agreement, the amount and ownership of the securities of the Company held by such Holder, such Holder's intended method of distribution and any other customary representations and warranties concerning the Holder and its Registrable Securities reasonably requested by the Company or the underwriters and (B) no Holder shall be required to make any representations or warranties concerning the Company or its business, properties, prospects, financial condition or related matters.

1.5 OBLIGATIONS OF THE COMPANY. Whenever required under this Section 1 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) Prepare and file with the SEC a registration statement with respect to such Registrable Securities and use commercially reasonable efforts to cause such registration statement to become effective, and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for up to one hundred twenty (120) days.

(b) Prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such registration statement for up to one hundred twenty (120) days.

(c) Furnish to the Holders such numbers of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the Securities Act, and such other documents as they may reasonably request in order to facilitate the disposition of Registrable Securities owned by them.

(d) Use its best commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by the Holders, provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions.

(e) In the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering. Each Holder participating in such underwriting shall also enter into and perform its obligations under such an agreement, provided, however, that with respect to registrations pursuant to Sections 1.2 and 1.4 (A) no Holder shall be required to make any representations or warranties to, or agreements with, the Company or any underwriter other than representations, warranties or agreements regarding the identity of such Holder, the title to the Registrable Securities being sold by such Holder, the power and authority of such Holder to enter into the underwriting agreement, the amount and ownership of the securities of the Company held by such Holder, such Holder's intended method of distribution and any other customary representations and warranties concerning the Holder and its Registrable Securities reasonably requested by the Company or the underwriters and (B) no Holder shall be required to make any representations or warranties concerning the Company or its business, properties, prospects, financial condition or related matters, and, provided further, that with respect to registrations pursuant to Section 1.3 no Holder shall be required to make any representations or warranties to, or agreements with, the Company or any underwriter other than the representations set forth in Part (A) of this paragraph, above, and, if the Holders are required by the underwriters, the same representations and warranties required by the underwriters on the part of the Company concerning the Company or its business, properties, prospects, financial condition or related matters provided that such representations will be

qualified as to the knowledge of such selling Holder.

(f) Notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the Securities Act of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing, such obligation to continue for one hundred twenty (120) days. In such case, the Company shall promptly prepare a supplement or amendment to such prospectus and furnish to each seller of Registrable Securities a reasonable number of copies of such supplement to or an amendment of such prospectus as may be necessary so that, after delivery to the purchasers of such Registrable Securities, such prospectus shall not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading. The number of days during which the Company is preparing such supplement or amendment shall be added to the period set forth in Section 1.5(a) hereof.

(g) Cause all such Registrable Securities registered pursuant hereunder to be listed on each securities exchange on which similar securities issued by the Company are then listed.

(h) Provide a transfer agent and registrar for all Registrable Securities registered pursuant hereunder and a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration.

(i) Use its best commercially reasonable efforts to furnish, at the request of any Holder requesting registration of Registrable Securities pursuant to this Section 1, on the date that such Registrable Securities are delivered to the underwriters for sale in connection with a registration pursuant to this Section 1, if such securities are being sold through underwriters, or, if such securities are not being sold through underwriters, on the date that the registration statement with respect to such securities becomes effective, (i) an opinion, dated such date, of the counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters, if any, and to the Holders requesting registration of Registrable Securities and (ii) a letter dated such date, from the independent certified public accountants of the Company, in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering, addressed to the underwriters, if any, and to the Holders requesting registration of Registrable Securities.

(j) In the event of any underwritten public offering, cooperate with the Holders requesting registration, the underwriter participating in the offering and their counsel in any due diligence investigation reasonably requested by the Holders or the underwriters in connection therewith, and participate, to the extent reasonably requested by the underwriter for the offering (including, without limitation, participating in "roadshow" meetings with prospective investors) and that would be customary for underwritten primary offerings of a comparable amount of equity securities by the Company.

1.6 FURNISH INFORMATION. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 1 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be reasonably required to effect the registration of such Holder's Registrable Securities. The Company shall have no obligation with

respect to any registration requested pursuant to Section 1.2 or Section 1.4 of this Agreement if, as a result of the application of the preceding sentence, the number of shares or the anticipated aggregate offering price of the Registrable Securities to be included in the registration does not equal or exceed the number of shares or the anticipated aggregate offering price required to originally trigger the Company's obligation to initiate such registration as specified in subsection 1.2(a) or subsection 1.4(b), whichever is applicable; provided, however, that such registration shall not be deemed a registration for purposes of Section 1.2(d).

1.7 EXPENSES OF REGISTRATION.

(a) DEMAND REGISTRATION. All expenses other than underwriting discounts and commissions incurred in connection with registrations, filings or qualifications pursuant to Section 1.2, including (without limitation) all registration, filing and qualification fees, printers' and accounting fees, fees and disbursements of counsel for the Company, and the reasonable fees and disbursements of one counsel for the selling Holders selected by them (collectively "Registration Expenses") shall be borne by the Company; provided, however, that if the Holders bear the Registration Expenses for any registration proceeding begun pursuant to Section 1.2 and subsequently withdrawn by the Holders registering shares therein, such registration proceeding shall not be counted as a requested registration pursuant to Section 1.2 hereof, except in the event that such withdrawal is based upon material adverse information relating to the Company that is different from the information known or available (upon request from the Company or otherwise) to the Holders requesting registration at the time of their request for registration under Section 1.2, in which event such registration shall not be treated as a counted registration for purposes of Section 1.2 hereof, even though the Holders do not bear the Registration Expenses for such registration.

(b) COMPANY REGISTRATION. All expenses other than underwriting discounts and commissions incurred in connection with registrations, filings or qualifications of Registrable Securities pursuant to Section 1.3 for each Holder, including (without limitation) all registration, filing, and qualification fees, printers' and accounting fees, fees and disbursements of counsel for the Company and the reasonable fees and disbursements of one counsel for the selling Holder or Holders selected by them shall be borne by the Company.

(c) REGISTRATION ON FORM S-3. All expenses other than underwriting discounts and commissions incurred in connection with a registration requested pursuant to Section 1.4, including (without limitation) all registration, filing, qualification, printer's and accounting fees and the reasonable fees and disbursements of one counsel for the selling Holder or Holders selected by them shall be borne by the Company.

1.8 UNDERWRITING REQUIREMENTS. In connection with any offering involving an underwriting of shares of the Company's capital stock, the Company shall not be required under Section 1.3 to include any of the Holders' securities in such underwriting unless they accept the terms of the underwriting as agreed upon between the Company and the underwriters selected by it (or by other persons entitled to select the underwriters), and then only in such quantity as the underwriters determine in their good faith will not jeopardize the success of the offering by the Company. If the total amount of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the amount of securities sold other than by the Company that the underwriters determine in their good faith is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters determine in their good faith will not jeopardize the success of the offering. The Company will include in such registration (i) first, the securities the Company proposes to sell for its own account; (ii) second, to the extent that the number of securities the Company proposes to sell

is less than the number of securities which the Company has been advised can be sold in such offering that is compatible with the success of the

offering, such number of Registrable Securities which the Holders have requested to be included in such registration pursuant to Section 1.3 hereof; provided, however, in no event shall such number of Registrable Securities which the Holders have requested to be included in such registration be reduced below twenty-five percent (25%) of the total amount of securities included in such registration, unless such offering is the Qualified IPO and such registration does not include shares of any other selling stockholders, in which event any or all of the Registrable Securities of the Holders may be excluded in accordance with the immediately preceding sentence; and (iii) third, to the extent that the number of securities which are to be included in such registration pursuant to clauses (i) and (ii) is, in the aggregate, less than the number of securities which the Company has been advised can be sold in such offering that is compatible with the success of the offering, such number of other securities requested to be included in the offering for the account of any holders not contractually entitled to registration which, in the opinion of the underwriters, is compatible with the success of the offering. In no event will shares of any other selling stockholder be included in such registration which would reduce the number of shares which have been requested to be included by Holders without the written consent of Holders of not less than sixty six and two thirds percent (66 2/3%) of the Registrable Securities proposed to be sold in the offering. The number of Registrable Securities included in such registration statement shall be allocated pro rata among the Holders based on the number of Registrable Securities held by each Holder or in such other proportions as shall mutually be agreed to by such selling Holders, but in no event shall any shares being sold by a Holder exercising a demand registration right similar to that granted in Section 1.2 be excluded from such offering. For purposes of this Section 1.8 concerning apportionment, for any selling stockholder which is a holder of Registrable Securities and which is a partnership or corporation, the partners, retired partners and stockholders of such holder, or the estates and family members of any such partners and retired partners and any trusts for the benefit of any of the foregoing persons shall be deemed to be a single "selling stockholder" and any pro-rata reduction with respect to such "selling stockholder" shall be based upon the aggregate amount of shares carrying registration rights owned by all entities and individuals included in such "selling stockholder," as defined in this sentence.

1.9 DELAY OF REGISTRATION. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 1.

1.10 INDEMNIFICATION. In the event any Registrable Securities are included in a registration statement under this Section 1:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each Holder, its legal counsel, its accountants, any underwriter (as defined in the Securities Act) for such Holder and each person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Securities Exchange Act of 1934, as amended (the "Exchange Act"), against any losses, claims, damages, or liabilities (joint or several) to which they may become subject under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively a "Violation"): (i) any untrue statement or alleged untrue statement of a material fact contained in such registration statement, including any preliminary prospectus or final prospectus contained therein or any amendments or

supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any state securities law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law; and the Company will pay to each such Holder, underwriter or controlling person, as incurred, any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability, or action; provided, however, that the indemnity agreement contained in this subsection 1.10(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld), nor shall the Company be liable to any Holder, underwriter or controlling person for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon a Violation which occurs in reliance upon and in conformity with written information furnished expressly for use in connection with such registration by any such Holder, underwriter or controlling person.

(b) To the extent permitted by law, each selling Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who has signed the registration statement, each person, if any, who controls the Company within the meaning of the Securities Act, its legal counsel, its accountants, any underwriter, any other Holder selling securities in such registration statement and any controlling person of any such underwriter or other Holder, against any losses, claims, damages, or liabilities (joint or several) to which any of the foregoing persons may become subject, under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereto) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by such Holder expressly for use in connection with such registration; and each such Holder will pay, as incurred, any legal or other expenses reasonably incurred by any person intended to be indemnified pursuant to this subsection 1.10(b), in connection with investigating or defending any such loss, claim, damage, liability, or action; provided, however, that the indemnity agreement contained in this subsection 1.10(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; provided, that in no event shall any indemnity under this subsection 1.10(b) exceed the net proceeds from the offering received by such Holder, except in the case of willful fraud by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 1.10 of notice of the commencement of any action (including any governmental action), such indemnified party shall, if a claim in respect thereof is to be made against any indemnifying party under this Section 1.10, deliver to the indemnifying party a written notice of the commencement thereof and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties which may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the reasonable fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing

interests between such indemnified party and any other party represented by such counsel in such proceeding. The failure to so notify the indemnifying party shall not relieve the indemnifying party of any liability (i) that it may have

to the indemnified party hereunder (except to the extent the indemnifying party forfeits rights or defenses by reason of such failure), or (ii) that it may have to any indemnified party other than under this 1.10.

(d) If the indemnification provided for in this Section 1.10 is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss, liability, claim, damage or expense referred to therein, then the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and of the indemnified party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage or expense as well as any other relevant equitable considerations; provided, that in no event shall any contribution by a Holder under this Subsection 1.10(d) exceed the net proceeds from the offering received by such Holder, except in the case of willful fraud by such Holder. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) The obligations of the Company and Holders under this Section 1.10 shall survive the completion of any offering of Registrable Securities in a registration statement under this Section 1, and otherwise.

1.11 REPORTS UNDER SECURITIES EXCHANGE ACT OF 1934. With a view to making available to the Holders the benefits of Rule 144 promulgated under the Securities Act and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company agrees to:

(a) make and keep public information available, as those terms are understood and defined in SEC Rule 144, at all times after ninety (90) days after the effective date of the first registration statement filed by the Company for the offering of its securities to the general public so long as the Company remains subject to the periodic reporting requirements under Sections 13 or 15(d) of the Exchange Act;

(b) take such action, including the voluntary registration of its Common Stock under Section 12 of the Exchange Act, as is necessary to enable the Holders to utilize Form S-3 for the sale of their Registrable Securities, such action to be taken as soon as practicable

after the end of the fiscal year in which the first registration statement filed by the Company for the offering of its securities to the general public is declared effective;

(c) file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act; and

(d) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of SEC Rule

144 (at any time after ninety (90) days after the effective date of the first registration statement filed by the Company), the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after it so qualifies), (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC which permits the selling of any such securities without registration or pursuant to such form.

1.12 ASSIGNMENT OF REGISTRATION RIGHTS. The rights to cause the Company to register Registrable Securities pursuant to this Section 1 may be assigned (but only with all related obligations) by a Holder to (i) a transferee or assignee of at least 400,000 shares of such securities, (ii) a transferee or assignee of all of such Registrable Securities held by such transferring Holder, if less than 400,000 shares, or (iii) a general partner, limited partner, retired partner, member or retired member, affiliate, parent or majority-owned subsidiary of the transferee or Holder, provided that prior to such transfer or assignment the Company is furnished with written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned and with an agreement to be bound to the rights and obligations under Sections 1 and 3 of this Agreement as a Holder hereunder executed by such transferee or assignee; and provided, further, that such assignment shall be effective only if immediately following such transfer the further disposition of such securities by the transferee or assignee is restricted under the Securities Act; and, provided further, that such transferee or assignee is not a competitor of the Company as determined in good faith by the Company's Board of Directors. For the purposes of determining the number of shares of Registrable Securities held by a transferee or assignee, the holdings of transferees and assignees of a partnership who are partners or retired partners of such partnership (including spouses and ancestors, lineal descendants and siblings of such partners or spouses who acquire Registrable Securities by gift, will or intestate succession) shall be aggregated together and with the partnership; provided that all assignees and transferees who would not qualify individually for assignment of registration rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices or taking any action under Section 1.

1.13 LIMITATIONS ON SUBSEQUENT REGISTRATION RIGHTS. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the outstanding Registrable Securities, enter into any agreement with any holder or prospective holder of any securities of the Company which would allow such holder or prospective holder (a) to include such securities in any registration filed under Section 1.2 hereof, unless under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of his securities will not reduce the amount of

the Registrable Securities of the Holders which is included or (b) to make a demand registration which could result in such registration statement being declared effective prior to the earlier of either of the dates set forth in subsection 1.2(a) or within one hundred twenty (120) days of the effective date of any registration effected pursuant to Section 1.2, provided, however, that with respect to the inclusion by such holder or prospective holder of securities in any registration under Section 1.2(a)(ii) of this Agreement, the consent required under this Section 1.13 shall also include the prior written consent of the holders of a majority of the shares of Series C Preferred Shares.

1.14 "MARKET STAND-OFF" AGREEMENT. Each Holder hereby agrees that, during the period of duration (up to, but not exceeding, 180 days) specified by the Company and an underwriter of Common Stock or other securities of the Company, following the effective date of a registration statement of the Company filed under the Securities Act, it shall not, to the extent requested by

the Company and such underwriter, directly or indirectly sell, offer to sell, contract to sell (including, without limitation, any short sale), grant any option to purchase or otherwise transfer or dispose of (other than to donees who agree to be similarly bound) any securities of the Company held by it at any time during such period except Common Stock included in such registration; provided, however, that:

(a) such agreement shall be applicable only to the first such registration statement of the Company which covers Common Stock (or other securities) to be sold on its behalf to the public in an underwritten offering; and

(b) all officers, directors, and key employees of the Company, all five-percent security holders, and all other persons with registration rights (whether or not pursuant to this Agreement) enter into similar agreements.

In order to enforce the foregoing covenant and until the end of such stand-off period (i) each certificate representing Registrable Securities shall have a legend imprinted thereon that such Registrable Securities are subject to a market stand-off agreement restricting the transfer thereof for a period of 180 days following the initial public offering of the Company's securities and (ii) the Company may impose stop-transfer instructions with respect to the Registrable Securities of each Holder (and the shares or securities of every other person subject to the foregoing restriction). Each Holder agrees that, if so requested, such Holder will execute an agreement in the form provided by the underwriter containing terms which are essentially consistent with the provisions of this Section 1.14.

Notwithstanding the foregoing, the obligations described in this Section 1.14 shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms which may be promulgated in the future, or a registration relating solely to an SEC Rule 145 transaction on Form S-4 or similar forms which may be promulgated in the future.

1.15 TERMINATION OF REGISTRATION RIGHTS. No Holder shall be entitled to exercise any right provided for in this Section 1 after the earlier of (i) five (5) years following the consummation of a Qualified IPO, or (ii) such time as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares during a three (3)-month period without registration.

2. COVENANTS OF THE COMPANY.

2.1 DELIVERY OF FINANCIAL STATEMENTS. The Company shall deliver to each Holder of at least 400,000 shares of Registrable Securities:

(a) as soon as practicable, but in any event within ninety (90) days after the end of each fiscal year of the Company, an income statement for such fiscal year, a balance sheet of the Company and statement of stockholder's equity as of the end of such year, and a statement of cash flows for such year, such year-end financial reports to be in reasonable detail, prepared in accordance with generally accepted accounting principles ("GAAP"), and audited and certified by an independent public accounting firm of nationally recognized standing selected by the Company;

(b) as soon as practicable, but in any event within thirty (30) days after the end of each of the first three (3) quarters of each fiscal year of the Company, an unaudited profit or loss statement, a statement of cash flows for such fiscal quarter and an unaudited balance sheet as of the end of such fiscal quarter;

(c) within thirty (30) days of the end of each month, an unaudited income statement and a statement of cash flows and balance

sheet for and as of the end of such month, in reasonable detail;

(d) as soon as practicable, but in any event thirty (30) days prior to the end of each fiscal year, a budget and business plan for the next fiscal year, prepared on a monthly basis, and, as soon as prepared, any other budgets or revised budgets prepared by the Company; and

(e) with respect to the financial statements called for in subsections (b) and (c) of this Section 2.1, an instrument executed by the Chief Financial Officer or President of the Company and certifying that such financials were prepared in accordance with GAAP consistently applied with prior practice for earlier periods (with the exception of footnotes that may be required by GAAP) and fairly present the financial condition of the Company and its results of operation for the period specified, subject to year-end audit adjustment, provided that the foregoing shall not restrict the right of the Company to change its accounting principles consistent with GAAP, if the Board of Directors determines that it is in the best interest of the Company to do so.

2.2 INSPECTION. The Company shall permit each Holder of at least 400,000 shares of Registrable Securities, at such Holder's expense, to visit and inspect the Company's properties, to examine its books of account and records and to discuss the Company's affairs, finances and accounts with its officers, all at such reasonable times as may be requested by the Investor; provided, however, that the Company shall not be obligated pursuant to this Section 2.2 to provide access to any information (i) which it reasonably considers to be a trade secret or similar confidential information unless such holder executes a nondisclosure agreement reasonably acceptable to the Company or (ii) to any Holder that is a competitor to the Company or acting on behalf of a competitor to the Company as determined in good faith by the Board of Directors.

2.3 RIGHT OF FIRST OFFER. Subject to the terms and conditions specified in this Section 2.3, the Company hereby grants to each Holder a right of first offer with respect to future

sales by the Company of its Shares (as hereinafter defined). A Holder who chooses to exercise the right of first offer may designate as purchasers under such right, in accordance with the provisions of Section 2.3(e), itself or its partners or affiliates in such proportions as it deems appropriate.

Each time the Company proposes to offer any shares of, or securities convertible into or exercisable for any shares of, any class of its capital stock ("Shares"), the Company shall first make an offering of such Shares to each Holder in accordance with the following provisions:

(a) The Company shall deliver a notice by certified mail ("Notice") to the Holders stating (i) its bona fide intention to offer such Shares, (ii) the number of such Shares to be offered, and (iii) the price and material terms, if any, upon which it proposes to offer such Shares.

(b) Within 15 calendar days after delivery of the Notice, the Holder may elect to purchase or obtain, at the price and on the terms specified in the Notice, up to that portion of such Shares which equals the proportion that the number of shares of Common Stock issued and held, or issuable upon conversion and exercise of all convertible or exercisable securities then held, by such Holder bears to the total number of shares of Common Stock then outstanding (assuming full conversion and exercise of all convertible or exercisable securities). After such 15-day period, the Company will provide notice to all Holders as to whether or not the right of first offer has been or will be exercised by all Holders. If any Holders do not exercise their right of first offer, the Shares that would otherwise be allocated to such non-exercising Holders shall be available for allocation to each exercising Holder on a pro-rata basis (based upon the number of shares of Common Stock

issued and held, or issuable upon conversion and exercise of all convertible or exercisable securities then held by such Holder relative to the total number of such shares held by all exercising Holders), provided that the additional right of first offer must be exercised, if at all, within five days after the exercising Holder has received notice from the Company that the original right of first offer was not exercised by all Holders.

(c) The Company may, during the 45-day period following the expiration of the period provided in subsection 2.3(b) hereof, offer the remaining unsubscribed portion of the Shares to any person or persons at a price not less than, and upon terms no more favorable to the offeree than those specified in the Notice. If the Company does not enter into an agreement for the sale of the Shares within such period, or if such agreement is not consummated within 60 days of the execution thereof, the right provided hereunder shall be deemed to be revived and such Shares shall not be offered unless first reoffered to the Holders in accordance herewith.

(d) The right of first offer in this paragraph 2.3 shall not be applicable (i) to the issuance or sale of Common Stock (or options therefor) to employees, consultants and directors, pursuant to plans or agreements approved by the Board of Directors for the primary purpose of soliciting or retaining their services, (ii) to the sale of shares in connection with a firm commitment underwritten public offering, (iii) to the issuance of securities pursuant to the conversion or exercise of convertible or exercisable securities, (iv) to the issuance of securities in connection with a bona fide business acquisition of or by the Company, whether by merger, consolidation, sale of assets, sale or exchange of stock or otherwise or in connection with a corporate partnering agreement approved by the Board of Directors, (v) to the issuance of securities to financial institutions or lessors in connection with commercial credit arrangements, equipment

financing, or similar transactions approved by the Board of Directors, (vi) to the issuance or sale of the Series E Preferred Stock, (vii) to the issuance of dividends or distributions on shares of Preferred Stock, or (viii) warrants which are currently outstanding for the purchase of shares of the Company's Common Stock or Preferred Stock.

(e) The right of first offer set forth in this Section 2.3 may be assigned by a Holder to (i) a transferee or assignee of at least 400,000 shares of such securities, (ii) a transferee or assignee of all of such Registrable Securities held by such Transferring Holder, if less than 400,000 shares, or (iii) a partner, affiliate or majority-owned subsidiary of the transferee, provided that such transferee or assignee is not a competitor of the Company as determined in good faith by the Company's Board of Directors.

2.4 QUALIFIED SMALL BUSINESS. The Company will use reasonable efforts to comply with the reporting and record keeping requirements of Section 1202 of the Code, any regulations promulgated thereunder and any similar state laws and regulations, and agrees not to repurchase any stock of the Company if such repurchase would cause the Stock not to so qualify as "Qualified Small Business Stock," so long as the Company's Board of Directors determines that it is in the best interests of and not unduly burdensome to the Company to comply with the provisions of Section 1202 of the Code. The Company further covenants to submit to its stockholders and to state and federal taxation authorities such forms and filings as may be required to document such compliance, including the California Franchise Tax Board Form 3565, Small Business Stock Questionnaire, with its franchise or income tax return for the current income year.

2.5 ADDITIONAL COVENANTS.

(a) For so long as an Investor of Series C Stock holds 1,000,000 or more shares of Series C Stock, or the shares of Common Stock issued on conversion thereof equivalent to 1,000,000 shares of Series C Stock (a

"Major Investor") the Company shall:

(i) Deliver to such Major Investor all reports and information required by Section 2.1,

(ii) Permit such Major Investor reasonable access, during regular business hours, to contact the Company's senior management,

(iii) Provide to such Major Investor other non-scientific information reasonably requested by such Major Investor, provided that the Company consents to the provision of such information (which consent shall not be unreasonably withheld), and, provided further, that such Major Investor delivers to the Company a confidentiality agreement, in a form reasonably satisfactory to the Company, which states, among other things and without limitation, that such Major Investor shall not use such information for any purpose other than for evaluation and monitoring its investment in the Company, and

(iv) Provide to such Major Investor, on a timely basis, management reports in form and substance mutually agreed to by the Company and such Major Investor.

(b) For so long as an Investor, who was at any time a Major Investor, holds any Registrable Securities of the Company, the Company shall provide to such Investor any and all information that the Company provides to non-affiliate holders of Common Stock holding a number of shares of Common Stock equal to or less than the number of shares of Common Stock such Investor holds or may be deemed to hold upon conversion of any Registrable Securities held by such Investor at such time.

(c) Any Major Investor requesting disclosure, reports or information from the Company pursuant to any provision of this Section 2, shall work with and assist the Company to prevent the compilation and delivery of any such requested material or information from placing an undue burden on the Company or the Company's senior management.

(d) The Company's obligation under Section 2.5 (a)(iii) shall terminate as to any Major Investor upon the occurrence of both of the following events:

(i) The Company undergoes (A) an initial public offering of its Common Stock pursuant to a registration statement filed under the Securities Act of 1933 or (B) a merger, consolidation or sale of all or substantially all of its assets; and

(ii) After the occurrence of a transaction listed in (i) above, such Major Investor no longer maintains a representative director on the Board of Directors of the Company.

2.6 TERMINATION OF COVENANTS.

(a) The covenants set forth in Sections 2.1 through Section 2.3 shall terminate as to each Holder and be of no further force or effect immediately prior to the consummation of a Qualified IPO.

(b) The covenants set forth in Sections 2.1 and 2.2 shall terminate as to each Holder and be of no further force or effect when the Company first becomes subject to the periodic reporting requirements of Sections 13 or 15(d) of the Exchange Act, if this occurs earlier than the events described in Section 2.6(a) above; provided, however, that the Company covenants and agrees to enter into an agreement including such covenants if the Company ceases to be subject to such periodic reporting requirements.

3. MISCELLANEOUS.

3.1 SUCCESSORS AND ASSIGNS. Except as otherwise provided in this Agreement, the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective permitted successors and assigns of the parties (including transferees of any of the Preferred Stock or any Common Stock issued upon conversion thereof). Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

3.2 AMENDMENTS AND WAIVERS. Any term of this Agreement may be amended or waived only with the written consent of the Company and the holders of at least sixty percent (60%) of the Registrable Securities then outstanding. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each holder of any Registrable Securities then outstanding, each future holder of all such Registrable Securities, and the Company, provided that, this Agreement shall not be changed in any way that would adversely affect the rights and privileges of any Holder holding Series A Preferred Stock, Series B Preferred Stock, Series C Stock, Series D Stock and/or Series E Stock in a manner different from the Holders of the other series of Preferred Stock without the written consent of the holders of a majority of the adversely affected series of Preferred Stock. Notwithstanding anything herein to the contrary, any Additional Purchaser who purchases Stock at the Second Closing or the Third Closing, as the case may be, as such terms are defined in the Purchase Agreement, in accordance with Section 1.2 of the Purchase Agreement shall become a party to this Agreement as an Investor without any amendment of this Agreement pursuant to this Section 3.2 or any consent or approval of any other Investor. Exhibit A hereto shall be supplemented to reflect the addition of any Additional Purchasers in the Second Closing.

3.3 NOTICES. Unless otherwise provided, any notice required or permitted by this Agreement shall be in writing and shall be deemed sufficient upon delivery, when delivered personally or by overnight courier or sent by telegram or fax, or seventy-two (72) hours after being deposited in the U.S. mail, as certified or registered mail, with postage prepaid, and addressed to the party to be notified at such party's address or fax number as set forth on the signature page or Exhibit A hereto or as subsequently modified by written notice.

3.4 SEVERABILITY. If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (a) such provision shall be excluded from this Agreement, (b) the balance of the Agreement shall be interpreted as if such provision were so excluded and (c) the balance of the Agreement shall be enforceable in accordance with its terms.

3.5 GOVERNING LAW. This Agreement and all acts and transactions pursuant hereto shall be governed, construed and interpreted in accordance with the laws of the State of California, without giving effect to principles of conflicts of laws.

3.6 COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. 3.7 TITLES AND SUBTITLES. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

3.8 AGGREGATION OF STOCK. All shares of the Preferred Stock held or acquired by affiliated entities or persons shall be aggregated

together for the purpose of determining the availability of any rights under this Agreement.

[Signature Page Follows]

The parties have executed this Investors' Rights Agreement as of the date first above written.

COMPANY:

CYTOKINETICS, INCORPORATED

By:_____

Print Name: James Sabry

Title: President & CEO

Address: 280 E. Grand Avenue
So. San Francisco, CA 94080

INVESTORS:

[Investor Signature Pages To Follow]

LIFE SCIENCE VENTURE FUND

By: ReqMed Company, Ltd.
Its General Partner

By:_____

Name:_____

Title:_____

SIGNATURE PAGE - SERIES E - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

SEVIN ROSEN FUND VII L.P.

By: SRB Associates VII L.P.,
Its General Partner

By:_____

Name: John V. Jaggers

Title: General Partner

SEVIN ROSEN VII AFFILIATES FUND L.P.

By: SRB Associates VII L.P.,
Its General Partner

By:_____

Name: John V. Jaggers

Title: General Partner

SEVIN ROSEN FUND VIII L.P.

By: SRB Associates VIII L.P.,
Its General Partner

By:_____

Name: John V. Jaggers

Title: General Partner

SEVIN ROSEN VIII AFFILIATES FUND L.P.

By: SRB Associates VIII L.P.,
Its General Partner

By:_____

Name: John V. Jaggers

Title: General Partner

MAYFIELD IX,
A DELAWARE LIMITED PARTNERSHIP

By: Mayfield IX Management, L.L.C.
Its: General Partner

By:_____

Name:_____

Title: Managing Director

MAYFIELD ASSOCIATES FUND IV,
A DELAWARE LIMITED PARTNERSHIP

By: Mayfield IX Management, L.L.C.
Its: General Partner

By:_____

Name:_____

Title: Managing Director

CELL TRUST II

By:_____

Name:_____

Title: Administrative Trustee

SIGNATURE PAGE - SERIES E - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

THE A. GRANT III & JEANETTE YVONNE HEIDRICH COMMUNITY PROPERTY TRUST

By: _____

Name: _____

Title: _____

SIGNATURE PAGE - SERIES E - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

BIOMEDICINE, L.P.

By: International BM Biomedicine Holdings (Cayman) Ltd.
Its: General Partner

By: _____

Name: Dr. Gaudenz I. Staehelin

Title: Chairman

By: _____

Name: Philip J. Sutcliffe

Title: Director

By: _____

Name: Julie Arnall

Title: Director

SIGNATURE PAGE - SERIES E - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

MIZUHO CAPITAL CO., LTD.

By: _____

Name: Osamu Kita

Title: President
Address: Mizuho Capital Co., Ltd.
Attn: Kazumasa Aoe,
Chief Investment Officer
4-3 Nihombashi-kabutocho,
Chuo-ku,
Tokyo 103-0026

Fax: +81-3-3664-3449

MHCC NO. 3 LIMITED LIABILITY FUND

By: Mizuho Capital Co., Ltd.
Its: General Partner

By: _____

Name: Osamu Kita

Title: President
Address: Mizuho Capital Co., Ltd.
Attn: Kazumasa Aoe,
Chief Investment Officer
4-3 Nihombashi-kabutocho,
Chuo-ku,
Tokyo 103-0026
Fax: +81-3-3664-3449

SIGNATURE PAGE - SERIES E - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY (SEVF2)

By: _____

Name: Tyler Edelstein

Title: Managing Director, Separate Investments
Address: Stanford Management Company
Attn: Victoria von Schell
2770 Sand Hill Road
Menlo Park, CA 94025

SIGNATURE PAGE - SERIES E - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

GENERAL AMERICAN INVESTORS COMPANY, INC.

By: _____

Name: Eugene L. DeStaebler, Jr.

Title: Vice-President, Administration

SIGNATURE PAGE - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

SCHWEIZERHALL INVESTMENT LTD

By: _____

Name: _____

Title: _____

SIGNATURE PAGE - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

CREDIT SUISSE FIRST BOSTON EQUITY PARTNERS, L.P.

By: Hemisphere Private Equity Partners, Ltd., Its General Partner

By: _____

Name: _____

Title: _____
Address: c/o CSFB Advisory Partners, L.L.C.
11 Madison Avenue
New York, NY 10010
Attn: Ron Millard
Fax: (646) 935-7498

CREDIT SUISSE FIRST BOSTON EQUITY PARTNERS (BERMUDA), L.P.

By: Hemisphere Private Equity Partners, Ltd., Its General Partner

By: _____

Name: _____

Title: _____
Address: c/o CSFB Advisory Partners, L.L.C.
11 Madison Avenue
New York, NY 10010
Attn: Ron Millard
Fax: (646) 935-7498

SIGNATURE PAGE - SERIES E - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

CREDIT SUISSE FIRST BOSTON U.S. EXECUTIVE ADVISORS, L.P.

By: Hemisphere Private Equity Partners, Ltd., Its General Partner

By: _____

Name: _____

Title: _____
Address: c/o CSFB Advisory Partners, L.L.C.
11 Madison Avenue
New York, NY 10010
Attn: Ron Millard

Fax: (646) 935-7498

ALTA BIOPHARMA PARTNERS II, L.P.

By: Alta BioPharma Management Partners II, LLC

By: _____

Name: _____

Title: Managing Director
Address: Alta Partners
One Embarcadero Center
Suite 4050
San Francisco, CA 94111
Attn: Elaine Walker Penny
Fax: (415) 362-6178

ALTA EMBARCADERO BIOPHARMA PARTNERS II, LLC

By: _____

Name: _____

Title: V.P. of Finance & Admin.
Address: Alta Partners
One Embarcadero Center
Suite 4050
San Francisco, CA 94111
Attn: Elaine Walker Penny
Fax: (415) 362-6178

SIGNATURE PAGE - SERIES E - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

MVI MEDICAL VENTURE INVESTMENTS LIMITED

By: _____

Name: John Arnold

Title: Director

SIGNATURE PAGE - SERIES E - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

GLAXO GROUP LIMITED

By: _____

Name: Donald F. Parman

Title: Attorney-In-Fact

SIGNATURE PAGE - SERIES E - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

VULCAN VENTURES INC.

By: _____

Name: William D. Savoy

Title: Vice President

SIGNATURE PAGE - SERIES E - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

AEOLUS TECHNOLOGY CORPORATION

By: _____

Name: _____

Title: _____

Address: TrustNet (British Virgin Islands) Limited
TrustNet Chambers
P.O. Box 3444
RoadTown, Tortola
British Virgin Islands

SIGNATURE PAGE - SERIES E - FOURTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT

Exhibit 4.3

LOAN AND SECURITY AGREEMENT

THIS AGREEMENT (the "Agreement"), dated as of September 25, 1998 (the "Closing Date") is entered into by and between Cytokinetics, Incorporated, a Delaware corporation having a principal place of business at 280 East Grand Avenue, South San Francisco, CA 94080 (the "Borrower") and Comdisco, Inc., a Delaware corporation having a principal place of business at 6111 North River Road, Rosemont, Illinois 60018 (the "Lender"). In consideration of the mutual agreements contained herein, the parties hereto agree as follows:

WHEREAS, Borrower has requested Lender to make available to Borrower a loan in the aggregate principal amount of up to ONE MILLION FIVE HUNDRED THOUSAND and 00/100 DOLLARS ($1,500,000.00) (as the same may from time to time be amended, modified, supplemented or revised, the "Loan"), which shall be available in minimum installments of TWO HUNDRED FIFTY THOUSAND and 00/100 DOLLARS ($250,000) each (the "Advance") on various dates prior to September 25, 1999 ("Advance Date(s)"), which would be evidenced by Secured Promissory Note(s) executed by Borrower substantially in the form of EXHIBIT A hereto (as the same may from time to time be amended, modified, supplemented or restated the "Note(s)");

NOW, THEREFORE, it is agreed:

SECTION 1. THE LOAN

1.1 Subject to the terms and conditions set forth herein, Lender shall lend to Borrower the aggregate original principal amount of ONE MILLION FIVE HUNDRED THOUSAND AND 00/100 DOLLARS ($1,500,000) together with interest at the rate of eight and one quarter percent (8.25%) per annum due and payable in monthly installments as set forth in the Note

1.2 Upon the occurrence of and during an Event of Default (as defined herein), interest shall thereafter be calculated at a rate of five percent (5%) in excess of the rate that would otherwise be applicable ("Default Rate"). All such interest shall be due and payable in arrears, on the first day of the following month.

1.3 Notwithstanding any provision in this Agreement, the Note, or any other "Loan Document" (as defined herein), it is not the parties' intent to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law which a court of competent jurisdiction shall deem applicable hereto (which under the laws of the State of Illinois shall be deemed to be the laws relating to permissible rates of interest on commercial loans) (the "Maximum Rate"). If the Borrower actually pays Lender an amount of interest, chargeable on the total aggregate principal Secured Obligations of Borrower under this Agreement and the Note (as said rate is calculated over a period of time that is the longer of (i) the time from the date of this Agreement through the maturity time as set forth on the Note, or (ii) the entire period of time that any principal is outstanding on the Note), which amount of interest exceeds interest calculated at the Maximum Rate on said principal chargeable over said period of time, then such excess interest actually paid by Borrower shall be applied first, to the payment of principal outstanding on the Note; second, after all principal is repaid, to the payment of Lender's out of pocket costs, expenses, and professional fees which are owed by Borrower to Lender under this Agreement or the Loan Documents; and third, after all principal, costs, expenses, and professional fees owed by Borrower to Lender are repaid, the excess (if any) shall be refunded to Borrower.

1.4 In the event any interest is not paid when due hereunder, delinquent interest shall be added to principal and shall bear interest on interest, compounded at the rate set forth in Section 1.1

1.5 Upon and during the continuation of an Event of Default hereunder (as defined herein), all Secured Obligations, including principal, interest, compounded interest, and reasonable professional fees, shall bear interest at a rate per annum equal to the Default Rate.

1.6 Borrower shall have the option to prepay the Note, in whole or in part, at any time after the date hereof by paying the principal amount together with all accrued and unpaid interest with respect to such principal amount, as of the date of such prepayment and the Balloon Payment as described in the Note together with a prepayment premium equal to the difference, if any, between (x) the amount being prepaid and (y) the present value, discounted at the Treasury Rate, of each installment of principal and interest being prepaid discounted to the date of prepayment. If the amount in (x) is greater than the amount in (y), no prepayment premium shall be due. The "Treasury Rate" shall mean the then prevailing yield on US Treasury Constant Maturities for the most recent business day, as quoted in the Federal Reserve Statistical Release H15, as of the date of prepayment for an obligation of comparable maturity to the maturity date of the Note.

SECTION 2. SECURITY INTEREST

As security for the payment of all indebtedness ("Indebtedness") of the Borrower to the Lender hereunder and under the Note, as the same may be renewed, extended for any period or rearranged, and the performance by the Borrower of its other obligations hereunder (the Indebtedness and such other obligations being hereinafter sometimes collectively referred to as the "Secured Obligations"), the Borrower hereby assigns to the Lender, and grants to the Lender a first priority security interest in, all the Borrower's right, title, and interest in and to the following property ("Collateral"): (i) the equipment and other property (the "Equipment") described in Exhibit B attached hereto; and (ii) all proceeds, products, replacements, additions to, substitutions for and accessions to any and all Equipment including, without limitation, the proceeds applicable to the insurance referred to in Section 4 hereof.

Equipment shall consist of computers, workstations, peripherals, instrumentation, electronic test equipment, office furniture, certain types of microscopy equipment and other items of equipment approved by Lender. Up to 20% of the Loan may be used for software and tenant improvements.

SECTION 3. REPRESENTATIONS AND WARRANTIES OF BORROWER

The Borrower represents, warrants and agrees that:

3.1 it has good title in and to the Equipment, free of all liens, security interests, encumbrances and claims whatsoever, except for the interest of the Lender therein;

3.2 it has the full power and authority to, and does hereby grant and convey to the Lender, a valid first priority perfected security interest in the Collateral as security for the Secured Obligations, free of all liens, security interests, encumbrances and claims, and shall execute such

Uniform Commercial Code ("UCC") financing statements in connection herewith as the Lender may reasonably request. No other lien, security interest, adverse claim or encumbrance has been created by Borrower or is known by Borrower to exist with respect to any Collateral;

3.3 it is a corporation duly organized, legally existing and in good standing under the laws of the State of Delaware, and is duly qualified as a foreign corporation in all jurisdictions where the failure to so qualify would have a material adverse effect on the Collateral or the business of the Borrower taken as a whole;

3.4 the execution, delivery and performance of the Note, this

Agreement, the Warrant Agreement dated September 25, 1998 pursuant to which Borrower granted to Lender the right to purchase the number of shares of preferred stock as set forth therein ("Warrant Agreement"), and all financing statements, certificates and other documents required to be delivered or executed in connection herewith (collectively, the "Loan Documents") have been duly authorized by all necessary corporate action of Borrower, the individual or individuals executing the Loan Documents were duly authorized to do so, the Equipment is personal property and as used by the Borrower will not be or become fixtures under applicable law, and the Loan Documents constitute legal, valid and binding obligations of the Borrower, enforceable in accordance with their respective terms, subject to applicable bankruptcy, insolvency, reorganization or other similar laws generally affecting the enforcement of the rights of creditors;

3.5 the Loan Documents do not and will not violate any provisions of its Certificate of Incorporation, bylaws or any contract, agreement, law, regulation, order, injunction, judgment, decree or writ to which the Borrower is subject, or result in the creation or imposition of any lien, security interest or other encumbrance upon the Collateral, other than those created by this Agreement;

3.6 the execution, delivery and performance of the Loan Documents do not require the consent or approval of any other person or entity including, without limitation, any regulatory authority or governmental body of the United States or any state thereof or any political subdivision of the United States or any state thereof.

3.7 as of the date hereof no fact or condition exists that would (or could, with the passage of time, the giving of notice, or both) constitute an Event of Default under this Agreement or any of the Loan Documents and no event which has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing. For purposes of this Agreement, "Material Adverse Effect" means a material adverse effect upon (i) the business, operations, properties, assets or financial condition of Borrower; or (ii) the ability of Borrower to perform the Secured Obligations.

SECTION 4. INSURANCE AND RISK OF LOSS

4.1 Risk of loss of, damage to or destruction of the Equipment shall be borne by the Borrower and effective from the date of this Agreement and until the payment and performance in full of all Secured Obligations, Borrower shall at its own expense cause to be carried and maintained all risk casualty insurance (covering risk of fire, theft and other such risks as the Lender may require, including standard and extended coverage) with respect to each item of Equipment in an amount no less than the replacement costs applicable to such item of Equipment during the term of this Agreement. All policies evidencing such casualty insurance shall contain a

standard mortgagee's endorsement and shall provide for at least thirty days prior written notice by the underwriter or insurance company to the Lender in the event of cancellation or expiration. Borrower shall provide Lender with insurance certificates evidencing the foregoing at time of closing.

4.2 If any item of Equipment is lost or rendered unusable as a result of any physical damage to or destruction of such item of Equipment during the period from the date hereof to and including the maturity date under the Note or the date all Secured Obligations hereunder have been fully satisfied, whichever is later, Borrower shall give to Lender prompt notice thereof. Borrower shall determine, within fifteen (15) days after the date of occurrence of such loss, damage or destruction, whether such item of Equipment can be repaired and restored to the condition in which such item of Equipment was required to be maintained as of the date immediately preceding such damage. If Borrower determines that such item of Equipment can be repaired, Borrower, at its expense, shall cause such item of Equipment to be promptly repaired. If Borrower determines that such item of I Equipment is lost or cannot be repaired,

Borrower shall promptly notify the Lender and such item of Equipment shall be deemed to have suffered a "Casualty Loss" for purposes of this Section as of the date of the occurrence of such loss. Within fifteen (15) days following the occurrence of any such loss, damage or destruction, Borrower shall notify the Lender of the item(s) of Equipment which has suffered such Casualty Loss ("Loss Item"), and within thirty (30) days thereafter (the "Settlement Date"), Borrower shall either (a) replace such item(s) of Equipment with equipment of the same model, type and feature configuration, in an operating condition and repair no less than that required hereunder of the damaged or lost equipment immediately prior to the date of such damage or loss, and having a fair market value no less than the Casualty Value (as defined herein) applicable to such item of Equipment as of the date immediately prior to such damage, in which case such replacement equipment shall for all purposes hereunder become part of the Collateral and (without limiting the preceding provisions) Borrower shall grant to Lender a first lien and security interest in respect of such replacement equipment pursuant to the terms of this Agreement, and Borrower shall provide the Lender evidence satisfactory to the Lender of Borrower's good and marketable title to such replacement equipment (free of any liens, security interests or encumbrances other than those created by this Agreement and Borrower shall be entitled to receive the amount of any insurance or other recovery received by Lender up to cost of obtaining the replacement equipment; or (b) so long as no Event of Default or event which with the giving of notice or passage of time, or both, would constitute an Event of Default, has occurred and is continuing, Borrower may provide substitute equipment satisfactory to Lender to become part of the Collateral and Borrower shall grant to Lender a first lien and security interest in respect of such substitute equipment pursuant to the terms of this Agreement, and Borrower shall provide the Lender evidence satisfactory to Lender of Borrower's good and marketable title to such substitute equipment (free of any liens, security interests or encumbrances other than created by this Agreement and Lender shall provide any required endorsements in connection with any insurance proceeds received by Borrower pursuant to such insurance policies; or (c) Borrower shall pay Lender the insurance proceeds payable pursuant to such insurance policies ("Insurance Proceeds") with respect to such Loss Item(s) and the principal amount of the Note (and interest accrued on the principal amount so prepayable) shall become due and payable on the Settlement Date to the extent of the replacement cost for all such Loss Item(s). For purposes of this Section 4.2, Casualty Value shall mean an amount equal to the greater of the fair market value of the Equipment as of the date of the Casualty Loss or the outstanding principal and accrued interest on the Loan. Moneys so received shall be applied, on the date of such receipt, as follows: first, to pay any

accrued interest on the outstanding principal amount of the Note on such date; second, to prepay, the outstanding principal amount of the Note (to the extent of the fair market value attributable to such Loss Item(s)); third, to pay any other Indebtedness of amounts then due and owing to the Lender hereunder; and fourth, so long as there has occurred no Event of Default under Section 8 hereof and no event which with the giving of notice or passage of time or both would constitute an Event of Default, has occurred and is continuing, Borrower and Lender hereby agree that the balance of any such Insurance Proceeds shall be paid promptly to the Borrower.

4.3 Effective upon the date hereof under the Note and while there are any Secured Obligations outstanding, Borrower shall cause to be carried and maintained comprehensive general liability insurance with regard to the Collateral against risks customarily insured against in the Borrower's business. Such risks shall include, without limitation, the risks of death, bodily injury and property damage associated with the Collateral. All policies evidencing such insurance shall provide for at least thirty (30) days prior written notice by the underwriter or insurance company to the Lender in the event of cancellation or expiration.

4.4 Borrower shall and does hereby indemnify and hold Lender, its agents and shareholders harmless from and against any and all claims, costs, expenses, damages and liabilities (including without limitation such claims, costs, expenses, damages and liabilities based on liability in tort including

without limitation strict liability in tort) including reasonable attorneys' fees, arising out of Borrower's ownership, possession, operation, control, use, maintenance, delivery, or other disposition of the Collateral. Notwithstanding the foregoing, Borrower shall not be responsible under the terms of this Section 4.4 to a party indemnified hereunder for any claims, costs, expenses, damages and liabilities occasioned by the negligence or willful misconduct of such indemnified party.

SECTION 5. COVENANTS OF BORROWER

Borrower covenants and agrees as follows at all times while any of the Secured Obligations remain outstanding:

5.1 Borrower shall maintain the Equipment in good operating order, repair, condition and appearance and protect the Equipment from deterioration, other than normal wear and tear. Borrower shall not use the Equipment or permit its use for any purpose other than for which it was designed. Borrower's obligation regarding the maintenance of the Equipment shall include, without limitation, all maintenance, repair, refurbishment and replacement recommended or advised either by the manufacturer, or that commonly performed by prudent business and/or professional practice. Any exceptions or qualifications expressed in this Agreement relating to normal or ordinary wear and tear shall not be deemed to limit Borrower's obligations pursuant to the preceding sentence.

5.2 Borrower shall only relocate any item of the Collateral provided that: (a) it shall have caused to be filed and/or delivered to the Lender all UCC financing statements, certificates or other documents or instruments necessary to continue in effect the first prior perfected security interest of the Lender in the Collateral, and (b) it shall have given the Lender no less than fifteen (15) days prior written notice of such relocation.

5.3 Upon the request of Lender, Borrower shall, during business hours, make the Equipment available to Lender for inspection at the place where it is normally located and shall make Borrower's log and maintenance records pertaining to the Equipment available to the Equipment available to Lender for inspection. Borrower shall take all action necessary to maintain such logs and maintenance records in a correct and complete fashion.

5.4 Upon the request of Lender, Borrower shall cause the Equipment to be plainly, permanently and conspicuously marked, by stenciling or by metal tag or plate affixed thereto, indicating Lender's security interest in the Equipment. Borrower shall replace any such stenciling, tag or plate which may be removed or destroyed or become illegible. Borrower shall keep all Equipment free from any marking or labeling which might be interpreted as a claim of ownership adverse to Borrower's.

5.5 Borrower covenants and agrees to pay when due, all taxes, fees or other charges of any nature whatsoever (together with any related interest or penalties) now or hereafter imposed or assessed against Borrower, Lender or the Collateral or upon Borrower's ownership, possession, use, operation or disposition thereof or upon Borrower's rents, receipts or earnings arising therefrom. Borrower shall file on or before the due date therefor all personal property tax returns in respect of the Collateral.

5.6 Borrower shall furnish to Lender the financial statements listed hereinafter, prepared in accordance with generally accepted accounting principles consistently applied (the "Financial Statements"):

(a) as soon as practicable (and in any event within thirty (30) days) after the end of each month: an internally prepared income statement, balance sheet, and cash flow statement, (including the commencement of any material litigation by or against Borrower), each certified by Borrower's Chief Executive or Financial Officer to be true and correct;

(b) as soon as practicable (and in any event within ninety (90) days) after the end of each fiscal year, audited Financial Statements, setting forth in comparative form the corresponding figures for the preceding fiscal year, and accompanied by any audit report and opinion of the independent certified public accountants selected by Borrower; and

(c) promptly any additional information (including but not limited to tax returns, income statements, balance sheets, and names of principal creditors) as Lender reasonably believes necessary to evaluate Borrower's continuing ability to meet financial obligations.

5.7 Notwithstanding the foregoing, after the effective date of the initial registration statement covering a public offering of Borrower's securities, the term "Financial Statements" shall be deemed to refer to only those statements required by the Securities and Exchange Commission, to be provided no less frequently than quarterly. Borrower will from time to time execute, deliver and file, alone or with Lender, any financing statements, security agreements or other documents; and take all further action that may be necessary, or that Lender may reasonably request, to confirm, perfect, preserve and protect the security interests intended to be granted hereby, and in addition, and for such purposes only, Borrower hereby authorizes Lender to execute and deliver on behalf of Borrower and to file such financing statements, security

agreement and other documents without the signature of Borrower either in Lender's name or in the name of Borrower as agent and attorney-in-fact for Borrower.

5.8 Borrower shall protect and defend Borrower's title as well as the interest of the Lender against all persons claiming any interest adverse to Borrower or Lender and shall at all times keep the Collateral free and clear from any attachment or levy, liens or encumbrances whatsoever (except any placed thereon by Lender, or any liens arising by operation of law with respect to any obligations not yet overdue or any other liens consented to in writing by Lender) and shall give Lender immediate written notice thereof.

SECTION 6. CONDITIONS PRECEDENT TO LOAN

The obligation of Lender to fund the Loan on each Advance Date(s) shall be subject to satisfaction by Borrower or waiver by Lender, in Lender's sole discretion, of the following conditions:

6.1 (a) The Advance Date(s) for any installment shall occur on or before September 25, 1999.

6.2 DOCUMENT DELIVERY. Borrower, on or prior to the Closing Date, shall have delivered to Lender the following, in form and substance reasonably satisfactory to Lender:

(a) executed originals of the Agreement, Note(s), Warrant Agreement and any documents reasonably required by Lender to effectuate the liens of Lender, with respect to all Collateral;

(b) certified copy of resolutions of Borrower's board of directors evidencing approval of the borrowing and other transactions evidenced by the Loan Documents;

(c) certified copies of the Certificate of Incorporation and the Bylaws of Borrower, as amended through the Closing Date;

(d) certificate of good standing for Borrower from its state of incorporation and similar certificates from all other

jurisdictions in which it does business and where the failure to be qualified would have a Material Adverse Effect;

(e) such other documents as Lender may reasonably request.

6.3 ADVANCE REQUEST. Borrower, on or prior to each Advance Date(s), shall have delivered to Lender the following:

(a) a minimum of two (2) business days prior to the Advance Date(s), written notice in the form of an Advance Request, or as otherwise specified by Lender from time to time, specifying amount of such Advance and wire transfer instructions;

(b) such other documents as Lender may reasonably request.

6.4 PERFECTION OF SECURITY INTERESTS. Borrower shall have taken or caused to be taken such actions requested by Lender to grant Lender a first priority perfected security interest in the Collateral. Such actions shall include, without limitation, the delivery to Lender of all appropriate financing statements, executed by Borrower, as to the Collateral granted by Borrower for all jurisdictions as may be necessary or desirable to perfect the security interest of Lender in such Collateral

6.5 ABSENCE OF EVENTS OF DEFAULTS. As of the Closing Date or the Advance Date, no fact or condition exists that would (or would, with the passage of time, the giving of notice, or both) constitute an Event of Default under this Agreement or any of the Loan Documents.

6.6 MATERIAL ADVERSE EFFECT. As of the Closing Date or the Advance Date, no event which has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

SECTION 7. ASSIGNMENT BY LENDER

7.1 Borrower acknowledges and understands that Lender may sell and assign all or a part of its interest hereunder and under the Note and Loan Documents to any person or entity (an "Assignee"). After such assignment the term Lender shall mean such Assignee, and such Assignee shall be vested with all rights, powers and remedies of Lender hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, the Lender shall retain all rights, powers and remedies hereby given. No such assignment by Lender shall relieve Borrower of any of its obligations hereunder. Borrower shall acknowledge such assignment or assignments as shall be designated by written notice given by Lender to Borrower. The Lender agrees that in the event of any transfer by it of the Note, it will endorse thereon a notation as to the portion of the principal of the Note which shall have been paid at the time of such transfer and as to the date to which interest shall have been last paid thereon.

SECTION 8. DEFAULT

The occurrence of any one or more of the following events (herein called "Events of Default") shall constitute a default hereunder and under the Note:

8.1 The Borrower defaults in the payment of any principal or interest payable under this Agreement, the Note or any of the other Loan Documents and such default continues for more than five (5) days after the due date thereof;

8.2 The Borrower defaults in the payment or performance of any other covenant or obligation of the Borrower hereunder or under the Note or any other Loan Documents for more than ten (10) days after the Lender has given

notice of such default to the Borrower;

8.3 Any representation or warranty made herein by the Borrower shall prove to have been false or misleading in any material respect;

8.4 The making of an assignment by Borrower for the benefit of its creditors or the admission by Borrower in writing of its inability to pay its debts as they become due, or the insolvency of Borrower, or the filing by Borrower of a voluntary petition in bankruptcy, or the

adjudication of Borrower as a bankrupt, or the filing by Borrower of any petition or answer seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution, or similar relief under any present or future statute, law or regulation, or the filing of any answer by Borrower admitting, or the failure by Borrower to deny, the material allegations of a petition filed against it for any such relief, or the seeking or consenting by Borrower to, or acquiescence by Borrower in, the appointment of any trustee, receiver or liquidator of Borrower or of all or any substantial part of the properties of Borrower, or the inability of Borrower to pay its debts when due, or the commission by Borrower of any act of bankruptcy as defined in the Federal Bankruptcy Act, as amended;

8.5 The failure by Borrower, within sixty (60) days after the commencement of any proceeding against Borrower seeking any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, to obtain the dismissal of such proceeding or, within sixty (60) days after the appointment, without the written consent or acquiescence of Lender, of any trustee, receiver or liquidator of Borrower or of all or any substantial part of the properties of Borrower, to vacate such appointment; or

8.6 The default by Borrower under any other notes or other agreement for borrowed money, lease or other agreement between Borrower and Lender.

SECTION 9. REMEDIES

Upon the occurrence hereof of any one or more Events of Default, Lender, at its option, may declare the Note to be accelerated and immediately due and payable, (provided, that upon the occurrence of an Event of Default of the type described in 8.4 or 8.5, the Note and all other Secured Obligations shall automatically be accelerated and made due and payable without any further act) whereupon the unpaid principal of and accrued interest on such Note shall become immediately due and payable, and shall thereafter bear interest at the Default Rate and calculated in accordance with Section 1.2. Lender may exercise all rights and remedies with respect to the Collateral granted pursuant hereto for such Note, or otherwise available to it under applicable law, including the right to release, hold or otherwise dispose of all or any part of the Collateral and the right to utilize, process and commingle the Collateral.

Upon the happening and during the continuance of any Event of Default, Lender may then, or at any time thereafter and from time to time, apply, collect, sell in one or more sales, lease or otherwise dispose of, any or all of the Collateral, in its then condition or following any commercially reasonable preparation or processing, in such order as Lender may elect, and any such sale may be made either at public or private sale at its place of business or elsewhere. Borrower agrees that any such public or private sale may occur upon five (5) calendar day's notice to Borrower. Lender may require Borrower to assemble the Collateral and make it available to Lender at a place designated by Lender which is reasonably convenient to Lender and Borrower, The proceeds of any sale, disposition or other realization upon all or any part of the collateral shall be distributed by Lender in the following order of priorities:

First, to Lender in an amount sufficient to pay in full Lender's reasonable costs and professionals' and advisors' fees and expenses;

Second, to Lender in an amount equal to the then unpaid amount of the Secured Obligations in such order and priority as Lender may choose In its sole discretion; and

Finally, upon payment in full of all of the Secured Obligations, to Borrower or its representatives or as a court of competent jurisdiction may direct.

The Lender shall return to the Borrower any surplus Collateral remaining after payment of all Secured Obligations.

SECTION 10. MISCELLANEOUS

10.1 Borrower shall remain liable to Lender for any unpaid Secured Obligations, advances, costs, charges and expenses, together with interest thereon and shall pay the same immediately to Lender at Lender's offices.

10.2 The powers conferred upon Lender by this Agreement are solely to protect its interest in the Collateral and shall not impose any duty upon Lender to exercise any such powers.

10.3 This is a continuing Agreement and the grant of a security interest hereunder shall remain in full force and effect and all the rights, powers and remedies of Lender hereunder shall continue to exist until the Secured Obligations are paid in full as the same become due and payable. When Borrower has paid in full all Secured Obligations, Lender will execute a written termination statement, reassigning to Borrower, without recourse, the Collateral and all rights conveyed hereby and return possession (if Lender has possession) of the Collateral to Borrower. The rights, powers and remedies of Lender hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of any other rights, powers and remedies of Lender. Furthermore, regardless of whether or not the UCC is in effect in the jurisdiction where such rights, powers and remedies are asserted, Lender shall have the rights, powers and remedies of a secured party under the UCC.

10.4 Upon payment in full of all Secured Obligations, the Lender shall cancel the Note, this Agreement and all UCC financing statements, if any, and shall promptly deliver all such canceled documents to the Borrower.

10.5 GOVERNING LAW. This Agreement, the Note and the other Loan Documents have been negotiated and delivered to Lender in the State of Illinois and shall not become effective until accepted by Lender in the State of Illinois. Payment to Lender by Borrower of the Secured Obligations is due in the State of Illinois. This Agreement shall be governed by, and construed and enforced in accordance with the laws of the State of Illinois excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

10.6 CONSENT TO JURISDICTION AND VENUE. All judicial proceedings arising in or under or related to this Agreement, the Note or any of the other Loan Documents may be brought in any state or federal court of competent jurisdiction located in the State of Illinois. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to personal jurisdiction in Cook County, State of Illinois; (b) waives any objection as to jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement, the Note and the other Loan Documents. Service of

process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for

notice set forth in Section 10.8 below and shall be deemed effective and received as set forth in Section 10.8 below. Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

10.7 Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

10.8 Any notice required or given hereunder shall be deemed properly given upon the earlier of: (i) the first business day after transmission by facsimile or hand delivery or deposit with an overnight express service or overnight mail delivery service; or (ii) or three (3) days after mailed, postage prepaid, in each case, addressed to the designated recipient at its address set forth herein or such other address as such party may advise the other party by notice given in accordance with this provision.

10.9 Lender and Borrower acknowledge that there are no agreements or understandings, written or oral, between Lender and Borrower with respect to the Loan, other than as set forth herein, in the Note and the other Loan Documents and that this Agreement, the Note and the other Loan Documents contain the entire agreement between Lender and Borrower with respect thereto. None of the terms of this Agreement, the Note and the other Loan Documents may be amended except by an instrument executed by each of the parties hereto.

10.10 No omission, or delay, by Lender at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by Borrower at any time designated, shall be a waiver of any such right or remedy to which Lender is entitled, nor shall it in any way affect the right of Lender to enforce such provisions thereafter.

10.11 All agreements, representations and warranties contained in this Agreement or the Note, or in any Loan Documents delivered pursuant hereto or in connection herewith shall be for the benefit of Lender and any Assignee and shall survive the execution and delivery of this Agreement or the Note and the expiration or other termination of this Agreement or the Note.

10.12 This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

10.13 This Agreement shall be binding upon, and shall inure to the benefit of, Borrower and its permitted assigns (if any). Borrower shall not assign its obligations under this Agreement, the Note or any of the other Loan Documents without Lender's express written consent and any such attempted assignment shall be void and of no effect. Any assignment by Borrower in connection with a "Merger" (as defined below) shall be subject to Lender's prior consent. Any consent granted by Lender shall be conditioned upon such surviving entity or transferee assuming Borrower's Secured Obligations hereunder pursuant to assignment documents reasonably acceptable to Lender. If Lender reasonably withholds its consent to such assignment in

connection with a Merger, the outstanding principal and accrued and unpaid interest shall be prepaid in whole without a prepayment premium.

For purposes of this Agreement, a "Merger" shall mean any consolidation or merger of the Borrower with or into any other corporation or entity, any sale or conveyance of an or substantially all of the assets or stock of the Borrower by or to any other person or entity in which Borrower is not the surviving entity.

IN WITNESS WHEREOF, the Borrower and the Lender have duly executed and delivered this Agreement as of the day and year first above written.

BORROWER: CYTOKINETICS, INCORPORATED.

By: /s/ Jon C. Richards

Title: Chief Financial Officer
Date: 10-1-98

ACCEPTED IN ROSEMONT, ILLINOIS:

LENDER: COMDISCO, INC.

By: /s/ JAMES P. LABE

Title: PRESIDENT
COMDISCO VENTURES DIVISION

Date: SEP 30 1998

Amendment No. One to Loan and Security Agreement

This Amendment Agreement No. One ("Amendment") to the Loan and Security Agreement dated as of September 25, 1998 is entered into this 1st day of February, 1999 by and between Cytokinetics, inc., a Delaware corporation, with its chief executive offices and principal place of business at 280 East Grand Avenue Suite 2, South San Francisco, CA 94080 ("Borrower") and Comdisco, Inc., a Delaware corporation, with its chief executive offices and principal place of business at 6111 North River Road, Rosemont, IL 60018 ("Lender").

RECITALS

WHEREAS, pursuant to the terms and conditions set forth in the Loan and Security Agreement dated as of September 25, 1998 between Borrower and Lender (hereinafter, "Loan Agreement"), the parties have entered into that certain Secured Promissory Note dated February 3, 1999 herewith (the "Note(s)") whereby for value received, Borrower promises to pay certain payments to Lender in the principal amount of Six Hundred Sixty Two Thousand Six Hundred Ninety four and 81/100 Dollars ($662,694.81);

WHEREAS, in connection with the issuance of the Note, Lender and Borrower wish to amend the Loan Agreement to include the Exhibit B as required under the Loan Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and mutual agreements contained herein, Borrower and Lender hereby agree as follows:

1. Except as expressly set forth herein, all terms used herein shall have the meanings set forth in the Loan Agreement.

2. Borrower and Lender agree that the Exhibit B attached hereto shall be incorporated and made a part of the Loan Agreement and the equipment described thereon shall be "Equipment" as set forth in the Loan Agreement.

3. Except as specifically amended hereby, the terms and conditions of the Loan Agreement are hereby reaffirmed and remain in full force and effect, and from and after the date hereof the "Agreement" shall mean the "Agreement" as amended by this Amendment.

4. This Amendment may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall

constitute but one and the same instrument.

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IN WITNESS WHEREOF, Borrower and Lender have duly executed and delivered this Amendment as of the day and year first above written.

BORROWER CYTOKINETICS, INC.

Signature: /s/ Jon C. Richards

Print Name: Jon C. Richards

Title: Chief Financial Officer

ACCEPTED IN ROSEMONT, ILLINOIS

LENDER COMDISCO, INC.

Signature: /s/ Jill Hanses

Print Name: Jill Hanses

Title: SRVP

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EXHIBIT B

Cytokinetics, Inc.

REF#	VENDOR	DATE REC/INV	PO#	INVOICE #	DESCRIPTION (brief)	SERIAL #	COST
Furniture							
8	Corp Int	8-Sep		1085-1	Desk-director 3x24 corner, 4x24 ret	N/A	1,165.00
8	Corp Int	8-Sep		1085-1	Desk-director locking pedestal	N/A	1,165.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-adm	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-adm	N/A	1,100.00
253	Item	20-Oct	CS10198	87449 CA	Work Station	No S/N	778.11

254	Item	20-Oct	CS10198	87449 CA	Work Station		No S/N	778.11
								23,686.22
LAB EQ:								
1	VWR	28-Aug	CY185	13218620	Freezer, gen upright 20.9cft (-20)		U17H391576VH	895.00
2	VWR	5-Aug	CY108	277640	Generator PT DA 21 1 2/2EC		H2840271366211F	1,016.00
2	VWR	10-Aug	CY164	10480030	Nanopure infinity UV/UF 120V		899980816921	4,033.00
2	VWR	11-AUQ	CY110	58752390	Freezer uprt auto/DF 23.3cft (-80)		U10H39050UH	4,190.55
2	VWR	11-Aug	CY209	292020	Radiation SRVY w/Probet		9825-319	625.00
2	VWR	13-Aug	CY108	11293240	Polytron, PTMR2100 Homogenizer		324474	1,196.00
3	VWR	29-Jul	061798C	57664663	Dual slab gelkit 220MM		NO S/N	643.80
4	VWR	17-Jul	CY110	58832690	Oven, Hybridiser, techne HB-1D		826905-8	2,931.75
5	VWR	9-Jul	CY110	58752380	Incubator, CSA model 1 545		1103097	1,450.52
5	VWR	9-Jul	CY110	58752380	Incubator, WTR JKT model 3015		600298	2,397.95
5	VWR	8-Jul	CY108	192070	Generator PT-DA2107/2EC		H284027136613G	888.00
5	Beckman	9-Jul	CY110	58752400	Afgra 6R rfrg bnch cntrifuge		ALR98G01	6,556.00
5	VWR	9-Jul	CY110	58752400	GH-3.8 Horiz rotor w/4 ALM		98U 20801	2,133.50
5	VWR	9-Jul	CY110	58752400	Carrier assy, mtcroplus		Consumable	977.50
14	PE Bio	4-Jul	CY107	90172820	Analyzer, general 100/120V (system)		100000668	55,000.00
16	Tech Ins	22-Jul	CY138	102160	TMS mainbody W/B INO w/ lenses.eye		To be returned	3,127.59
20	Stratgen	21-Jul	CY153	670159	Stratalinker 2400, 120V		9823647	1,435.50
23	MJ Research	11-Aug	980615	50435	DNA engine chassis		EN007984	5,495.00
24	MJ Research	11-Aug	980615	50435	Dual Alpha PTC 200/225		ALO18393	2,495.00

REF#	VENDOR	TOTAL	CK#			% FUNDED	TOTAL FUNDED
Furniture							
8	Corp Int	1,165.00	2196/2077			80%	$ 932.00
8	Corp Int	1,165.00	2196/2077			80%	$ 932.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 830.00
8	Corp Int	1,100.00	2196/2077			80%	$ 88000
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880,00
8	Corp int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
253	Item	778.11	VISA	778.11	accrue	100%	$ 778.11
254	Item	778.11	VISA	778.11	accrue	100%	$ 778.11
		23,686.22			ok		$19,260.22
LAB EQ:							
1	VWR	895.00	2187	895.00		80%	$ 716,00
2	VWR	1,016.00	2186			80%	$ 812.80

2	VWR	4,033.00	2186			80%	$ 3,226.40
2	VWR	4,190.55	2186			80%	$ 3,352.44
2	VWR	625.00	2186			80%	$ 500.00
2	VWR	1,196.00	2186	11,060.55		80%	$ 956.80
3	VWR	643.80	2110	643.80		80%	$ 515.04
4	VWR	2,931.75	2072	2,931.75		80%	$ 2,345.40
5	VWR	1,450.52	2056			70%	$ 1,015.36
5	VWR	2,397.95	2056			70%	$ 1,678.57
5	VWR	888.00	2056			70%	$ 621.60
5	Beckman	6,556.00	2056			70%	$ 4,589.20
5	VWR	2,133.50	2056			70%	$ 1,493.45
5	VWR	977.50	2056	14,403.47		70%	$ 684.25
14	PE Bio	55,000.00	2087	55,000.00		70%	$38,500.00
16	Tech Ins	3,127.59	2098	3.127.59		80%	$ 2,502.07
20	Stratgen	1,435.50	2130	1,435.50		80%	$ 1,148.40
23	MJ Research	5,495.00	2174			80%	$ 4,396.00
24	MJ Research	2,495.00	2174			80%	$ 1,996.00

1/29/99

Cytokinetics, Inc.

REF #	VENDOR	DATE REC/INV	PO#	INVOICE #	DESCRIPTION	SERIAL #	COST
26	MJ Research	11-Aug	980615	50435	Minicycler 16W Hot Bonnet	MC008706	2,995.00
29	Savant	31-Jul	Cy125	155171	Gel pump w/charcoal filter	GEP140-9G310051-1	2,085.00
32	Cryosafe	2-Sep	Cy239	578	Liquid Nitrogen auto till liquid tank	562007PS9809	5,495.00
33	Cryosafe	2-Sep	Cy239	578	Complete invt sys	562007P89S09	1,100.00
37	Savant	11-Sep	CY260	156820	DNA speedvac & rotor	110-813470196-1G	4,072.50
39	Molecular Dev	15-Sep	Shumate	C. Shumate exp rept	Spectramax 340, softmax pro	MO1115 (LO2022)	12,800.00
200	BioRad	15-Sep	91498	1430358	Ultramark Microplate Reader	10006	19,995.00
201	BioRad	31-Jul	CY173	1402499	Econo Pump Model EP-1	700-BR08532	1,315.37
202	Beckman	6-Oct	CY313	352838FT01	Rotor Assy/w bottle cap, PP & AY	98U1947	4,482.28
203	Beckman	8-Oct	CY313	352838FT02	J2-HS Centrifuge 208V 60HZ	CJA98K01	11,631.90
204	Beckman	10-Sep	CY244	349358FT01	Multimek 96 Pipettor	304181APS	46,350.00
205	Beckman	10-Sep	CY244	349358FT01	Multimek Pro Software	304181APS	5,000.00
206	Beckman	10-Sep	CY244	349358FT01	Disposable Tip Wash System	304181APS	6,000.00
207	Beckman	2-Oct	CY266	348803FT00A	SW55TI Swinging Bucket Titanium Rotor	98U2605	8,160.00
208	Beckman	2-Oct	CY266	348803FT00A	DU 640 UV/VIS Scanning Spcetrophotometer	4323214	7,140.00
209	Beckman	2-Oct	CY266	348803FT00A	Transport	4323214	659.60
210	Beckman	2-Oct	CY266	348803FT00A	Micro Auto 6 Cell Holder unheated	4323214	673.20
211	Beckman	2-Oct	CY266	348803FT00A	External Storage Device	4323214	584.80
212	Beckman	2-Oct	CY266	348803FT00A	UV Silica Cuvette (set4)	4323214	530.40
213	Beckman	2-Oct	CY266	348803FT00A	Optima TLX Ultracentrifuge	CTX98G04	21,938.07
214	Beckman	2-Oct	CY266	348803FT00A	TLA 110 Fixed Angle Titanium Rotor Pkg	98U314	4,726.00
215	Beckman	2-Oct	CY266	348803FT00A	TLA 100 Fixed Angle Titanium Rotor Pkg	98U1338	3,066.80
216	Beckman	2-Oct	CY266	348803FT00A	Avanti J-25 Centrifuge for 50/60 HX	JHX98K02	14,756.00
217	Beckman	2-Oct	CY266	348803FT00A	JA 25.50 Fixed Angle Rotor Assy	JHX98K02	2,352.80
218	Beckman	2-Oct	CY266	348803FT00A	JLA-16 Rotor w/single locking lid	98U752	3,284.00
219	Beckman	2-Oct	CY266	348803FT00A	Optima LE 80 K preparative Untracentrifuge	COL9840	27,404.00
220	Beckman	2-Oct	CY266	348803FT00A	Type 19 Fixed angle Alum. Rotor Assy	98E3701	5,508.00
221	Beckrnan	2-Oct	CY266	348803FT00A	Type 45TI Fixed angle titanium Rotor Assy	98U3423	7,344.00
222	Beckman	2-Oct	CY266	348803FT00A	Type 70.1 Fixed angle Titan. Rotor Assy	98U3968	7,208.00

223	ComDisco	8-Oct		12910	New Brunswick Orbital Shaker G-25	190524971	3,360.00
224	ComDisco	8-Oct		12910	New Brunswick Orbital Shaker G-25	181188	3,360.00
225	CCS Packard	14-Sep	9149802	3090407	Jun-Air Compressor w/air hose	405282	1,550.00
226	Forma Scient	18-Sep	CY243	2735850	Lab Glassware Dryer	18937-514	7,428.00
227	Forma Scient	16-Sep	CY263	2738190	Bio Safe Cab TT 6Ft SLD	19497-69	5,090.00
230	MicroSource	22-Sep	CY294	94728	MicroSource Plates "Killer' Plate	N/A	1,100.00
231	VWR	22-Sep	CY261	13582370	55702-497 REF,Chr,VWR49C,FS,MST,115VT	12076807	2,996.94
232	VWR	18-Sep	CY252	13463890	Scotsman 325 Ice Flaker	051918-03N	2,675.00
233	VWR	17-Sep	CY185	13124400	Revco/Lindberg 24.4 CuFt Upright (-80)	80508h-381550-SH	8,398.00
234	VWR	29-Sep	CY314	432300	Bath.GP. Microcntl CSA 5.5L1 1 5VT	698060478	576.90
235	VWR	5-Oct	CY318	15794230	Storage Mat Applicator	No SIN	904.76
236	VWR	5-Oct	CY317	15769580	Elect Pip 8CH	N72553	786.05
7	VWR	25-Jun	061798C	57664630	Micro centrfg, epp 5417C 115V	3929	1,905.00
7	VWR	25-Jun	061798C	57664630	Micro centrfg, epp 5417C 115V	9165	1,905.00
7	VWR	25-Jun	061798C	57664630	Micro centrfg, epp 5417C 115V	8991	1,905.00

REF#	VENDOR	TOTAL	CK#			% FUNDED	TOTAL FUNDED
26	MJ Research	2,995.00	2174	10,985.00		80%	$ 2,396.00
29	Savant	2,085.00	2180	2,085.00		80%	$ 1,668.00
32	Cryosafe	5,495.00	2213		accrue	80%	$ 4,396.00
33	Cryosafe	1,100.00	2213	6,595.00	accrue	80%	$ 880.00
37	Savant	4,072.50	2238	4,072.50		100%	$ 4,072.50
39	Molecular Dev	12,800.00	2252	12,800.00		100%	$ 12,800.00
200	BioRad	19,995.00	2273			100%	$ 19,995.00
201	BioRad	1,315.37	2273	21,310.37		80%	$ 1,052.30
202	Beckman	4,482.28	2274			100%	$ 4,482.28
203	Beckman	11,631.90	2274			100%	$ 11,631.90
204	Beckman	46,350.00	2274			80%	$ 37,080.00
205	Beckman	5,000.00	2274			80%	$ 4,000,00
206	Beckman	6,000.00	2274	73,464.18		80%	$ 4,800.00
207	Beckman	8,160.00	2275			100%	$ 8,160.00
208	Beckman	7,140.00	2275			100%	$ 7,140.00
209	Beckman	659.60	2275			100%	$ 659.60
210	Beckman	673.20	2275			100%	$ 673.20
211	Beckman	584.80	2275			100%	$ 584.80
212	Beckman	530.40	2275			100%	$ 530.40
213	Beckman	21,938.07	2275			100%	$ 21,938.07
214	Beckman	4,726.00	2275			100%	$ 4,726.00
215	Beckman	3,066.80	2275			100%	$ 3,066.80
216	Beckman	14,756.00	2275			100%	$ 14,756.00
217	Beckman	2,352.80	2275			100%	$ 2,352.80
218	Beckman	3,284.00	2275			100%	$ 3,284.00
219	Beckman	27,404.00	2275			100%	$ 27,404.00
220	Beckman	5,508.00	2275			100%	$ 5,508.00
221	Beckrnan	7,344.00	2275			100%	$ 7,344.00
222	Beckman	7,203.00	2275	115,335.67		100%	$ 7,208.00
223	ComDisco	3,360.00	2279			100%	$ 3,360.00
224	ComDisco	3,360.00	2279	6,720.00		100%	$ 3,360.00
225	CCS Packard	1,550.00	2282	1,550.00		100%	$ 1,550.00
226	Forma Scient	7,428,00	2292			100%	$ 7,428.00
227	Forma Scient	5,090.00	2292	12,518.00		100%	$ 5,090.00
230	MicroSource	1,100.00	2300	1,100.00	accru	100%	$ 1,100.00
231	VWR	2,996.94	2324			100%	$ 2,996.94
232	VWR	2,675.00	2324			100%	$ 2,675.00
233	VWR	8,398.00	2324			100%	$ 8,398.00
234	VWR	576.90	2324			100%	$ 576.90
235	VWR	904.76	2324			100%	$ 904.76
236	VWR	786.05	2324	16,337.65		100%	$ 786.05

7	VWR	1,905.00	2015		70%	$	1,333.50
7	VWR	1,905.00	2015		70%	$	1,333.50
7	VWR	1,905.00	2015		70%	$	1,333.50

Cytokinetics, Inc.

REF #	VENDOR	DATE REC/INV	PO#	INVOICE #	DESCRIPTION	SERIAL #
7	VWR	25-Jun	061798C	57664630	Micro centrfg, epp 5417C 115V	8992
7	VWR	25-Jun	061798C	57664630	Micrcent refrig, w/o rotor 115V	540703929
7	VWR	25-Jun	061798C	57664630	Platform, rocking VWR100	8906011
7	VWR	25-Jun	061798C	57664630	Platform, rocking VWR100	980601A
7	VWR	25-Jun	061798C	57664630	Platform, rocking VWR100	980601F
7	VWR	25-Jun	061798C	57664630	Vortex mixer, multi tube	1071
7	VWR	25-Jun	061798C	57664630	Balance, analyt premier	116040045
7	VWR	25-Jun	061798C	57664630	PH meter, 430 meter w/kit 120V	3889
7	VWR	1-Jul	061798C	57664640	Lauda circ, E 106T, 115V/60HZ	W09037
7	VWR	1-Jul	061798C	57664640	Lauda circ, E 106T, 115V/60HZ	W09035
7	VWR	26-Jun	061798C	57664660	Dual slab gelkit 220MM	No S/N
7	VWR	26-Jun	061798C	57664661	Transillum, dual, Bnch TP VWR115VT	060898-006
7	VWR	25-Jun	061798C	57664670	Balance, PRF, LVL, Delta, PR5002DRT	1117151544
7	VWR	8-Jul	061798C	57664632	Shakr orbit micp roc CNT 110V	960
7	VWR	8-Jul	061798C	57664632	Shakr orbit micp roc CNT 110V	958
7	VWR	8-Jul	061798C	57664632	Shakr orbit micp roc CNT 110V	963
7	VWR	8-Jul	061798C	57664633	Finnpette digitl 12ch	F501984510050
7	VWR	2-Jul	061798C	57664631	Finnpette dig.12ch 50-300UL	FS9064
7	VWR	9-Jul	061798C	57664651	Ultrason cell distr 1/2 IN/450	C080306G
83	BioRad	22-Jui	CY134	1396445	Uno Column	347BR2689
84	BioRad	22-Jul	CY134	1396445	Auto Steam Select Valve	347BR2689
85	BioRad	22-Jul	CY134	1396445	Auto Steam Select Valve	347BR2689
93	BioRad	22-Jul	CY134	1396445	Select Valve	347BR2689
94	BioRad	22-Jul	CY134	1396445	Select Valve	347BR2689
86	BioRad	23-Jul	CY134	1396830	Auto Biologic System	347BR2689
87	BioRad	23-Jul	CY134	1396830	Biologic Dynaloop kit	347BR2689
88	BioRad	31-Jul	CY173	1402499	Econo Pump, model EP-1, 110V	700BR08532
81	Life Tech	28-Jul	CY165	743380	EDAS 120 system	EKB74902512
80	BioRad	12-Aug	CY134	1409267	Dynaloop 90ML replacement loop	347BR2689
82	Microfluids	19-Aug	CY201	3793	M110S Large Pump Assy	98058
89	PEBio	14-Sep		90194114	TF, Kit BDT PR-100	No S/N
90	PEBio	14-Sep		90196900	10MMD/250MML Glass Column	No S/N
245	Beckman	29-Oct	CY313	352838FT03	JLA-16 Rotor w/single locking lid	98U752
246	CCS Packard	6-Oct	CY253	3100462	Platestak, scanner, deck	1347
247	CCS Packard	6-Oct	Cs100698	3100458	500ML Birdfeeder	N/A
249	MXR	8-Oct	CY266	369682	Konica SRX-101 Processor	105210881
	WXR	29-Oct		370525	SRX-101 Film Processor	105210881
250	Therm-X	26-Oct	CY347	54128	Watlow Mini Benchtop controller/couple	P/N Mini TR-00-000 (No S/N)
251	PE Bio	4-Jul	CY107	90172820	Genetic Analyzer 100/120V 310	100000668
252	Univ. Imaging	23-Oct	CY269	6623	Hamamtsu C4742-95 12 Bit Interline Camera with 2x2 or 4x4 binning	270465
252	Univ. Imaging	23-Oct	CY269	6623	Acquisition Option for Hamamatsu Camera	270465

REF#	VENDOR	COST	TOTAL	CK#	% FUNDED	TOTAL FUNDED
7	VWR	1,905.00	1,905.00	2015	70%	$ 1,333.50

7	VWR	5,033.00	5,033.00	2015			70%	$	3,523.10
7	VWR	567.00	567.00	2015			70%	$	396.90
7	VWR	567.00	567.00	2015			70%	$	396.90
7	VWR	567.00	567.00	2015			70%	$	396.90
7	VWR	1,081.00	1,081.00	2015			70%	$	756.70
7	VWR	5,466.00	5,466.00	2015			70%	$	3,826.20
7	VWR	567.88	567.88	2015			70%	$	397.52
7	VWR	1,186.25	1,186.25	2015			70%	$	830.38
7	VWR	1,186.25	1,186.25	2015			70%	$	830.38
7	VWR	643.80	643.80	2015			70%	$	450.66
7	VWR	1,108.51	1,108.51	2015			70%	$	775.96
7	VWR	2,796.00	2,796.00	2015			70%	$	1,957.20
7	VWR	982.55	982.55	2015			70%	$	687.79
7	VWR	982.55	982.55	2015			70%	$	687.79
7	VWR	982.55	982.55	2015			70%	$	687.79
7	VWR	573.18	573.18	2015			70%	$	401.23
7	VWR	573.18	573.18	2015			70%	$	401.23
7	VWR	2,296.00	2,296.00	2015	34,779.70		70%	$	1,607.20
83	BioRad	997.50	997.50	2139			80%	$	798.00
84	BioRad	855.00	855.00	2139			80%	$	684.00
85	BioRad	855.00	855.00	2139			80%	$	684.00
93	BioRad	506.25	506.25	2139			80%	$	405.00
94	BioRad	506.25	506.25	2139			80%	$	405.00
86	BioRad	22,311.00	22,311.00	2139			80%	$	17,848.80
87	BioRad	697.50	697.50	2139			80%	$	558.00
88	BioRad	1,350.00	1,350.00	2139/2273	28,078.50		80%	$	1,080.00
81	Life Tech	3,141.00	3,141.00	2140	3,141.00		80%	$	2,512.80
80	BioRad	645.00	645.00	2155	645.00		80%	$	516.00
82	Microfluids	23,800.00	23,800.00	2175	23,800.00		80%	$	19,040.00
89	PEBio	675.00	675.00	2201			100%	$	675.00
90	PEBio	575.00	575.00	2201	1,250.00		100%	$	575.00
245	Beckman	2,956.44	2,956.44	2353	2,956.44		100%	$	2,956.44
246	CCS Packard	23,225.00	23,225.00	2356	23,225.00		100%	$	23,225.00
247	CCS Packard	1,100.00	1,100.00	accrued	1,100.00		100%	$	1,100.00
249	MXR	3,812.00	3,812.00	2374	3,812.00		100%	$	3,812.00
	WXR	3,812.00	3,812.00	2301	3,812.00	no invo	100%	$	3,812.00
250	Therm-X	658.00	658.00	2389	658.00		100%	$	658.00
251	PE Bio	55,000.00	55,000.00	2087	55,000.00		70%	$	38,500.00
252	Univ. Imaging	14,900.00	14,900.00	2392			100%	$	14,900.00
252	Univ. Imaging	4,800.00	4,800.00	2392			100%	$	4,800.00

REF #	VENDOR	DATE REC/INV	PO#	INVOICE #	DESCRIPTION	SERIAL #	COST
252	Univ. Imaging	23-Oct	CY269	6623	Lamda Light Source with 175 W Ozone Free Bulb	N/A	3,985.00
252	Univ. Imaging	23-Oct	CY269	6623	Liquid Light Guide for Lambda-10C	N/A	1,400.00
252	Univ. Imaging	23-OCt	CY259	6623	Epi Replacement Adapter for Zeiss Inverted Scope	N/A	700.00
252	Univ. Imaging	23-Oct	CY269	6623	Sutter LS cold Mirror and Adapter	N/A	600.00
252	Univ. Imaging	23-Oct	CY269	6623	Lambda-10 Ten Position Filter Whieel with Shutter	N/A	5,650.00
252	Univ. Imaging	23-Oct	CY269	6623	Lambda-10 Excitation Adapter for Zeiss AxioVert	N/A	200.00
252	Univ. Imaging	23-Oct	CY269	6623	2 Axis (X,Y) Motor controler	9009	4,200.00
252	Univ. Imaging	23-Oct	CY269	6623	Prior Motorized Travel Stage for Inv. Scopes	3966	6,350.00
252	Univ. Imaging	23-Oct	CY269	6623	Prior Specimen Holder for H 107 Stage	N/A	350.00
252	Univ. Imaging	23-Oct	CY269	6623	Prior 9 pin. RS-232 cable	N/A	50.00
237	Zymark	16-Sep	CY245	105607	Twister-zymark, 110V/220V & kit ext. landscape	TW9838N0227	10,050.00

finger

609,863.67

COMPUTER HARDWARE:

40	Sabry	8-Apr	catalog	153620042	Dell dimension system		DY3KP	3,345.00
41	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB		1S656284U23XCKX4	1,301.00
42	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB		1S656284U23XCRL7	1,301.00
43	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB		1S656284U23XCKC7	1,002.00
44	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB		1S656284U23XCPG8	1,002.00
45	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB		1S656284U23XCKN9	1,002.00
46	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB		1S656284U23XCPT4	1,002.00
47	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB		1S656284U23XCKV3	1,002.00
48	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB		1S656284U23XCPY4	1,002.00
49	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB		1S656284U23XCRF6	812.00
50	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB		1S656284U23XCRX9	812.00
51	Spectrum	27-Aug	Malik	32450	Decaview monit 15" w/cards		552067822	571.00
55	Informax	29-Jun	CY100	4038	Vector NTI5.0		BLLIUV-4038	2,195.00
56	Informax	29-Jun	CY100	4038	Vector NTI5.0		BLLIUV-4038	2,195.00
95	Informax	6-Jul	CY100	4038	Align X		BLLIUV-4038	795.00
96	Informax	6-Jul	CY100	4038	Align X		BLLIUV-4038	795.00
97	informax	6-Jul	CY100	4038	Align X		BLLIUV-4038	795.00
98	Informax	6-Jul	CY100	4038	Align X		BLLIUV-4038	795.00
57	MDL	5-Aug	8059801	141153	ISIS Draw software		ID214XE980234	495.00
58	MDL	5-Aug	8059801	141153	ISIS Base software		IB214XE980100	925.00
59	Computown	10-Sep	verbal	358223	IBM Pc 300PL 4.2 GB w/19in monitor		1S689216U23N2684	2,720.00
60	Computown	10-Sep	verbal	358223	IBM Pc 300PL 4.2 GB w/19in monitor		1S689216U23N2641	2,720.00
238	Computown	17-Sep		360244	Procurve Switch 4000M		SG83160178	2,300.00
239	Computown	22-Sep		361793	PC 300PL 4.2GB sys w/19in monitor		23N1467	2,720.00
240	Computown	22-Sep		361793	PC 300PL 4.2GB sys w/19in monitor		23N1033	2,720.00
241	Computown	6-Oct		366561	M Pro P2-4009.1GB		23F3332	3,250.00
242	Computown	6-Oct	10598	366588	128MB 100MHZ ECC Module		Memory - No S/N	437.50

REF #	VENDOR	TOTAL	CK #		% FUNDED	TOTAL FUNDED
252	Univ. Imaging	3,985.00	2392		100%	$ 3,985.00
252	Univ. Imaging	1,400.00	2392		100%	$ 1,400.00
252	Univ. Imaging	700.00	2392		100%	$ 700.00
252	Univ. Imaging	600.00	2392		100%	$ 600.00
252	Univ. Imaging	5,650.00	2392		100%	$ 5,650.00
252	Univ. Imaging	200.00	2392		100%	$ 200.00
252	Univ. Imaging	4,200.00	2392		100%	$ 4,200.00
252	Univ. Imaging	6,350.00	2392		100%	$ 6,350.00
252	Univ. Imaging	350.00	2392		100%	$ 350.00
252	Univ. Imaging	50.00	2392	43,185.00	100%	$ 50.00
237	Zymark	10,050.00	2327	10,050.00	100%	$ 10,050.00
		609,863.67		609,863.67	ok	$ 531,290.91

COMPUTER HARDWARE: -

40	Sabry	3,345.00	1045	3,345.00	accrue	65%	$ 2,174.25
41	CDW	1,301.00	2143		accrue	80%	$ 1,040.80
42	CDW	1,301.00	2143		accrue	80%	$ 1,040.80
43	CDW	1,002.00	2143		accrue	80%	$ 801.60
44	CDW	1,002.00	2143		accrue	80%	$ 801.60
45	CDW	1,002.00	2143		accrue	80%	$ 801.60
46	CDW	1,002.00	2143		accrue	30%	$ 801.60
47	CDW	1,002.00	2143		accrue	80%	$ 801.60
48	CDW	1,002.00	2143		accrue	80%	$ 801.60
49	CDW	812.00	2143		accrue	80%	$ 649.60
50	CDW	812.00	2143	10,238.00	accrue	80%	$ 649.60
51	Spectrum	571.00	2144	571.00		80%	$ 456.80

55	Informax	2,195.00	2166			70%	$	1,536.50
56	Informax	2,195.00	2166			70%	$	1,536.50
95	Informax	795.00	2166			70%	$	556.50
96	Informax	795.00	2166			70%	$	556.50
97	informax	795.00	2166			70%	$	556.50
98	Informax	795.00	2166	7,570.00		70%	$	556.50
57	MDL	495.00	2173			80%	$	396.00
58	MDL	925.00	2173	1,420.00		80%	$	740.00
59	Computown	2,720.00	2189			80%	$	2,176.00
60	Computown	2,720.00	2189	5,440.00		80%	$	2,176.00
238	Computown	2,300.00	2331			100%	$	2,300.00
239	Computown	2,720.00	2331			100%	$	2,720.00
240	Computown	2,720.00	2331			100%	$	2,720.00
241	Computown	3,250.00	2331			100%	$	3,250.00
242	Computown	437.50	2331			100%	$	437.50

Cytokinetics, Inc.

REF #	VENDOR	DATE REC/INV	PO#	INVOICE #	DESCRIPTION	SERIAL #	COST	TOTAL
243	Computown	6-Oct	10598	366588	128MB 100MHZ ECC Module	Memory - No S/N	437.50	437.50
248	Computown	20-Oct	Verbal	370998	Thinkpad	72299	3,050.00	3,050.00
	Computown	20-Oct	Verbal	370998	Thinkpad	71299/1	3,050.00	3,050.00
100	Computown	31-Jul		345499	Server 330 P2-333 #864021	1S861021Y23AAD88	3,685.00	3,685.00
100	Computown	31-Jul		345499	50 GB Internal AIT tape drive sdx-300	3Y3KP	3,710.00	3,710.00
100	Computown	21-Jul		345499	Win NT server v4.0 #227.01152	BPC814C01665	1,460.00	1,460.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1014	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1047	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1467	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1032	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1049	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1503	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1033	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1051	2,143.00	2,143.00
							72,548.00	72,548.00
OFFICE EQUIPMENT-OTHER:								
62	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311698	811.00	811.00
63	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311711	811.00	811.00
64	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311680	811.00	811.00
65	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311690	811.00	811.00
66	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311692	811.00	811.00
67	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311699	811.00	811.00
68	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311708	811.00	811.00
69	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311702	811.00	811.00
70	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311694	811.00	811.00
71	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311681	811.00	811.00
	Computown	2-Jul	Sabry	336481-A	LaserJet 4000TN 17PPM 8MB 1200X1200DPI PCL6	1SUSNC128841	1,545.00	1,545.00
72	Computown	2-Jul	Sabry	340497	IBM Pc 300PL 4.2 GB HD	1S689216U23N1017	2,143.00	2,143.00
73	Computown	2-Jul	Sabry	340497	IBM Pc 300PL 4.2 GB HD	1S689216U23N2668	2,143.00	2,143.00
91	Sears	13-Sep	Vaughan	exp report	Freezer 17 in	BA83212874	579.99	579.99
92	Sears	13-Sep	Vaughan	exp report	Refrig 18 in	BA3609110	899.98	899.98
							15,420.97	15,420.97
TELEPHONE HARDWARE:								
74	ACD	14-Jul			Toshiba DK424 (Model DKSue424A)	G28977	11,277.00	11,277.00
					Voice Center	1239496		

ARCHITECT FEES:								
75	Dowler	28-May	9804001-2	Architect, blueprints, programming		NO S/N	3,600.98	3,600.98
76	Dowler	15-Jul	9804003	Architect, construction documents		NO S/N	1,530.00	1,530.00
255	Dowler	19-Oct	9804007	Architect, blueprints		NO S/N	50.00	50.00
256	Dowler	19-Oct	9804006	Architect, construction documents		NO S/N	1,567.50	1,567.50
	Dowler	8-Sep	9804005	Architect		NO S/N	2,190.00	2,190.00

REF #	VENDOR	CK #			% FUNDED		TOTAL FUNDED
243	Computown	2331	11,865.00		100%	$	437.50
248	Computown	accrued	3,050.00		100%	$	3,050.00
	Computown	accrued	3,050.00		100%	$	3,050.00
100	Computown	2001			80%	$	2,948.00
100	Computown	2001			80%	$	2,968.00
100	Computown	2001			80%	$	1,168.00
100	Computown	2001			80%	$	1,714.40
100	Computown	2001			80%	$	1,714.40
100	Computown	2001			80%	$	1,714.40
100	Computown	2001			80%	$	1,714.40
100	Computown	2001			80%	$	1,714.40
100	Computown	2001			80%	$	1,714.40
100	Computown	2001			80%	$	1,714.40
100	Computown	2001	25,999.00		80%	$	1,714.40
			72,548.00	ok		$	60,372.65
OFFICE EQUIPMENT-OTHER:							
62	Computown	1033			70%	$	567.70
63	Computown	1033			70%	$	567.70
64	Computown	1033			70%	$	567.70
65	Computown	1033			70%	$	567.70
66	Computown	1033			70%	$	567.70
67	Computown	1033			70%	$	567.70
68	Computown	1033			70%	$	567.70
69	Computown	1033			70%	$	567.70
70	Computown	1033			70%	$	567.70
71	Computown	1033			70%	$	567.70
	Computown	1033	9,655.00		70%	$	1,081.50
72	Computown	2058			70%	$	1,500.10
73	Computown	2058	4,286.00		70%	$	1,500.10
91	Sears	2217			100%	$	579.99
92	Sears	2217	1,479.97		100%	$	899.98
			15,420.97	ok		$	11,238.67
TELEPHONE HARDWARE:							
74	ACD	2014/2146	11,277.00	ok	80%	$	9,021.60
ARCHITECT FEES:							
75	Dowler	1016	3,600.98		70%	$	2,520.69
76	Dowler	2099	1,530.00		80%	$	1,224.00
255	Dowler	accrued	50.00		100%	$	50.00
256	Dowler	accrued	1,567.50		100%	$	1,567.50
	Dowler	2286	2,190.00	need c	80%	$	1,752.00

REF #	VENDOR	DATE REC/INV	PO#	INVOICE #	DESCRIPTION	SERIAL #	COST	TOTAL	CK #

77	Dowler	15-Jul	9804004	Architect	NO S/N	38.34	38.34	2100	38.34
						8,976.82	8,976.82		8,976.82
CABLING COSTS:									
78	Valley Comm	26-Jun	38799A	Voice Cabling	NO S/N	11,363.67	11,363.67	2059	11,363.67
78	Valley Comm	26-Jun	38799A	Voice Cabling	NO S/N	9,671.04	9,671.04	accrued	9,671.04
						21,034.71	21,034.71		21,034.71
TENANT IMPROVEMENT COSTS-OTHER									
79	Cardkey	26-Aug	558778	Security Sys	0385-98G	12,052.00	12,052.00	1036/2158	12,052.00
						12,052.00	12,052.00		12,052.00
						91,694.20	91,694.20		91,694.20
							TOTAL INV.		774,859.39

REF #	VENDOR		% FUNDED	TOTAL FUNDED
77	Dowler		80%	$ 30.67
		ok		$ 7,144.86
CABLING COSTS:				
78	Valley Comm		70%	$ 7,954.57
78	Valley Comm	journal	70%	$ 6,769.73
		ok		$ 14,724.30
TENANT IMPROVEMENT COSTS-OTHER				
79	Cardkey		80%	$ 9,641.60
		-		$ 9,641.60
		TOTAL HARDWARE		$ 631,184.05
		TOTAL SOFT & TI		$ 31,510.76
		TOTAL FUNDED		$ 662,694.81

Exhibit 4.4

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AS AMENDED, OR ANY STATE SECURITIES LAWS. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL (WHICH MAY BE COMPANY COUNSEL) REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY APPLICABLE STATE SECURITIES LAWS.

WARRANT AGREEMENT

TO PURCHASE SHARES OF THE SERIES A PREFERRED STOCK OF

CYTOKINETICS, INC.

DATED AS OF SEPTEMBER 25, 1998 (THE "EFFECTIVE DATE")

WHEREAS, Cytokenetics, Inc., a Delaware corporation (the "Company") has entered into a Loan And Security Agreement dated as of September 25, 1998, and related Promissory Note(s) (collectively, the "Loans") with Comdisco, Inc., a Delaware corporation (the "Warrantholder"); and

WHEREAS, the Company desires to grant to Warrantholder, in consideration for such Loans, the right to purchase shares of its Series A Preferred Stock;

NOW, THEREFORE, in consideration of the Warrantholder executing and delivering such Loans and in consideration of mutual covenants and agreements contained herein, the Company and Warrantholder agree as follows:

1. GRANT OF THE RIGHT TO PURCHASE PREFERRED STOCK.

For the first $1,000,000 portion of the Loans, the Company hereby grants to the Warrantholder, and the Warrantholder is entitled, upon the terms and subject to the conditions hereinafter set forth, to subscribe to and purchase, from the Company, 45,000 fully paid and non-assessable shares of the Company's Series A Preferred Stock ("Preferred Stock") at a purchase price of $1.00 per share (the "Exercise Price") provided however, that from and after the effective date of the registration statement for the Company's initial public offering of its equity securities, the securities purchasable by the Warrantholder upon the exercise of this Warrant Agreement shall be shares of the Company's Common Stock ("Common Stock") which shares shall be purchasable by the Warrantholder in the same number that the Warrantholder would otherwise have been entitled to purchase had this Warrant Agreement remained exercisable for shares of the Company's Preferred Stock. From and after the effective date of the registration statement for the Company's initial public offering of its equity securities, the Warrantholder shall not have any further right pursuant to this Warrant Agreement to purchase shares of the Company's Preferred Stock. The shares of Preferred Stock or Common Stock that are issuable from time to time upon the exercise of this Warrant Agreement are sometimes referred to herein as the "Stock.

In the event that the Company requests and the Warrantholder funds any portion of the additional $250,000 Advances between the first $1,000,000 and up to $1,500,000 as provided under the Loans, the Company hereby grants to the Warrantholder, and the Warrantholder is entitled, upon the terms and subject to the conditions hereinafter set forth, to subscribe for and purchase, from the Company, for each Advance funded, 11,250 shares of Stock at the Exercise Price.

The number and purchase price of such shares are subject to adjustment as provided in Section 8 hereof.

2. TERM OF THE WARRANT AGREEMENT.

Except as otherwise provided for herein, the term of this Warrant

Agreement and the right to purchase Stock as granted herein shall commence on the Effective Date and shall be exercisable for a period of (i) seven (7) years or (ii) three (3) years from the effective date of the Company's initial public offering, whichever is shorter.

3. EXERCISE OF THE PURCHASE RIGHTS.

The purchase rights set forth in this Warrant Agreement are exercisable by the Warrantholder, in whole or in part, at any time, or from time to time, prior to the expiration of the term set forth in Section 2 above, by tendering to the Company at its principal office a notice of exercise in the form attached hereto as Exhibit I (the "Notice of Exercise"), duly completed and executed. Promptly upon receipt of the Notice of Exercise and the payment of the purchase price in accordance with the terms set forth below, and in no event later than twenty-one (21) days thereafter, the Company shall issue to the Warrantholder a certificate for the number of shares of Stock purchased and shall execute the acknowledgment of exercise in the form attached hereto as Exhibit II (the "Acknowledgment of Exercise") indicating the number of shares which remain subject to future purchases, if any.

The Exercise Price may be paid at the Warrantholder's election either (i) by cash or check, or (ii) by surrender of Warrants ("Net Issuance") as determined below. If the Warrantholder elects the Net Issuance method, the Company will issue Stock in accordance with the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where: X = the number of shares of Stock to be issued to the Warrantholder.

Y = the number of shares of Stock requested to be exercised under this Warrant Agreement.

A = the fair market value of one (1) share of Stock.

B = the Exercise Price.

For purposes of the above calculation, current fair market value of Stock shall mean with respect to each share of Stock:

(i) if the exercise is in connection with an initial public offering of the Company's Common Stock, and if the Company's Registration Statement relating to such public offering has been declared effective by the SEC, then the fair market value per share shall be the product of (x) the initial "Price to Public" specified in the final prospectus with respect to the offering and (y) the number of shares of Common Stock into which each share of Stock is convertible at the time of such exercise;

(ii) if this Warrant is exercised after, and not in connection with the Company's initial public offering, and:

(a) if traded on a securities exchange, the fair market value shall be deemed to be the product of (x) the average of the closing prices over a twenty-one (21) day period ending three days before the day the current fair market value of the securities is being determined and (y) the number of shares of Common Stock into which each share of Stock is convertible at the time of such exercise; or

(b) if actively traded over-the-counter, the fair market value shall be deemed to be the product of (x) the average of the closing bid and asked prices quoted on the

NASDAQ system (or similar system) over the twenty-one (21) day period ending three days before the day the current fair market value of the securities is being determined and (y) the number of shares of Common Stock into which each share of Stock is convertible at the time of such exercise;

(iii) if at any time the Common Stock is not listed on any securities exchange or quoted in the NASDAQ System or the over-the-counter market, the current fair market value of Stock shall be the product of (x) the highest price per share which the Company could obtain from a willing buyer (not a current employee or director) for shares of Common Stock sold by the Company, from authorized but unissued shares, as determined in good faith by its Board of Directors and (y) the number of shares of Common Stock into which each shares of Stock is convertible at the time of such exercise unless the Company shall become subject to a merger, acquisition or other consolidation pursuant to which the Company is not the surviving party, in which case the fair market value of Stock shall be deemed to be the value received by the holders of the Company's Stock on a common equivalent basis pursuant to such merger or acquisition.

Upon partial exercise by either cash or Net Issuance, the Company shall promptly issue an amended Warrant Agreement representing the remaining number of shares purchasable hereunder. All other terms and conditions of such amended Warrant Agreement shall be identical to those contained herein, including, but not limited to the Effective Date hereof.

4. RESERVATION OF SHARES.

(a) Authorization and Reservation of Shares. During the term of this Warrant Agreement, the Company will at all times have authorized and reserved a sufficient number of shares of its Stock to provide for the exercise of the rights to purchase Stock as provided for herein.

(b) Registration or Listing. If any shares of Stock required to be reserved hereunder require registration with or approval of any governmental authority under any Federal or State law (other than any registration under the Securities Act of 1933, as amended ("1933 Act"), as then in effect, or any similar Federal statute then enforced, or any state securities law, required by reason of any transfer involved in such conversion), or listing on any domestic securities exchange, before such shares may be issued upon conversion, the Company will, at its expense and as expeditiously as possible, use its best efforts to cause such shares to be duly registered, listed or approved for listing on such domestic securities exchange, as the case may be.

5. NO FRACTIONAL SHARES OR SCRIP.

No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the Warrant, but in lieu of such fractional shares the Company shall make a cash payment therefor upon the basis of the Exercise Price then in effect.

6. NO RIGHTS AS SHAREHOLDER.

This Warrant Agreement does not entitle the Warrantholder to any voting rights or other rights as a shareholder of the Company prior to the exercise of the Warrant.

7. WARRANTHOLDER REGISTRY.

The Company shall maintain a registry showing the name and address of the registered holder of this Warrant Agreement.

8. ADJUSTMENT RIGHTS.

The purchase price per share and the number of shares of Stock purchasable hereunder are subject to adjustment, as follows:

(a) Merger and Sale of Assets. If at any time there shall be a capital reorganization of the shares of the Company's stock (other than a combination, reclassification, exchange or subdivision of shares otherwise provided for herein), or a merger or consolidation of the Company with or into another corporation whether or not the Company is the surviving corporation, or the sale of all or substantially all of the Company's properties and assets to any other person (hereinafter referred to as a "Merger Event"), then, as a part of such Merger Event, lawful provision shall be made so that the Warrantholder shall thereafter be entitled to receive, upon exercise of the Warrant, the number of shares of preferred stock or other securities of the successor corporation resulting from such Merger Event, equivalent in value to that which would have been issuable if Warrantholder had exercised this Warrant immediately prior to the Merger Event. In any such case, appropriate adjustment (as determined in good faith by the Company's Board of Directors) shall be made in the application of the provisions of this Warrant Agreement with respect to the rights and interest of the Warrantholder after the Merger Event to the end that the provisions of this Warrant Agreement (including adjustments of the Exercise Price and number of shares of Preferred Stock purchasable) shall be applicable to the greatest extent possible.

(b) Reclassification of Shares. If the Company at any time shall, by combination, reclassification, exchange or subdivision of securities or otherwise, change any of the securities as to which purchase rights under this Warrant Agreement exist into the same or a different number of securities of any other class or classes, this Warrant Agreement shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights

under this Warrant Agreement immediately prior to such combination, reclassification, exchange, subdivision or other change.

(c) Subdivision or Combination of Shares. If the Company at any time shall combine or subdivide its Stock, the Exercise Price shall be proportionately decreased in the case of a subdivision, or proportionately increased in the case of a combination.

(d) Stock Dividends. If the Company at any time shall pay a dividend payable in, or make any other distribution (except any distribution specifically provided for in the foregoing subsections (a) or (b)) of the Company's stock, then the Exercise Price shall be adjusted, from and after the record date of such dividend or distribution, to that price determined by multiplying the Exercise Price in effect immediately prior to such record date by a fraction (i) the numerator of which shall be the total number of all shares of the Company's stock outstanding immediately prior to such dividend or distribution, and (ii) the denominator of which shall be the total number of all shares of the Company's stock outstanding immediately after such dividend or distribution. The Warrantholder shall thereafter be entitled to purchase, at the Exercise Price resulting from such adjustment, the number of shares of Stock (calculated to the nearest whole share) obtained by multiplying the Exercise Price in effect immediately prior to such adjustment by the number of shares of Stock issuable upon the exercise hereof immediately prior to such adjustment and dividing the product thereof by the Exercise Price resulting from such adjustment.

(e) Antidilution Rights. Additional antidilution rights applicable to the Preferred Stock purchasable hereunder are as set forth in the Company's Certificate of Incorporation, as amended through the Effective Date, a true and complete copy of which is attached hereto as Exhibit _ (the "Charter"). The Company shall promptly provide the Warrantholder with any restatement,

amendment, modification or waiver of the Charter. The Company shall provide Warrantholder with prior written notice of any issuance of its stock or other equity security to occur after the Effective Date of this Warrant, which notice shall include (a) the price at which such stock or security is to be sold, (b) the number of shares to be issued, and (c) such other information as necessary for Warrantholder to determine if a dilutive event has occurred.

(f) Notice of Adjustments. If: (i) the Company shall declare any dividend or distribution upon its stock, whether in cash, property, stock or other securities; (ii) the Company shall offer for subscription prorata to the holders of any class of its Preferred or other convertible stock any additional shares of stock of any class or other rights; (iii) there shall be any Merger Event; (iv) there shall be an initial public offering; or (v) there shall be any voluntary dissolution, liquidation or winding up of the Company; then, in connection with each such event, the Company shall send to the Warrantholder: (A) at least twenty (20) days' prior written notice of the date on which the books of the Company shall close or a record shall be taken for such dividend, distribution, subscription rights (specifying the date on which the holders of Stock shall be entitled thereto) or for determining rights to vote in respect of such Merger Event, dissolution, liquidation or winding up; (B) in the case of any such Merger Event, dissolution, liquidation or winding up, at least twenty (20) days' prior written notice of the date when the same shall take place (and specifying the date on which the holders of Stock shall be entitled to exchange their Stock for securities or other property deliverable upon such Merger Event, dissolution, liquidation or winding up); and (C) in the case of a public offering, the Company shall give the Warrantholder at least twenty (20) days written notice prior to the effective date thereof.

Each such written notice shall set forth, in reasonable detail, (i) the event requiring the adjustment, (ii) the amount of the adjustment, (iii) the method by which such adjustment was calculated, (iv) the Exercise Price, and (v) the number of shares subject to purchase hereunder after giving effect to such adjustment, and shall be given by first class mail, postage prepaid, addressed to the Warrantholder, at the address as shown on the books of the Company.

(g) Timely Notice. Failure to timely provide such notice required by subsection (f) above shall entitle Warrantholder to retain the benefit of the applicable notice period notwithstanding anything to the contrary contained in any insufficient notice received by Warrantholder. The notice period shall begin on the date Warrantholder actually receives a written notice containing all the information specified above.

9. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

(a) Reservation of Stock. The Stock issuable upon exercise of the Warrantholder's rights has been duly and validly reserved and, when issued in accordance with the provisions of this Warrant Agreement, will be validly issued, fully paid and non-assessable, and will be free of any taxes, liens, charges or encumbrances of any nature whatsoever; provided, however, that the Stock issuable pursuant to this Warrant Agreement may be subject

to restrictions on transfer under state and/or Federal securities laws. The Company has made available to the Warrantholder true, correct and complete copies of its Charter and Bylaws, as amended. The issuance of certificates for shares of Stock upon exercise of the Warrant Agreement shall be made without charge to the Warrantholder for any issuance tax in respect thereof, or other cost incurred by the Company in connection with such exercise and the related issuance of shares of Stock. The Company shall not be required to pay any tax which may be payable in respect of any transfer involved and the issuance and delivery of any certificate in a name other than that of the Warrantholder.

(b) Due Authority. The execution and delivery by the Company of this Warrant Agreement and the performance of all obligations of the Company hereunder, including the issuance to Warrantholder of the right to acquire the

shares of Stock, have been duly authorized by all necessary corporate action on the part of the Company, and the Loans and this Warrant Agreement are not inconsistent with the Company's Charter or Bylaws, do not contravene any law or governmental rule, regulation or order applicable to it, do not and will not contravene any provision of, or constitute a default under, any indenture, mortgage, contract or other instrument to which it is a party or by which it is bound, and the Loans and this Warrant Agreement constitute legal, valid and binding agreements of the Company, enforceable in accordance with their respective terms.

(c) Consents and Approvals. No consent or approval of, giving of notice to, registration with, or taking of any other action in respect of any state, Federal or other governmental authority or agency is required with respect to the execution, delivery and performance by the Company of its obligations under this Warrant Agreement, except for the filing of notices pursuant to Regulation D under the 1933 Act and any filing required by applicable state securities law, which filings will be effective by the time required thereby.

(d) Issued Securities. All issued and outstanding shares of Common Stock, Preferred Stock or any other securities of the Company have been duly authorized and validly issued and are fully paid and nonassessable. All outstanding shares of Common Stock, Preferred Stock and any other securities were issued in full compliance with all Federal and state securities laws. In addition:

(i) The authorized capital of the Company consists of (A) 10,000,000 shares of Common Stock, of which 1,126,110 shares are issued and outstanding, and (B) 5,550,000 shares of preferred stock, of which 5,300,000 shares are issued and outstanding and are convertible into 5,550,000 shares of Common Stock at $1.00 per share.

(ii) The Company has reserved (A) 2,000,000 shares of Common Stock for issuance under its under its 1997 Stock Option/Stock Issuance Plan under which 1,503,890 options have been granted. There are no other options, warrants, conversion privileges or other rights presently outstanding to purchase or otherwise acquire any authorized but unissued shares of the Company's capital stock or other securities of the Company.

(iii) In accordance with the Company's Articles of Incorporation, no shareholder of the Company has preemptive rights to purchase new issuances of the Company's capital stock.

(e) Insurance. The Company has in full force and effect insurance policies, with extended coverage, insuring the Company and its property and business against such losses and risks, and in such amounts, as are customary for corporations engaged in a similar business and similarly situated and as otherwise may be required pursuant to the terms of any other contract or agreement.

(f) Exempt Transaction. Subject to the accuracy of the Warrantholder's representations in Section 10 hereof, the issuance of the Stock upon exercise of this Warrant will constitute a transaction exempt from (i) the registration requirements of Section 5 of the 1933 Act, in reliance upon Section 4(2) thereof, and (ii) the qualification requirements of the applicable state securities laws.

(g) Compliance with Rule 144. At the written request of the Warrantholder, who proposes to sell Stock issuable upon the exercise of the Warrant in compliance with Rule 144 promulgated by the Securities and Exchange Commission, the Company shall furnish to the Warrantholder, within ten days after receipt of such request, a written statement confirming the Company's compliance with the filing requirements of the Securities and Exchange Commission as set forth in such Rule, as such Rule may be amended from time to time.

10. REPRESENTATIONS AND COVENANTS OF THE WARRANTHOLDER.

This Warrant Agreement has been entered into by the Company in reliance upon the following representations and covenants of the Warrantholder:

(a) Investment Purpose. The right to acquire Stock issuable upon exercise of the Warrantholder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Warrantholder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Private Issue. The Warrantholder understands (i) that the Stock issuable upon exercise of this Warrant is not registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuance contemplated by this Warrant Agreement will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations set forth in this Section 10.

(c) Disposition of Warrantholder's Rights. In no event will the Warrantholder make a disposition of any of its rights to acquire Stock issuable upon exercise of such rights unless and until (i) it shall have notified the Company of the proposed disposition, and (ii) if requested by the Company, it shall have furnished the Company with an opinion of counsel (which counsel may either be inside or outside counsel to the Warrantholder) satisfactory to the Company and its counsel to the effect that (A) appropriate action necessary for compliance with the 1933 Act has been taken, or (B) an exemption from the registration requirements of the 1933 Act is available. Notwithstanding the foregoing, the restrictions imposed upon the transferability of any of its rights to acquire Stock issuable on the exercise of such rights do not apply to transfers from the beneficial owner of any of the aforementioned securities to its nominee or from such nominee to its beneficial owner, and shall terminate as to any particular share of Stock when (1) such security shall have been effectively registered under the 1933 Act and sold by the holder thereof in accordance with such registration or (2) such security shall have been sold without registration in compliance with Rule 144 under the 1933 Act, or (3) a letter shall have been issued to the Warrantholder at its request by the staff of the Securities and Exchange Commission or a ruling shall have been issued to the Warrantholder at its request by such Commission stating that no action shall be recommended by such staff or taken by such Commission, as the case may be, if such security is transferred without registration under the 1933 Act in accordance with the conditions set forth in such letter or ruling and such letter or ruling specifies that no subsequent restrictions on transfer are required. Whenever the restrictions imposed hereunder shall terminate, as hereinabove provided, the Warrantholder or holder of a share of Stock then outstanding as to which such restrictions have terminated shall be entitled to receive from the Company, without expense to such holder, one or more new certificates for the Warrant or for such shares of Stock not bearing any restrictive legend.

(d) Financial Risk. The Warrantholder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment, and has the ability to bear the economic risks of its investment.

(e) Risk of No Registration. The Warrantholder understands that if the Company does not register with the Securities and Exchange Commission pursuant to Section 12 of the 1934 Act (the "1934 Act"), or file reports pursuant to Section 15(d), of the 1934 Act", or if a registration statement covering the securities under the 1933 Act is not in effect when it desires to sell (i) the rights to purchase Stock pursuant to this Warrant Agreement, or (ii) the Stock issuable upon exercise of the right to purchase, it may be required to hold such securities for an indefinite period. The Warrantholder also understands that any sale of its rights of the Warrantholder to purchase Stock which might be made by it in reliance upon Rule 144 under the 1933 Act

may be made only in accordance with the terms and conditions of that Rule.

(f) Accredited Investor. Warrantholder is an "accredited investor" within the meaning of the Securities and Exchange Rule 501 of Regulation D, as presently in effect.

11. TRANSFERS.

Subject to the terms and conditions contained in Section 10 hereof, this Warrant Agreement and all rights hereunder are transferable in whole or in part by the Warrantholder and any successor transferee, provided, however, in no event shall the number of transfers of the rights and interests in all of the Warrants exceed three (3) transfers. The transfer shall be recorded on the books of the Company upon receipt by the Company of a notice of

transfer in the form attached hereto as Exhibit III (the "Transfer Notice"), at its principal offices and the payment to the Company of all transfer taxes and other governmental charges imposed on such transfer.

12. MISCELLANEOUS.

(a) Effective Date. The provisions of this Warrant Agreement shall be construed and shall be given effect in all respects as if it had been executed and delivered by the Company on the date hereof. This Warrant Agreement shall be binding upon any successors or assigns of the Company.

(b) Attorney's Fees. In any litigation, arbitration or court proceeding between the Company and the Warrantholder relating hereto, the prevailing party shall be entitled to attorneys' fees and expenses and all costs of proceedings incurred in enforcing this Warrant Agreement.

(c) Governing Law. This Warrant Agreement shall be governed by and construed for all purposes under and in accordance with the laws of the State of Illinois.

(d) Counterparts. This Warrant Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(e) Notices. Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery, facsimile transmission (provided that the original is sent by personal delivery or mail as hereinafter set forth) or seven (7) days after deposit in the United States mail, by registered or certified mail, addressed (i) to the Warrantholder at 6111 North River Road, Rosemont, Illinois 60018, attention: Venture Lease Administration, cc: Legal Department, attn.: General Counsel, (and/or, if by facsimile, (847) 518-5465 and (847)518-5088 and (ii) to the Company at 280 East Grand Avenue, Suite 2, South San Francisco, CA 94080, attention: President (and/or if by facsimile, (650) 624-3010 or at such other address as any such party may subsequently designate by written notice to the other party.

(f) Remedies. In the event of any default hereunder, the non-defaulting party may proceed to protect and enforce its rights either by suit in equity and/or by action at law, including but not limited to an action for damages as a result of any such default, and/or an action for specific performance for any default where Warrantholder will not have an adequate remedy at law and where damages will not be readily ascertainable. The Company expressly agrees that it shall not oppose an application by the Warrantholder or any other person entitled to the benefit of this Agreement requiring specific performance of any or all provisions hereof or enjoining the Company from continuing to commit any such breach of this Agreement.

(g) No Impairment of Rights. The Company will not, by amendment of its Charter or through any other means, avoid or seek to avoid the observance or

performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate in order to protect the rights of the Warrantholder against impairment.

(h) Survival. The representations, warranties, covenants and conditions of the respective parties contained herein or made pursuant to this Warrant Agreement shall survive the execution and delivery of this Warrant Agreement.

(i) Severability. In the event any one or more of the provisions of this Warrant Agreement shall for any reason be held invalid, illegal or unenforceable, the remaining provisions of this Warrant Agreement shall be unimpaired, and the invalid, illegal or unenforceable provision shall be replaced by a mutually acceptable valid, legal and enforceable provision, which comes closest to the intention of the parties underlying the invalid, illegal or unenforceable provision.

(j) Amendments. Any provision of this Warrant Agreement may be amended by a written instrument signed by the Company and by the Warrantholder.

IN WITNESS WHEREOF, the parties hereto have caused this Warrant Agreement to be executed by its officers thereunto duly authorized as of the Effective Date.

COMPANY: CYTOKENETICS, INC.

By: /s/ JON C. RICHARDS

Title: Chief Financial Officer

WARRANTHOLDER: COMDISCO, INC.

By: /s/ JAMES P. LABE

Title: JAMES P. LABE
PRESIDENT COMDISCO VENTURES DIVISION

EXHIBIT I

NOTICE OF EXERCISE

TO: _____

(1) The undersigned Warrantholder hereby elects to purchase _____ shares of the Series A Preferred Stock of _____, pursuant to the terms of the Warrant Agreement dated the ____ day of _____ 19___ (the "Warrant Agreement") between _____ and the Warrantholder, and tenders herewith payment of the purchase price for such shares in full, together with all applicable transfer taxes, if any.

(2) In exercising its rights to purchase the Series A Preferred Stock of _____, the undersigned hereby confirms and acknowledges the investment representations and warranties made in Section 10 of the Warrant Agreement.

(3) Please issue a certificate or certificates representing said shares of Series A Preferred Stock in the name of the undersigned or in such other name as is specified below.

_____
(Name)

_____
(Address)

WARRANTHOLDER: COMDISCO, INC.

By: _____

Title: _____

Date: _____

EXHIBIT II

ACKNOWLEDGMENT OF EXERCISE

The undersigned _____ , hereby acknowledge receipt of the "Notice of Exercise" from Comdisco, Inc., to purchase _____ shares of the Series A Preferred Stock of_____ pursuant to the terms of the Warrant Agreement, and further acknowledges that _____ shares remain subject to purchase under the terms of the Warrant Agreement,

COMPANY:

By: _____

Title: _____

Date: _____

EXHIBIT III

TRANSFER NOTICE

(TO TRANSFER OR ASSIGN THE FOREGOING WARRANT AGREEMENT EXECUTE THIS FORM AND SUPPLY REQUIRED INFORMATION. DO NOT USE THIS FORM TO PURCHASE SHARES.)

FOR VALUE RECEIVED, the foregoing Warrant Agreement and all rights evidenced thereby are hereby transferred and assigned to

_____
(Please Print)

whose address is

_____

_____

Dated: _____

Holder's Signature: _____

Holder's Address: _____

_____

Signature Guaranteed: _____

NOTE: The signature to this Transfer Notice must correspond with the name as it appears on the face of the Warrant Agreement, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant Agreement.

Exhibit 4.5

LOAN AND SECURITY AGREEMENT

THIS AGREEMENT (the "Agreement"), dated as of December 16, 1999 (the "Closing Date") is entered into by and between Cytokinetics, Incorporated, a Delaware corporation having a principal place of business at 280 East Grand Avenue, South San Francisco, CA 94080 (the "Borrower") and Comdisco, Inc., a Delaware corporation having a principal place of business at 6111 North River Road, Rosemont, Illinois 60018 (the "Lender"). In consideration of the mutual agreements contained herein, the parties hereto agree as follows:

WHEREAS, Borrower has requested Lender to make available to Borrower a loan in the aggregate principal amount of up to FIVE MILLION and 00/100 DOLLARS ($5,000,000) (as the same may from time to time be amended, modified, supplemented or revised, the "Loan"), which shall be available in minimum installments of TWO HUNDRED FIFTY THOUSAND and 00/100 DOLLARS ($250,000) each (the "Advance") on various dates prior to December 16, 2000 ("Advance Date(s)"), which would be evidenced by Secured Promissory Note(s) executed by Borrower substantially in the form of EXHIBIT A-1 AND A-2 hereto (as the same may from time to time be amended, modified, supplemented or restated the "Note(s)");

NOW, THEREFORE, it is agreed:

SECTION 1. THE LOAN

1.1 Subject to the terms and conditions set forth herein, Lender shall lend to Borrower the aggregate original principal amount of FIVE MILLION AND 00/100 DOLLARS ($5,000,000) in two parts, the first part in the amount of Two Million Dollars ($2,000,000) ("Part I") and the second part in the amount of Three Million dollars ($3,000,000) ("Part II') together with interest at the rate of eight and one quarter percent (8.25%) per annum due and payable in monthly installments as set forth in the Note.

Proceeds of this Loan may finance computers, workstations, peripherals, instrumentation, electronic test equipment, office furniture, certain microscopy equipment and other equipment approved by Lender and evidenced by Secured Promissory Note(s) executed by Borrower substantially in the form of EXHIBIT A-1 . Up to 20% of the Loan may be used to finance software and tenant improvements evidenced by Secured Promissory Note(s) executed by Borrower substantially in the form of EXHIBIT A-2. Lender will not finance custom equipment, installation costs, delivery costs, rolling stock, special tooling, molds and hand held items.

1.2 Upon the occurrence of and during an Event of Default (as defined herein), interest shall thereafter be calculated at a rate of five percent (5%) in excess of the rate that would otherwise be applicable ("Default Rate"). All such interest shall be due and payable in arrears, on the first day of the following month.

1.3 Notwithstanding any provision in this Agreement, the Note, or any other "Loan Document" (as defined herein), it is not the parties' intent to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law which a court of competent jurisdiction shall deem applicable hereto (which under the laws of the State of Illinois shall be deemed to be the laws relating to permissible rates of interest on commercial loans) (the "Maximum Rate"). If the Borrower actually pays Lender an amount of interest, chargeable on the

total aggregate principal Secured Obligations of Borrower under this Agreement and the Note (as said rate is calculated over a period of time that is the longer of (i) the time from the date of this Agreement through the maturity time

as set forth on the Note, or (ii) the entire period of time that any principal is outstanding on the Note), which amount of interest exceeds interest calculated at the Maximum Rate on said principal chargeable over said period of time, then such excess interest actually paid by Borrower shall be applied first, to the payment of principal outstanding on the Note; second, after all principal is repaid, to the payment of Lender's out of pocket costs, expenses, and professional fees which are owed by Borrower to Lender under this Agreement or the Loan Documents; and third, after all principal, costs, expenses, and professional fees owed by Borrower to Lender are repaid, the excess (if any) shall be refunded to Borrower.

1.4 In the event any interest is not paid when due hereunder, delinquent interest shall be added to principal and shall bear interest on interest, compounded at the rate set forth in Section 1.1.

1.5 Upon and during the continuation of an Event of Default hereunder (as defined herein), all Secured Obligations, including principal, interest, compounded interest, and reasonable professional fees, shall bear interest at a rate per annum equal to the Default Rate.

1.6 Borrower shall have the option to prepay the Note, in whole or in part, at any time after the date hereof by paying the principal amount together with all accrued and unpaid interest with respect to such principal amount, as of the date of such prepayment and the Balloon Payment as described in the Note together with a prepayment premium equal to the difference, if any, between (x) the amount being prepaid and (y) the present value, discounted at the Treasury Rate, of each installment of principal and interest being prepaid discounted to the date of prepayment. If the amount in (x) is greater than the amount in (y), no prepayment premium shall be due. The "Treasury Rate" shall mean the then prevailing yield on US Treasury Constant Maturities for the most recent business day, as quoted in the Federal Reserve Statistical Release H15, as of the date of prepayment for an obligation of comparable maturity to the maturity date of the Note.

SECTION 2. SECURITY INTEREST

As security for the payment of all indebtedness ("Indebtedness") of the Borrower to the Lender hereunder and under the Note, as the same may be renewed, extended for any period or rearranged, and the performance by the Borrower of its other obligations hereunder (the Indebtedness and such other obligations being hereinafter sometimes collectively referred to as the "Secured Obligations"), the Borrower hereby assigns to the Lender, and grants to the Lender a first priority security interest in, all the Borrower's right, title, and interest in and to the following property ("Collateral"): (i) the equipment and other property (the "Equipment") described in Exhibit B attached hereto; and (ii) all proceeds, products, replacements, additions to, substitutions for and accessions to any and all Equipment including, without limitation, the proceeds applicable to the insurance referred to in Section 4 hereof.

Equipment shall consist of computers, workstations, peripherals, instrumentation, electronic test equipment, office furniture, certain types of microscopy equipment and other items of equipment approved by Lender. Up to 20% of the Loan may be used for software and tenant improvements.

SECTION 3. REPRESENTATIONS AND WARRANTIES OF BORROWER

The Borrower represents, warrants and agrees that:

3.1 it has good title in and to the Equipment, free of all liens, security interests, encumbrances and claims whatsoever, except for the interest of the Lender therein;

3.2 it has the full power and authority to, and does hereby grant and convey to the Lender, a valid first priority perfected security interest in

the Collateral as security for the Secured Obligations, free of all liens, security interests, encumbrances and claims, and shall execute such Uniform Commercial Code ("UCC") financing statements in connection herewith as the Lender may reasonably request. No other lien, security interest, adverse claim or encumbrance has been created by Borrower or is known by Borrower to exist with respect to any Collateral;

3.3 it is a corporation duly organized, legally existing and in good standing under the laws of the State of Delaware, and is duly qualified as a foreign corporation in all jurisdictions where the failure to so qualify would have a material adverse effect on the Collateral or the business of the Borrower taken as a whole;

3.4 the execution, delivery and performance of the Note, this Agreement, the Warrant Agreement dated December 16, 1999 pursuant to which Borrower granted to Lender the right to purchase the number of shares of preferred stock as set forth therein ("Warrant Agreement"), and all financing statements, certificates and other documents required to be delivered or executed in connection herewith (collectively, the "Loan Documents") have been duly authorized by all necessary corporate action of Borrower, the individual or individuals executing the Loan Documents were duly authorized to do so, the Equipment is personal property and as used by the Borrower will not be or become fixtures under applicable law, and the Loan Documents constitute legal, valid and binding obligations of the Borrower, enforceable in accordance with their respective terms, subject to applicable bankruptcy, insolvency, reorganization or other similar laws generally affecting the enforcement of the rights of creditors;

3.5 the Loan Documents do not and will not violate any provisions of its Certificate of Incorporation, bylaws or any contract, agreement, law, regulation, order, injunction, judgment, decree or writ to which the Borrower is subject, or result in the creation or imposition of any lien, security interest or other encumbrance upon the Collateral, other than those created by this Agreement;

3.6 the execution, delivery and performance of the Loan Documents do not require the consent or approval of any other person or entity including, without limitation, any regulatory authority or governmental body of the United States or any state thereof or any political subdivision of the United States or any state thereof.

3.7 as of the date hereof no fact or condition exists that would (or could, with the passage of time, the giving of notice, or both) constitute an Event of Default under this Agreement or any of the Loan Documents and no event which has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing. For purposes of this Agreement, "Material Adverse Effect" means a material adverse effect upon (i) the business, operations, properties, assets or financial condition of Borrower; or (ii) the ability of Borrower to perform the Secured Obligations.

SECTION 4. INSURANCE AND RISK OF LOSS

4.1 Risk of loss of, damage to or destruction of the Equipment shall be borne by the Borrower and effective from the date of this Agreement and until the payment and performance in full of all Secured Obligations, Borrower shall at its own expense cause to be carried and maintained all risk casualty insurance (covering risk of fire, theft and other such risks as the Lender may require, including standard and extended coverage) with respect to each item of Equipment in an amount no less than the replacement costs applicable to such item of Equipment during the term of this Agreement. All policies evidencing such casualty insurance shall contain a standard mortgagee's endorsement and shall provide for at least thirty days prior written notice by the underwriter or insurance company to the Lender in the event of cancellation or expiration. Borrower shall provide Lender with insurance certificates evidencing the

foregoing at time of closing.

4.2 If any item of Equipment is lost or rendered unusable as a result of any physical damage to or destruction of such item of Equipment during the period from the date hereof to and including the maturity date under the Note or the date all Secured Obligations hereunder have been fully satisfied, whichever is later, Borrower shall give to Lender prompt notice thereof. Borrower shall determine, within fifteen (15) days after the date of occurrence of such loss, damage or destruction, whether such item of Equipment can be repaired and restored to the condition in which such item of Equipment was required to be maintained as of the date immediately preceding such damage. If Borrower determines that such item of Equipment can be repaired, Borrower, at its expense, shall cause such item of Equipment to be promptly repaired. If Borrower determines that such item of I Equipment is lost or cannot be repaired, Borrower shall promptly notify the Lender and such item of Equipment shall be deemed to have suffered a "Casualty Loss" for purposes of this Section as of the date of the occurrence of such loss. Within fifteen (15) days following the occurrence of any such loss, damage or destruction, Borrower shall notify the Lender of the item(s) of Equipment which has suffered such Casualty Loss ("Loss Item"), and within thirty (30) days thereafter (the "Settlement Date"), Borrower shall either (a) replace such item(s) of Equipment with equipment of the same model, type and feature configuration, in an operating condition and repair no less than that required hereunder of the damaged or lost equipment immediately prior to the date of such damage or loss, and having a fair market value no less than the Casualty Value (as defined herein) applicable to such item of Equipment as of the date immediately prior to such damage, in which case such replacement equipment shall for all purposes hereunder become part of the Collateral and (without limiting the preceding provisions) Borrower shall grant to Lender a first lien and security interest in respect of such replacement equipment pursuant to the terms of this Agreement, and Borrower shall provide the Lender evidence satisfactory to the Lender of Borrower's good and marketable title to such replacement equipment (free of any liens, security interests or encumbrances other than those created by this Agreement and Borrower shall be entitled to receive the amount of any insurance or other recovery received by Lender up to cost of obtaining the replacement equipment; or (b) so long as no Event of Default or event which with the giving of notice or passage of time, or both, would constitute an Event of Default, has occurred and is continuing, Borrower may provide substitute equipment satisfactory to Lender to become part of the Collateral and Borrower shall grant to Lender a first lien and security interest in respect of such substitute equipment pursuant to the terms of this Agreement, and Borrower shall provide the Lender evidence satisfactory to Lender of Borrower's good and marketable title to such substitute equipment (free of any liens, security interests or

encumbrances other than created by this Agreement and Lender shall provide any required endorsements in connection with any insurance proceeds received by Borrower pursuant to such insurance policies; or (c) Borrower shall pay Lender the insurance proceeds payable pursuant to such insurance policies ("Insurance Proceeds")with respect to such Loss Item(s) and the principal amount of the Note (and interest accrued on the principal amount so prepayable) shall become due and payable on the Settlement Date to the extent of the replacement cost for all such Loss Item(s). For purposes of this Section 4.2, Casualty Value shall mean an amount equal to the greater of the fair market value of the Equipment as of the date of the Casualty Loss or the outstanding principal and accrued interest on the Loan. Moneys so received shall be applied, on the date of such receipt, as follows: first, to pay any accrued interest on the outstanding principal amount of the Note on such date; second, to prepay, the outstanding principal amount of the Note (to the extent of the fair market value attributable to such Loss Item(s)); third, to pay any other Indebtedness of amounts then due and owing to the Lender hereunder; and fourth, so long as there has occurred no Event of Default under Section 8 hereof and no event which with the giving of notice or passage of time or both would constitute an Event of Default, has occurred and is continuing, Borrower and Lender hereby agree that the balance of any such Insurance Proceeds shall be paid promptly to the Borrower.

4.3 Effective upon the date hereof under the Note and while there are any Secured Obligations outstanding, Borrower shall cause to be carried and maintained comprehensive general liability insurance with regard to the Collateral against risks customarily insured against in the Borrower's business. Such risks shall include, without limitation, the risks of death, bodily injury and property damage associated with the Collateral. All policies evidencing such insurance shall provide for at least thirty (30) days prior written notice by the underwriter or insurance company to the Lender in the event of cancellation or expiration.

4.4 Borrower shall and does hereby indemnify and hold Lender, its agents and shareholders harmless from and against any and all claims, costs, expenses, damages and liabilities (including without limitation such claims, costs, expenses, damages and liabilities based on liability in tort including without limitation strict liability in tort) including reasonable attorneys' fees, arising out of Borrower's ownership, possession, operation, control, use, maintenance, delivery, or other disposition of the Collateral. Notwithstanding the foregoing, Borrower shall not be responsible under the terms of this Section 4.4 to a party indemnified hereunder for any claims, costs, expenses, damages and liabilities occasioned by the negligence or willful misconduct of such indemnified party.

SECTION 5. COVENANTS OF BORROWER

Borrower covenants and agrees as follows at all times while any of the Secured Obligations remain outstanding:

5.1 Borrower shall maintain the Equipment in good operating order, repair, condition and appearance and protect the Equipment from deterioration, other than normal wear and tear. Borrower shall not use the Equipment or permit its use for any purpose other than for which it was designed. Borrower's obligation regarding the maintenance of the Equipment shall include, without limitation, all maintenance, repair, refurbishment and replacement recommended or advised either by the manufacturer, or that commonly performed by prudent business and/or professional practice. Any exceptions or qualifications expressed in this Agreement relating to normal or

ordinary wear and tear shall not be deemed to limit Borrower's obligations pursuant to the preceding sentence.

5.2 Borrower shall only relocate any item of the Collateral provided that: (a) it shall have caused to be filed and/or delivered to the Lender all UCC financing statements, certificates or other documents or instruments necessary to continue in effect the first prior perfected security interest of the Lender in the Collateral, and (b) it shall have given the Lender no less than fifteen (15) days prior written notice of such relocation.

5.3 Upon the request of Lender, Borrower shall, during business hours, make the Equipment available to Lender for inspection at the place where it is normally located and shall make Borrower's log and maintenance records pertaining to the Equipment available to the Equipment available to Lender for inspection. Borrower shall take all action necessary to maintain such logs and maintenance records in a correct and complete fashion.

5.4 Upon the request of Lender, Borrower shall cause the Equipment to be plainly, permanently and conspicuously marked, by stenciling or by metal tag or plate affixed thereto, indicating Lender's security interest in the Equipment. Borrower shall replace any such stenciling, tag or plate which may be removed or destroyed or become illegible. Borrower shall keep all Equipment free from any marking or labeling which might be interpreted as a claim of ownership adverse to Borrower's.

5.5 Borrower covenants and agrees to pay when due, all taxes, fees

or other charges of any nature whatsoever (together with any related interest or penalties) now or hereafter imposed or assessed against Borrower, Lender or the Collateral or upon Borrower's ownership, possession, use, operation or disposition thereof or upon Borrower's rents, receipts or earnings arising therefrom. Borrower shall file on or before the due date therefor all personal property tax returns in respect of the Collateral.

5.6 Borrower shall furnish to Lender the financial statements listed hereinafter, prepared in accordance with generally accepted accounting principles consistently applied (the "Financial Statements"):

(a) as soon as practicable (and in any event within thirty (30) days) after the end of each month: an internally prepared income statement, balance sheet, and cash flow statement, (including the commencement of any material litigation by or against Borrower), each certified by Borrower's Chief Executive or Financial Officer to be true and correct;

(b) as soon as practicable (and in any event within ninety (90) days) after the end of each fiscal year, audited Financial Statements, setting forth in comparative form the corresponding figures for the preceding fiscal year, and accompanied by any audit report and opinion of the independent certified public accountants selected by Borrower; and

(c) promptly any additional information (including but not limited to tax returns, income statements, balance sheets, and names of principal creditors) as Lender reasonably believes necessary to evaluate Borrower's continuing ability to meet financial obligations.

5.7 Notwithstanding the foregoing, after the effective date of the initial registration statement covering a public offering of Borrower's securities, the term "Financial Statements" shall be deemed to refer to only those statements required by the Securities and Exchange Commission, to be provided no less frequently than quarterly. Borrower will from time to time execute, deliver and file, alone or with Lender, any financing statements, security agreements or other documents; and take all further action that may be necessary, or that Lender may reasonably request, to confirm, perfect, preserve and protect the security interests intended to be granted hereby, and in addition, and for such purposes only, Borrower hereby authorizes Lender to execute and deliver on behalf of Borrower and to file such financing statements, security agreement and other documents without the signature of Borrower either in Lender's name or in the name of Borrower as agent and attorney-in-fact for Borrower.

5.8 Borrower shall protect and defend Borrower's title as well as the interest of the Lender against all persons claiming any interest adverse to Borrower or Lender and shall at all times keep the Collateral free and clear from any attachment or levy, liens or encumbrances whatsoever (except any placed thereon by Lender, or any liens arising by operation of law with respect to any obligations not yet overdue or any other liens consented to in writing by Lender) and shall give Lender immediate written notice thereof.

SECTION 6. CONDITIONS PRECEDENT TO LOAN

The obligation of Lender to fund the Loan on each Advance Date(s) shall be subject to satisfaction by Borrower or waiver by Lender, in Lender's sole discretion, of the following conditions:

6.1 (a) The Advance Date(s) for any installment shall occur on or before December 16, 2000.

6.2 DOCUMENT DELIVERY. Borrower, on or prior to the Closing Date,

shall have delivered to Lender the following, in form and substance reasonably satisfactory to Lender:

(a) executed originals of the Agreement, Note(s), Warrant Agreement and any documents reasonably required by Lender to effectuate the liens of Lender, with respect to all Collateral;

(b) certified copy of resolutions of Borrower's board of directors evidencing approval of the borrowing and other transactions evidenced by the Loan Documents;

(c) certified copies of the Certificate of Incorporation and the Bylaws of Borrower, as amended through the Closing Date;

(d) certificate of good standing for Borrower from its state of incorporation and similar certificates from all other jurisdictions in which it does business and where the failure to be qualified would have a Material Adverse Effect;

(e) such other documents as Lender may reasonably request.

6.3 ADVANCE REQUEST. Borrower, on or prior to each Advance Date(s), shall have delivered to Lender the following:

(a) a minimum of two (2) business days prior to the Advance Date(s), written notice in the form of an Advance Request, or as otherwise specified by Lender from time to time, specifying amount of such Advance and wire transfer instructions;

(b) such other documents as Lender may reasonably request.

6.4 PERFECTION OF SECURITY INTERESTS. Borrower shall have taken or caused to be taken such actions requested by Lender to grant Lender a first priority perfected security interest in the Collateral. Such actions shall include, without limitation, the delivery to Lender of all appropriate financing statements, executed by Borrower, as to the Collateral granted by Borrower for all jurisdictions as may be necessary or desirable to perfect the security interest of Lender in such Collateral

6.5 ABSENCE OF EVENTS OF DEFAULTS. As of the Closing Date or the Advance Date, no fact or condition exists that would (or would, with the passage of time, the giving of notice, or both) constitute an Event of Default under this Agreement or any of the Loan Documents.

6.6 MATERIAL ADVERSE EFFECT. As of the Closing Date or the Advance Date, no event which has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

SECTION 7. ASSIGNMENT BY LENDER

7.1 Borrower acknowledges and understands that Lender may sell and assign all or a part of its interest hereunder and under the Note and Loan Documents to any person or entity (an "Assignee"). After such assignment the term Lender shall mean such Assignee, and such Assignee shall be vested with all rights, powers and remedies of Lender hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, the Lender shall retain all rights, powers and remedies hereby given. No such assignment by Lender shall relieve Borrower of any of its obligations hereunder. Borrower shall acknowledge such assignment or assignments as shall be designated by written notice given by Lender to Borrower. The Lender agrees that in the event of any transfer by it of the Note, it will endorse thereon a notation as to the portion of the principal of the Note which shall have been paid at the time of

such transfer and as to the date to which interest shall have been last paid thereon.

SECTION 8. DEFAULT

The occurrence of any one or more of the following events (herein called "Events of Default") shall constitute a default hereunder and under the Note:

8.1 The Borrower defaults in the payment of any principal or interest payable under this Agreement, the Note or any of the other Loan Documents and such default continues for more than five (5) days after the due date thereof;

8.2 The Borrower defaults in the payment or performance of any other covenant or obligation of the Borrower hereunder or under the Note or any other Loan Documents for more than ten (10) days after the Lender has given notice of such default to the Borrower;

8.3 Any representation or warranty made herein by the Borrower shall prove to have been false or misleading in any material respect;

8.4 The making of an assignment by Borrower for the benefit of its creditors or the admission by Borrower in writing of its inability to pay its debts as they become due, or the insolvency of Borrower, or the filing by Borrower of a voluntary petition in bankruptcy, or the adjudication of Borrower as a bankrupt, or the filing by Borrower of any petition or answer seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution, or similar relief under any present or future statute, law or regulation, or the filing of any answer by Borrower admitting, or the failure by Borrower to deny, the material allegations of a petition filed against it for any such relief, or the seeking or consenting by Borrower to, or acquiescence by Borrower in, the appointment of any trustee, receiver or liquidator of Borrower or of all or any substantial part of the properties of Borrower, or the inability of Borrower to pay its debts when due, or the commission by Borrower of any act of bankruptcy as defined in the Federal Bankruptcy Act, as amended;

8.5 The failure by Borrower, within sixty (60) days after the commencement of any proceeding against Borrower seeking any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, to obtain the dismissal of such proceeding or, within sixty (60) days after the appointment, without the written consent or acquiescence of Lender, of any trustee, receiver or liquidator of Borrower or of all or any substantial part of the properties of Borrower, to vacate such appointment; or

8.6 The default by Borrower under any other notes or other agreement for borrowed money, lease or other agreement between Borrower and Lender.

SECTION 9. REMEDIES

Upon the occurrence hereof of any one or more Events of Default, Lender, at its option, may declare the Note to be accelerated and immediately due and payable, (provided, that upon the occurrence of an Event of Default of the type described in 8.4 or 8.5, the Note and all other Secured Obligations shall automatically be accelerated and made due and payable without any further act) whereupon the unpaid principal of and accrued interest on such Note shall become immediately due and payable, and shall thereafter bear interest at the Default Rate and calculated in accordance with Section 1.2. Lender may exercise all rights and remedies with respect to the Collateral granted pursuant hereto for such Note, or otherwise available to it under applicable law, including the right to release, hold or otherwise dispose of all or any part of the Collateral and the right to utilize, process and commingle the Collateral.

Upon the happening and during the continuance of any Event of Default, Lender may then, or at any time thereafter and from time to time, apply, collect, sell in one or more sales, lease or otherwise dispose of, any or all of the Collateral, in its then condition or following any commercially reasonable preparation or processing, in such order as Lender may elect, and any such sale may be made either at public or private sale at its place of business or elsewhere.

Borrower agrees that any such public or private sale may occur upon five (5) calendar day's notice to Borrower. Lender may require Borrower to assemble the Collateral and make it available to Lender at a place designated by Lender which is reasonably convenient to Lender and Borrower. The proceeds of any sale, disposition or other realization upon all or any part of the collateral shall be distributed by Lender in the following order of priorities:

First, to Lender in an amount sufficient to pay in full Lender's reasonable costs and professionals' and advisors' fees and expenses;

Second, to Lender in an amount equal to the then unpaid amount of the Secured Obligations in such order and priority as Lender may choose in its sole discretion; and

Finally, upon payment in full of all of the Secured Obligations, to Borrower or its representatives or as a court of competent jurisdiction may direct.

The Lender shall return to the Borrower any surplus Collateral remaining after payment of all Secured Obligations.

SECTION 10. MISCELLANEOUS

10.1 Borrower shall remain liable to Lender for any unpaid Secured Obligations, advances, costs, charges and expenses, together with interest thereon and shall pay the same immediately to Lender at Lender's offices.

10.2 The powers conferred upon Lender by this Agreement are solely to protect its interest in the Collateral and shall not impose any duty upon Lender to exercise any such powers.

10.3 This is a continuing Agreement and the grant of a security interest hereunder shall remain in full force and effect and all the rights, powers and remedies of Lender hereunder shall continue to exist until the Secured Obligations are paid in full as the same become due and payable. When Borrower has paid in full all Secured Obligations, Lender will execute a written termination statement, reassigning to Borrower, without recourse, the Collateral and all rights conveyed hereby and return possession (if Lender has possession) of the Collateral to Borrower. The rights, powers and remedies of Lender hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of any other rights, powers and remedies of Lender. Furthermore, regardless of whether or not the UCC is in effect in the jurisdiction where such rights, powers and remedies are asserted, Lender shall have the rights, powers and remedies of a secured party under the UCC.

10.4 Upon payment in full of all Secured Obligations, the Lender shall cancel the Note, this Agreement and all UCC financing statements, if any, and shall promptly deliver all such canceled documents to the Borrower.

10.5 GOVERNING LAW. This Agreement, the Note and the other Loan Documents have been negotiated and delivered to Lender in the State of Illinois and shall not become effective until accepted by Lender in the State of Illinois. Payment to Lender by Borrower of the Secured Obligations is due in the

State of Illinois. This Agreement shall be governed by, and

construed and enforced in accordance with the laws of the State of Illinois excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

10.6 CONSENT TO JURISDICTION AND VENUE. All judicial proceedings arising in or under or related to this Agreement, the Note or any of the other Loan Documents may be brought in any state or federal court of competent jurisdiction located in the State of Illinois. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to personal jurisdiction in Cook County, State of Illinois; (b) waives any objection as to jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement, the Note and the other Loan Documents. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in Section 10.8 below and shall be deemed effective and received as set forth in Section 10.8 below. Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

10.7 Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

10.8 Any notice required or given hereunder shall be deemed properly given upon the earlier of: (i) the first business day after transmission by facsimile or hand delivery or deposit with an overnight express service or overnight mail delivery service; or (ii) or three (3) days after mailed, postage prepaid, in each case, addressed to the designated recipient at its address set forth herein or such other address as such party may advise the other party by notice given in accordance with this provision.

10.9 Lender and Borrower acknowledge that there are no agreements or understandings, written or oral, between Lender and Borrower with respect to the Loan, other than as set forth herein, in the Note and the other Loan Documents and that this Agreement, the Note and the other Loan Documents contain the entire agreement between Lender and Borrower with respect thereto. None of the terms of this Agreement, the Note and the other Loan Documents may be amended except by an instrument executed by each of the parties hereto.

10.10 No omission, or delay, by Lender at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by Borrower at any time designated, shall be a waiver of any such right or remedy to which Lender is entitled, nor shall it in any way affect the right of Lender to enforce such provisions thereafter.

10.11 All agreements, representations and warranties contained in this Agreement or the Note, or in any Loan Documents delivered pursuant hereto or in connection herewith shall be for the benefit of Lender and any Assignee and shall survive the execution and delivery of this Agreement or the Note and the expiration or other termination of this Agreement or the Note.

10.12 This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

10.13 This Agreement shall be binding upon, and shall inure to the benefit of, Borrower and its permitted assigns (if any). Borrower shall not assign its obligations under this Agreement, the Note or any of the other Loan Documents without Lender's express written consent and any such attempted assignment shall be void and of no effect. Any assignment by Borrower in connection with a "Merger" (as defined below) shall be subject to Lender's prior consent. Any consent granted by Lender shall be conditioned upon such surviving entity or transferee assuming Borrower's Secured Obligations hereunder pursuant to assignment documents reasonably acceptable to Lender. If Lender reasonably withholds its consent to such assignment in connection with a Merger, the outstanding principal and accrued and unpaid interest shall be prepaid in whole without a prepayment premium.

For purposes of this Agreement, a "Merger" shall mean any consolidation or merger of the Borrower with or into any other corporation or entity, any sale or conveyance of an or substantially all of the assets or stock of the Borrower by or to any other person or entity in which Borrower is not the surviving entity.

IN WITNESS WHEREOF, the Borrower and the Lender have duly executed and delivered this Agreement as of the day and year first above written.

BORROWER: CYTOKINETICS, INCORPORATED.

By: /s/ JAMES SABRY

Title:

Date: _____

ACCEPTED IN ROSEMONT, ILLINOIS:

LENDER: COMDISCO, INC.

By: /s/ JILL C. HANSES

Title: JILL C. HANSES SENIOR VICE PRESIDENT

Date: DEC 23 1999

EXHIBIT A-1
SECURED PROMISSORY NOTE

Date: _____

$_____

Due: _____

FOR VALUE RECEIVED, Cytokinetics, Inc., Inc. a Delaware corporation (the "Borrower") hereby promises to pay to the order of Comdisco, Inc., a Delaware corporation (the "Lender") at P.O. Box 91744, Chicago, IL 60693 or such other place of payment as the holder of this Secured Promissory Note (this "Note") may specify from time to time in writing, in lawful money of the United States of America, the principal amount of _____and 00/100 Dollars ($_____) together with interest at eight and one quarter percent (8.25%) per annum from the date of this Note to maturity of each installment on the principal hereof remaining from time to time unpaid, such principal and interest to be paid 48 equal monthly installments of $_____each, commencing_____and on the same day of each month thereafter to and including_____ and an additional installment in the amount of $____(15%) ("Balloon Payment")* to be paid on_____, such installments to be applied first to accrued and unpaid interest and the balance to unpaid principal. Interest shall be computed on the basis of a year consisting of twelve months of thirty days each.

This Note is the Note referred to in, and is executed and delivered in connection with, that certain Loan and Security Agreement of even date herewith by and between Borrower and Lender (as the same may from time to time be amended, modified or supplemented in accordance with its terms, the "Loan Agreement"), and is entitled to the benefit and security of the Loan Agreement and the other Loan Documents (as defined in the Loan Agreement), to which reference is made for a statement of all of the terms and conditions thereof. All terms defined in the Loan Agreement shall have the same definitions when used herein, unless otherwise defined herein. Attached hereto as Exhibit B is a list of Collateral which is being financed with the proceeds of the Loan evidenced by this Note, which Collateral shall be deemed to be listed on Exhibit B to the Loan Agreement.

The Borrower waives presentment and demand for payment, notice of dishonor, protest and notice of protest and any other notice as permitted under the UCC or any applicable law.

This Note has been negotiated and delivered to Lender and is payable in the State of Illinois, and shall not become effective until accepted by Lender in the State of Illinois. This Note shall be governed by and construed and enforced in accordance with, the laws of the State of Illinois, excluding any conflicts of law rules or principles that would cause the application of the laws of any other jurisdiction.

BORROWER: CYTOKINETICS, INC.
280 East Grand Ave
South San Francisco, CA 94080

Signature: _____

Print Name: _____

Title: _____

* Borrower may request Lender to finance the Balloon Payment over 12 months at 8%. In that case a new promissory note will be prepared.

EXHIBIT A-2
SECURED PROMISSORY NOTE

Date: _____

$_____

Due: _____

FOR VALUE RECEIVED, Cytokinetics, Inc., Inc. a Delaware corporation (the "Borrower") hereby promises to pay to the order of Comdisco, Inc., a Delaware corporation (the "Lender") at P.O. Box 91744, Chicago, IL 60693 or such other place of payment as the holder of this Secured Promissory Note (this "Note") may specify from time to time in writing, in lawful money of the United States of America, the principal amount of _____and 00/100 Dollars ($ _____) together with interest at eight and one quarter percent (8.25%) per annum from the date of this Note to maturity of each installment on the principal hereof remaining from time to time unpaid, such principal and interest to be paid 36 equal monthly installments of $_____each, commencing_____and on the same day of each month thereafter to and including_____ and an additional installment in the amount of $____(15%) ("Balloon Payment")* to be paid on _____, such installments to be applied first to accrued and unpaid interest and the balance to unpaid principal. Interest shall be computed on the basis of a year consisting of twelve months of thirty days each.

This Note is the Note referred to in, and is executed and delivered in connection with, that certain Loan and Security Agreement of even date herewith by and between Borrower and Lender (as the same may from time to time be

amended, modified or supplemented in accordance with its terms, the "Loan Agreement"), and is entitled to the benefit and security of the Loan Agreement and the other Loan Documents (as defined in the Loan Agreement), to which reference is made for a statement of all of the terms and conditions thereof. All terms defined in the Loan Agreement shall have the same definitions when used herein, unless otherwise defined herein. Attached hereto as Exhibit B is a list of Collateral which is being financed with the proceeds of the Loan evidenced by this Note, which Collateral shall be deemed to be listed on Exhibit B to the Loan Agreement.

The Borrower waives presentment and demand for payment, notice of dishonor, protest and notice of protest and any other notice as permitted under the UCC or any applicable law.

This Note has been negotiated and delivered to Lender and is payable in the State of Illinois, and shall not become effective until accepted by Lender in the State of Illinois. This Note shall be governed by and construed and enforced in accordance with, the laws of the State of Illinois, excluding any conflicts of law rules or principles that would cause the application of the laws of any other jurisdiction.

BORROWER: CYTOKINETICS, INC.
280 East Grand Ave
South San Francisco, CA 94080

Signature: _____

Print Name: _____

Title: _____

* Borrower may request Lender to finance the Balloon Payment over 12 months at 8%. In that case a new promissory note will be prepared.

Amendment No. 1 to Loan and Security Agreement

This Amendment Agreement No. 1 ("Amendment") to the Loan and Security Agreement dated as of December 16, 1999 is entered into this 29 Th day of June, 2000 by and between Cytokinetics, Inc., a California corporation, with its chief executive offices and principal place of business at 280 East Grand Avenue, Suite 2, South San Francisco, CA 94080 ("Borrower") and Comdisco, Inc., a Delaware corporation, with its chief executive offices and principal place of business at 6111 North River Road, Rosemont, IL 60018 ("Lender").

RECITALS

WHEREAS, PURSUANT to the terms and conditions set forth in the Loan and Security Agreement dated as of December 16, 1999 between Borrower and Lender (hereinafter, "Loan Agreement"), the parties have entered into that certain Secured Promissory Note dated June 29, herewith (the "Note(s)") whereby for value received, Borrower promises to pay certain payments to Lender in the original principal amount of Six Hundred Twenty Seven Thousand Five Hundred Thirteen and 27/100 Dollars ($627,513.27);

WHEREAS, IN connection with the issuance of the Note, Lender and Borrower wish to amend the Loan Agreement to include the Exhibit B as required under the Loan Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and mutual agreements contained herein, Borrower and Lender hereby agree as follows:

1. Except as expressly set forth herein, all terms used herein shall have

the meanings set forth in the Loan Agreement.

2. Borrower and Lender agree that the Exhibit B attached hereto shall be incorporated and made a part of the Loan Agreement and the equipment described thereon shall be "Equipment" as set forth in the Loan Agreement.

3. Except as specifically amended hereby, the terms and conditions of the Loan Agreement are hereby reaffirmed and remain in full force and effect, and from and after the date hereof the "Agreement" shall mean the "Agreement" as amended by this Amendment.

4. This Amendment may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Borrower and Lender have duly executed and delivered this Amendment as of the day and year first above written.

BORROWER — CYTOKINETICS, INC

Signature: /s/ JAMES SABRY

Print Name: JAMES SABRY

Title: CEO

ACCEPTED IN ROSEMONT, ILLINOIS

LENDER — COMDISCO, INC.

Signature: _____

Print Name: _____

Title: _____

EXHIBIT B

CYTOKINETICS
SCHEDULE OF FIXED ASSETS

INVOICE DATE	VENDOR	DESCRIPTION	INVOICE #	SERIAL NO.	QTY
COMPUTER HARDWARE					
09/03/99	Dell	Dell PIII 500K GX1/T	272857823	4UJ1W	5
09/03/99	Dell	Dell 6450 PIII/MT	27322227	4UJ20	2
09/08/99	The Computer Guys	HP Procurve Switch 4000M	11485	SG92602333,SY1899,SY1699,000AJ14D767	
09/21/99	The Computer Guys	HP NetServer E60	11558	US93300835	
09/24/99	Dell	G810 21" Monitor	280963745	QI93098826,QI93098830,QI93098834	3
09/28/99	The Computer Guys	Shiva Lanrover/E	11592	PE 13005984	1
10/05/99	Dell	Dell 6450 PIII/MT	284567401	6HVIQ	1
10/06/99	Dell	Dell PIII 500K GX1/T	284566569	6JMA6	2
10/08/99	Dell	G810 21" Monitor	284564598	QI91584578	1
10/14/99	Dell	Inspiron 3500 A366GT	280591603	V3TG3	1
10/19/00	Dell	Dell PIII 500K GX1/T	288359367	7BA1L,7BA1S,7BA1X,7BA20,7BA21	5
10/29/99	Dell	G810 21" Monitor	292634888	n/a	1
11/04/99	Dell	Dell PIII 500K GX1/T	296076011	815TD;815TJ;815TM;815TR;815TY	5
11/08/99	The Computer Guys	HP Laser Jet 4050N	11958	USQC054318	1
11/09/99	The Computer Guys	IOMEGA Zip 100MB External	11971	n/a	1
11/10/99	The Computer Guys	HP NetServer LH4r Xeon 500	11975	n/a	1
11/22/99	The Computer Guys	HP Laser Jet 5000N	12111	n/a	1
12/21/99	Dell	Dell PIII 500K	313855363	BU1R6; BU1R8; BU1R9; BU1RB;BU1D1	5
12/23/99	Dell	Dimension 500MHZ,PIII	314609751		1
12/23/99	Dell	Dell 500PIII/M	314665654	CODIJ;CODIQ;CODIW;CODIZ	4
01/06/00	The Computer Guys	HP 18.2 Ultra 2 SCSI	12396	n/a	5
01/07/00	Dell	Dell PIII GX1/T+Base W/4MB	319602017	CLHV3;CLHV5;CLFV7;CLHV8;CLHVA	5
01/17/00	Dell	Dell 500PIII/M	322740937	CZUPL;CZUPP;CZUPS;CZUPV	4

INVOICE DATE	VENDOR	DESCRIPTION	INVOICE #	SERIAL NO.	QTY
Computer Software					
09/27/99	The MathWorks	Neural Network - Windows	99030491	n/a	3
10/12/99	The Computer Guys	Microsoft Project98	11710	n/a	5
			11710	n/a	2
			11710	n/a	1
11/15/99	Rogue Wave	DBTools.h++Core Library for V	38386	n/a	1
			38386	n/a	1
			38386	n/a	1
			38386	n/a	1
			38386	n/a	1
			38386	n/a	1
			38386	n/a	1
			38386	n/a	1
11/29/99	MathSoft	S-PLUS 2000 Professional for	82855-327270	n/a	2
12/28/99	InforMax, Inc.	Adv.Supp. Renewal for 2 Licer	4038 ASR	n/a	1
01/03/00	IDBS	Activity Base - HTSProject	30200	n/a	1
01/04/00	The Computer Guys	Microsoft MOLP-A	12379	n/a	25
			12379	n/a	25
01/06/00	MDL Inform Systems, [ILLEGIBLE]	Sculpt for windows 95/98/NT4	01.06.00	OCN00049069	1
01/10/00	MDL Inform Systems, [ILLEGIBLE]	Sculpt for windows on CD	706917	OCN00554031	1
01/18/00	Applikon	Bioexpert Windows NT Softwa	00042/310550 n/a		1

INVOICE DATE	VENDOR	DESCRIPTION	INVOICE #	SERIAL NO.	QTY
EQUIPMENT					
08/18/99	Composite Rotor	Centrifuge Sorval 6000rmp	0007224-IN	#7224,#7226 22794E2NTRC8,100000283,S01443,22794E2NT	
08/28/99	PE Biosystems	Geneamp 5700 SEQ DET Syst	90451346	RC8	
09/10/99	Beckman Coulter	Multimek 96,200UL	413325FT01		
09/16/99	Hudson Control Group	Platecrane 200100	6626	#11139-152	
09/21/99	BMG Labtechnologies	POLARstar Galaxy	1493	4030553	
10/07/99	CCS Packard	Standard Deck Plate	04-10-1485		
10/12/99	Microsource Discovery	Killer Plates	94841		
10/29/99	Hudson Control Group	Platecrane 200100	6641	#11139-163	
10/25/99	Linc-Quantum	HP-G1948A 1100 API	71170	US08410901	1
10/30/99	Li-Cor	Global IR2 DNA Sequencer	6202		
11/05/99	Comdisco Laboratory	New Brunswick G27 Shaker	15779		
11/12/99	Sanyo Sales & Supply [ILLEGIBLE]	Incubator C02	9813076-IN	90907519	1
11/17/99	MJ Research	PTC-2200	65847	EN010448,EN010460	
11/23/99	MJ Research	ALD-1244	66140		
12/13/99	CCS Packard	Platetrak PTS-120799-03.2	03-12-1713		
12/15/99	VWR Scientific	Rotoraps	2388195		
12/16/99	VWR Scientific	Pump,Syring Sage Mod M362	2405107		1
12/30/99	Universal Imaging Corp	Barcode Kit	7769	N781468, N895971	2
01/02/00	Sigma-Aldrich	Lopap-Pharm (SC011-1 Kit)	92520726		1
01/03/00	VWR Scientific	Pump 115V	2520170	KK081058	1
01/13/00	Universal Imaging Corp	HTS SU310	7816		
01/18/00	Bio-Rad	Ultramark Reader 110-240V	176691		
01/19/00	Marsh Biomedical	Plate Estate Storage System	245011	666/659/371	1
01/27/00	Varian	Prostar 210 SDM	1251025		

INVOICE DATE	VENDOR	DESCRIPTION	INVOICE #	SERIAL NO.	QTY
FURNITURE					
09/16/99	Corporate Interiors	Worksurface	1262	n/a	
09/23/99	Corporate Interiors	Regular Herman Shelf/H Herm	1317	A0520.1360, WR72	
10/01/99	Corporate Interiors	67"Hx48"W Powered Panel	1296 (Rev)	n/a	
10/01/99	Corporate Interiors	RA Stations	1348	n/a	
10/11/99	Corporate Interiors	BC Series Lab Stool w/Pneum [ILLEGIBLE]	1339	n/a	
10/20/99	Corporate Interiors	File Full Height Locking Pedes	1362	n/a	
10/20/99	Corporate Interiors	Ergonomic Clickit Arm w/Plata [ILLEGIBLE]	1350	n/a	
10/20/99	Corporate Interiors	60"Herman Miller Tack Board	1340	n/a	
10/21/99	Corporate Interiors	42"Four Drawer Locking	1331	n/a	
01/03/00	Corporate Interiors	4'x30" Workstation	1380	n/a	

INVOICE DATE	VENDOR	DESCRIPTION	INVOICE #	SERIAL NO.	QTY
TENANT IMPROVEMENT					
10/13/99	Sprig Electric	Install two 208V L(carat)NEMA circ [ILLEGIBLE]	36273	n/a	
10/13/99	Sprig Electric	Relocate power for equipment	36323	n/a	
10/13/99	Sprig Electric	Install furniture whips & pull 2- [ILLEGIBLE]	36374	n/a	
10/13/99	Sprig Electric	Repair flourescent lights	36384	n/a	
10/21/99	Sprig Electric	Replace high pressure fixtures	36429	n/a	
01/12/00	Peninsula Security Svc [ILLEGIBLE]	Radionics Readykey	13815	n/a	

Exhibit 4.6

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AS AMENDED, OR ANY STATE SECURITIES LAWS. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL (WHICH MAY BE COMPANY COUNSEL) REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY APPLICABLE STATE SECURITIES LAWS.

WARRANT AGREEMENT

TO PURCHASE SHARES OF THE SERIES B PREFERRED STOCK OF

CYTOKINETICS, INC.

DATED AS OF DECEMBER 16, 1999 (THE "EFFECTIVE DATE")

WHEREAS, Cytokenetics, Inc., a Delaware corporation (the "Company") has entered into a Loan And Security Agreement dated as of December 16,1999, and related Promissory Note(s) (collectively, the "Loans") with Comdisco, Inc., a Delaware corporation (the "Warrantholder"); and

WHEREAS, the Company desires to grant to Warrantholder, in consideration for such Loans, the right to purchase shares of its Series B Preferred Stock;

NOW, THEREFORE, in consideration of the Warrantholder executing and delivering such Loans and in consideration of mutual covenants and agreements contained herein, the Company and Warrantholder agree as follows:

1. GRANT OF THE RIGHT TO PURCHASE PREFERRED STOCK.

For the first $1,000,000 portion of the Loans, the Company hereby grants to the Warrantholder, and the Warrantholder is entitled, upon the terms and subject to the conditions hereinafter set forth, to subscribe to and purchase, from the Company, 14,483 fully paid and non-assessable shares of the Company's Series B Preferred Stock ("Preferred Stock") at a purchase price of $2.90 per share (the "Exercise Price") provided however, that from and after the effective date of the registration statement for the Company's initial public offering of its equity securities, the securities purchasable by the Warrantholder upon the exercise of this Warrant Agreement shall be shares of the Company's Common Stock ("Common Stock") which shares shall be purchasable by the Warrantholder in the same number that the Warrantholder would otherwise have been entitled to purchase had this Warrant Agreement remained exercisable for shares of the Company's Preferred Stock. From and after the effective date of the registration statement for the Company's initial public offering of its equity securities, the Warrantholder shall not have any further right pursuant to this Warrant Agreement to purchase shares of the Company's Preferred Stock. The shares of Preferred Stock or Common Stock that are issuable from time to time upon the exercise of this Warrant Agreement are sometimes referred to herein as the "Stock.

In the event that the Company requests and the Warrantholder funds any portion of the additional Advances between the first $1,000,000 and up to $2,000,000 as provided under the Loans, the Company hereby grants to the Warrantholder, and the Warrantholder is entitled, upon the terms and subject to the conditions hereinafter set forth, to subscribe for and purchase, from the Company, 14,483 shares of Stock at the Exercise Price.

In the event that the Company requests and the Warrantholder funds any portion of the additional Advances between the first $2,000,000 and up to $5,000,000 as provided under the Loans, the Company hereby grants to the Warrantholder, and the Warrantholder is entitled, upon the terms and subject to the conditions hereinafter set forth, to subscribe for and purchase, from the Company, 16,206 shares of Stock at the Exercise Price for each increment of

remaining $1,000,000 funded under the Loan.

For purposes of calculating the number of shares issuable hereunder, after the first dollar of each $1,000,000 installment is funded, the applicable number of shares referred to above shall be issuable. The number and purchase price of such shares are subject to adjustment as provided in Section 8 hereof.

2. TERM OF THE WARRANT AGREEMENT.

Except as otherwise provided for herein, the term of this Warrant Agreement and the right to purchase Stock as granted herein shall commence on the Effective Date and shall be exercisable for a period of (i) seven (7) years or (ii) three (3) years from the effective date of the Company's initial public offering, whichever is shorter.

3. EXERCISE OF THE PURCHASE RIGHTS.

The purchase rights set forth in this Warrant Agreement are exercisable by the Warrantholder, in whole or in part, at any time, or from time to time, prior to the expiration of the term set forth in Section 2 above, by tendering to the Company at its principal office a notice of exercise in the form attached hereto as Exhibit I (the "Notice of Exercise"), duly completed and executed. Promptly upon receipt of the Notice of Exercise and the payment of the purchase price in accordance with the terms set forth below, and in no event later than twenty-one (21) days thereafter, the Company shall issue to the Warrantholder a certificate for the number of shares of Stock purchased and shall execute the acknowledgment of exercise in the form attached hereto as Exhibit II (the "Acknowledgment of Exercise") indicating the number of shares which remain subject to future purchases, if any.

The Exercise Price may be paid at the Warrantholder's election either (i) by cash or check, or (ii) by surrender of Warrants ("Net Issuance") as determined below. If the Warrantholder elects the Net Issuance method, the Company will issue Stock in accordance with the following formula:

$$X = Y(A-B)/A$$

Where: X = the number of shares of Stock to be issued to the Warrantholder.

Y = the number of shares of Stock requested to be exercised under this Warrant Agreement.

A = the fair market value of one (1) share of Stock.

B = the Exercise Price.

For purposes of the above calculation, current fair market value of Stock shall mean with respect to each share of Stock:

(i) if the exercise is in connection with an initial public offering of the Company's Common Stock, and if the Company's Registration Statement relating to such public offering has been declared effective by the SEC, then the fair market value per share shall be the product of (x) the initial "Price to Public" specified in the final prospectus with respect to the offering and (y) the number of shares of Common Stock into which each share of Stock is convertible at the time of such exercise;

(ii) if this Warrant is exercised after, and not in connection with the Company's initial public offering, and:

(a) if traded on a securities exchange, the fair market value shall be deemed to be the product of (x) the average of the closing prices over a twenty-one (21) day

period ending three days before the day the current fair market value of the securities is being determined and (y) the number of shares of Common Stock into which each share of Stock is convertible at the time of such exercise; or

(b) if actively traded over-the-counter, the fair market value shall be deemed to be the product of (x) the average of the closing bid and asked prices quoted on the NASDAQ system (or similar system) over the twenty-one (21) day period ending three days before the day the current fair market value of the securities is being determined and (y) the number of shares of Common Stock into which each share of Stock is convertible at the time of such exercise;

(iii) if at any time the Common Stock is not listed on any securities exchange or quoted in the NASDAQ System or the over-the-counter market, the current fair market value of Stock shall be the product

of (x) the highest price per share which the Company could obtain from a willing buyer (not a current employee or director) for shares of Common Stock sold by the Company, from authorized but unissued shares, as determined in good faith by its Board of Directors and (y) the number of shares of Common Stock into which each shares of Stock is convertible at the time of such exercise unless the Company shall become subject to a merger, acquisition or other consolidation pursuant to which the Company is not the surviving party, in which case the fair market value of Stock shall be deemed to be the value received by the holders of the Company's Stock on a common equivalent basis pursuant to such merger or acquisition.

Upon partial exercise by either cash or Net Issuance, the Company shall promptly issue an amended Warrant Agreement representing the remaining number of shares purchasable hereunder. All other terms and conditions of such amended Warrant Agreement shall be identical to those contained herein, including, but not limited to the Effective Date hereof.

4. RESERVATION OF SHARES.

(a) Authorization and Reservation of Shares. During the term of this Warrant Agreement, the Company will at all times have authorized and reserved a sufficient number of shares of its Stock to provide for the exercise of the rights to purchase Stock as provided for herein.

(b) Registration or Listing. If any shares of Stock required to be reserved hereunder require registration with or approval of any governmental authority under any Federal or State law (other than any registration under the Securities Act of 1933, as amended ("1933 Act"), as then in effect, or any similar Federal statute then enforced, or any state securities law, required by reason of any transfer involved in such conversion), or listing on any domestic securities exchange, before such shares may be issued upon conversion, the Company will, at its expense and as expeditiously as possible, use its best efforts to cause such shares to be duly registered, listed or approved for listing on such domestic securities exchange, as the case may be.

5. NO FRACTIONAL SHARES OR SCRIP.

No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the Warrant, but in lieu of such fractional shares the Company shall make a cash payment therefor upon the basis of the Exercise Price then in effect.

6. NO RIGHTS AS SHAREHOLDER.

This Warrant Agreement does not entitle the Warrantholder to any voting

rights or other rights as a shareholder of the Company prior to the exercise of the Warrant.

7. WARRANTHOLDER REGISTRY.

The Company shall maintain a registry showing the name and address of the registered holder of this Warrant Agreement.

8. ADJUSTMENT RIGHTS.

The purchase price per share and the number of shares of Stock purchasable hereunder are subject to adjustment, as follows:

(a) Merger and Sale of Assets. If at any time there shall be a capital reorganization of the shares of the Company's stock (other than a combination, reclassification, exchange or subdivision of shares otherwise provided for herein), or a merger or consolidation of the Company with or into another corporation whether or not the Company is the surviving corporation, or the sale of all or substantially all of the Company's properties and assets to any other person (hereinafter referred to as a "Merger Event"), then, as a part of such Merger Event, lawful provision shall be made so that the Warrantholder shall thereafter be entitled to receive, upon exercise of the Warrant, the number of shares of preferred stock or other securities of the successor corporation resulting from such Merger Event, equivalent in value to that which would have been issuable if Warrantholder had exercised this Warrant immediately prior to the Merger Event. In any such case, appropriate adjustment (as determined in good faith by the Company's Board of Directors) shall be made in the application of the provisions of this Warrant Agreement with respect to the rights and interest of the Warrantholder after the Merger Event to the end that the provisions of this

Warrant Agreement (including adjustments of the Exercise Price and number of shares of Preferred Stock purchasable) shall be applicable to the greatest extent possible.

(b) Reclassification of Shares. If the Company at any time shall, by combination, reclassification, exchange or subdivision of securities or otherwise, change any of the securities as to which purchase rights under this Warrant Agreement exist into the same or a different number of securities of any other class or classes, this Warrant Agreement shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant Agreement immediately prior to such combination, reclassification, exchange, subdivision or other change.

(c) Subdivision or Combination of Shares. If the Company at any time shall combine or subdivide its Stock, the Exercise Price shall be proportionately decreased in the case of a subdivision, or proportionately increased in the case of a combination.

(d) Stock Dividends. If the Company at any time shall pay a dividend payable in, or make any other distribution (except any distribution specifically provided for in the foregoing subsections (a) or (b)) of the Company's stock, then the Exercise Price shall be adjusted, from and after the record date of such dividend or distribution, to that price determined by multiplying the Exercise Price in effect immediately prior to such record date by a fraction (i) the numerator of which shall be the total number of all shares of the Company's stock outstanding immediately prior to such dividend or distribution, and (ii) the denominator of which shall be the total number of all shares of the Company's stock outstanding immediately after such dividend or distribution. The Warrantholder shall thereafter be entitled to purchase, at the Exercise Price resulting from such adjustment, the number of shares of Stock (calculated to the nearest whole share) obtained by multiplying the Exercise Price in effect immediately prior to such adjustment by the number of shares of Stock issuable upon the exercise hereof immediately prior to such adjustment and

dividing the product thereof by the Exercise Price resulting from such adjustment.

(e) Antidilution Rights. Additional antidilution rights applicable to the Preferred Stock purchasable hereunder are as set forth in the Company's Certificate of Incorporation, as amended through the Effective Date, a true and complete copy of which is attached hereto as Exhibit _ (the "Charter"). The Company shall promptly provide the Warrantholder with any restatement, amendment, modification or waiver of the Charter. The Company shall provide Warrantholder with prior written notice of any issuance of its stock or other equity security to occur after the Effective Date of this Warrant, which notice shall include (a) the price at which such stock or security is to be sold, (b) the number of shares to be issued, and (c) such other information as necessary for Warrantholder to determine if a dilutive event has occurred.

(f) Notice of Adjustments. If: (i) the Company shall declare any dividend or distribution upon its stock, whether in cash, property, stock or other securities; (ii) the Company shall offer for subscription prorata to the holders of any class of its Preferred or other convertible stock any additional shares of stock of any class or other rights; (iii) there shall be any Merger Event; (iv) there shall be an initial public offering; or (v) there shall be any voluntary dissolution, liquidation or winding up of the Company; then, in connection with each such event, the Company shall send to the Warrantholder: (A) at least twenty (20) days' prior written notice of the date on which the books of the Company shall close or a record shall be taken for such dividend, distribution, subscription rights (specifying the date on which the holders of Stock shall be entitled thereto) or for determining rights to vote in respect of such Merger Event, dissolution, liquidation or winding up; (B) in the case of any such Merger Event, dissolution, liquidation or winding up, at least twenty (20) days' prior written notice of the date when the same shall take place (and specifying the date on which the holders of Stock shall be entitled to exchange their Stock for securities or other property deliverable upon such Merger Event, dissolution, liquidation or winding up); and (C) in the case of a public offering, the Company shall give the Warrantholder at least twenty (20) days written notice prior to the effective date thereof.

Each such written notice shall set forth, in reasonable detail, (i) the event requiring the adjustment, (ii) the amount of the adjustment, (iii) the method by which such adjustment was calculated, (iv) the Exercise Price, and (v) the number of shares subject to purchase hereunder after giving effect to such adjustment, and shall be given by first class mail, postage prepaid, addressed to the Warrantholder, at the address as shown on the books of the Company.

(g) Timely Notice. Failure to timely provide such notice required by subsection (f) above shall entitle Warrantholder to retain the benefit of the applicable notice period notwithstanding anything to the contrary contained

in any insufficient notice received by Warrantholder. The notice period shall begin on the date Warrantholder actually receives a written notice containing all the information specified above.

9. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

(a) Reservation of Stock. The Stock issuable upon exercise of the Warrantholder's rights has been duly and validly reserved and, when issued in accordance with the provisions of this Warrant Agreement, will be validly issued, fully paid and non-assessable, and will be free of any taxes, liens, charges or encumbrances of any nature whatsoever; provided, however, that the Stock issuable pursuant to this Warrant Agreement may be subject to restrictions on transfer under state and/or Federal securities laws. The Company has made available to the Warrantholder true, correct and complete copies of its Charter and Bylaws, as amended. The issuance of certificates for shares of Stock upon exercise of the Warrant Agreement shall be made without charge to the Warrantholder for any issuance tax in respect thereof, or other cost incurred by the Company in connection with such exercise and the related issuance of shares

of Stock. The Company shall not be required to pay any tax which may be payable in respect of any transfer involved and the issuance and delivery of any certificate in a name other than that of the Warrantholder.

(b) Due Authority. The execution and delivery by the Company of this Warrant Agreement and the performance of ail obligations of the Company hereunder, including the issuance to Warrantholder of the right to acquire the shares of Stock, have been duly authorized by all necessary corporate action on the part of the Company, and the Loans and this Warrant Agreement are not inconsistent with the Company's Charter or Bylaws, do not contravene any law or governmental rule, regulation or order applicable to it, do not and will not contravene any provision of, or constitute a default under, any indenture, mortgage, contract or other instrument to which it is a party or by which it is bound, and the Loans and this Warrant Agreement constitute legal, valid and binding agreements of the Company, enforceable in accordance with their respective terms.

(c) Consents and Approvals. No consent or approval of, giving of notice to, registration with, or taking of any other action in respect of any state, Federal or other governmental authority or agency is required with respect to the execution, delivery and performance by the Company of its obligations under this Warrant Agreement, except for the filing of notices pursuant to Regulation D under the 1933 Act and any filing required by applicable state securities law, which filings will be effective by the time required thereby.

(d) Issued Securities. All issued and outstanding shares of Common Stock, Preferred Stock or any other securities of the Company have been duly authorized and validly issued and are fully paid and nonassessable. All outstanding shares of Common Stock, Preferred Stock and any other securities were issued in full compliance with all Federal and state securities laws. In addition:

(i) The authorized capital of the Company consists of (A) 10,000,000 shares of Common Stock, of which 1,126,110 shares are issued and outstanding, and (B) 5,550,000 shares of preferred stock, of which 5,300,000 shares are issued and outstanding and are convertible into 5,550,000 shares of Common Stock at $1.00 per share.

(ii) The Company has reserved (A) 2,000,000 shares of Common Stock for issuance under its under its 1997 Stock Option/Stock Issuance Plan under which 1,503,890 options have been granted. There are no other options, warrants, conversion privileges or other rights presently outstanding to purchase or otherwise acquire any authorized but unissued shares of the Company's capital stock or other securities of the Company.

(iii) In accordance with the Company's Articles of Incorporation, no shareholder of the Company has preemptive rights to purchase new issuances of the Company's capital stock.

(e) Insurance. The Company has in full force and effect insurance policies, with extended coverage, insuring the Company and its property and business against such losses and risks, and in such amounts, as are customary for corporations engaged in a similar business and similarly situated and as otherwise may be required pursuant to the terms of any other contract or agreement.

(f) Exempt Transaction. Subject to the accuracy of the Warrantholder's representations in Section 10 hereof, the issuance of the Stock upon exercise of this Warrant will constitute a transaction exempt from (i) the

registration requirements of Section 5 of the 1933 Act, in reliance upon Section 4(2) thereof, and (ii) the qualification requirements of the applicable state securities laws.

(g) Compliance with Rule 144. At the written request of the Warrantholder, who proposes to sell Stock issuable upon the exercise of the Warrant in compliance with Rule 144 promulgated by the Securities and Exchange Commission, the Company shall furnish to the Warrantholder, within ten days after receipt of such request, a written statement confirming the Company's compliance with the filing requirements of the Securities and Exchange Commission as set forth in such Rule, as such Rule may be amended from time to time.

10. REPRESENTATIONS AND COVENANTS OF THE WARRANTHOLDER.

This Warrant Agreement has been entered into by the Company in reliance upon the following representations and covenants of the Warrantholder:

(a) Investment Purpose. The right to acquire Stock issuable upon exercise of the Warrantholder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Warrantholder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Private Issue. The Warrantholder understands (i) that the Stock issuable upon exercise of this Warrant is not registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuance contemplated by this Warrant Agreement will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations set forth in this Section 10.

(c) Disposition of Warrantholder's Rights. In no event will the Warrantholder make a disposition of any of its rights to acquire Stock issuable upon exercise of such rights unless and until (i) it shall have notified the Company of the proposed disposition, and (ii) if requested by the Company, it shall have furnished the Company with an opinion of counsel (which counsel may either be inside or outside counsel to the Warrantholder) satisfactory to the Company and its counsel to the effect that (A) appropriate action necessary for compliance with the 1933 Act has been taken, or (B) an exemption from the registration requirements of the 1933 Act is available. Notwithstanding the foregoing, the restrictions imposed upon the transferability of any of its rights to acquire Stock issuable on the exercise of such rights do not apply to transfers from the beneficial owner of any of the aforementioned securities to its nominee or from such nominee to its beneficial owner, and shall terminate as to any particular share of Stock when (1) such security shall have been effectively registered under the 1933 Act and sold by the holder thereof in accordance with such registration or (2) such security shall have been sold without registration in compliance with Rule 144 under the 1933 Act, or (3) a letter shall have been issued to the Warrantholder at its request by the staff of the Securities and Exchange Commission or a ruling shall have been issued to the Warrantholder at its request by such Commission stating that no action shall be recommended by such staff or taken by such Commission, as the case may be, if such security is transferred without registration under the 1933 Act in accordance with the conditions set forth in such letter or ruling and such letter or ruling specifies that no subsequent restrictions on transfer are required. Whenever the restrictions imposed hereunder shall terminate, as hereinabove provided, the Warrantholder or holder of a share of Stock then outstanding as to which such restrictions have terminated shall be entitled to receive from the Company, without expense to such holder, one or more new certificates for the Warrant or for such shares of Stock not bearing any restrictive legend.

(d) Financial Risk. The Warrantholder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment, and has the ability to bear the economic risks of its investment.

(e) Risk of No Registration. The Warrantholder understands that if the Company does not register with the Securities and Exchange Commission pursuant to Section 12 of the 1934 Act (the "1934 Act"), or file reports

pursuant to Section 15(d), of the 1934 Act", or if a registration statement covering the securities under the 1933 Act is not in effect when it desires to sell (i) the rights to purchase Stock pursuant to this Warrant Agreement, or (ii) the Stock issuable upon exercise of the right to purchase, it may be required to hold such securities for an indefinite period. The Warrantholder also understands that any sale of its rights of the Warrantholder to purchase Stock which might be made by it in reliance upon Rule 144 under the 1933 Act may be made only in accordance with the terms and conditions of that Rule.

(f) Accredited Investor. Warrantholder is an "accredited investor" within the meaning of the Securities and Exchange Rule 501 of Regulation D, as presently in effect.

11. TRANSFERS.

Subject to the terms and conditions contained in Section 10 hereof, this Warrant Agreement and all rights hereunder are transferable in whole or in part by the Warrantholder and any successor transferee, provided, however, in no event shall the number of transfers of the rights and interests in all of the Warrants exceed three (3) transfers. The transfer shall be recorded on the books of the Company upon receipt by the Company of a notice of transfer in the form attached hereto as Exhibit III (the "Transfer Notice"), at its principal offices and the payment to the Company of all transfer taxes and other governmental charges imposed on such transfer.

12. MISCELLANEOUS.

(a) Effective Date. The provisions of this Warrant Agreement shall be construed and shall be given effect in all respects as if it had been executed and delivered by the Company on the date hereof. This Warrant Agreement shall be binding upon any successors or assigns of the Company.

(b) Attorney's Fees. In any litigation, arbitration or court proceeding between the Company and the Warrantholder relating hereto, the prevailing party shall be entitled to attorneys' fees and expenses and all costs of proceedings incurred in enforcing this Warrant Agreement.

(c) Governing Law. This Warrant Agreement shall be governed by and construed for all purposes under and in accordance with the laws of the State of Illinois.

(d) Counterparts. This Warrant Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(e) Notices. Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery, facsimile transmission (provided that the original is sent by personal delivery or mail as hereinafter set forth) or seven (7) days after deposit in the United States mail, by registered or certified mail, addressed (i) to the Warrantholder at 6111 North River Road, Rosemont, Illinois 60018, attention: Venture Lease Administration, cc: Legal Department, attn.: General Counsel, (and/or, if by facsimile, (847) 518-5465 and (847)518-5088 and (ii) to the Company at 280 East Grand Avenue, Suite 2, South San Francisco, CA 94080, attention: President (and/or if by facsimile, (650) 624-3010 or at such other address as any such party may subsequently designate by written notice to the other party.

(f) Remedies. In the event of any default hereunder, the non-defaulting party may proceed to protect and enforce its rights either by suit in equity and/or by action at law, including but not limited to an action for damages as a result of any such default, and/or an action for specific performance for any default where Warrantholder will not have an adequate remedy at law and where damages will not be readily ascertainable. The Company expressly agrees that it shall not oppose an application by the Warrantholder or any other person entitled to the benefit of this Agreement requiring specific

performance of any or all provisions hereof or enjoining the Company from continuing to commit any such breach of this Agreement.

(g) No Impairment of Rights. The Company will not, by amendment of its Charter or through any other means, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate in order to protect the rights of the Warrantholder against impairment.

(h) Survival. The representations, warranties, covenants and conditions of the respective parties contained herein or made pursuant to this Warrant Agreement shall survive the execution and delivery of this Warrant Agreement.

(i) Severability. In the event any one or more of the provisions of this Warrant Agreement shall for any reason be held invalid, illegal or unenforceable, the remaining provisions of this Warrant Agreement shall be unimpaired, and the invalid, illegal or unenforceable provision shall be replaced by a mutually acceptable valid, legal and enforceable provision, which comes closest to the intention of the parties underlying the invalid, illegal or unenforceable provision.

(j) Amendments. Any provision of this Warrant Agreement may be amended by a written instrument signed by the Company and by the Warrantholder.

IN WITNESS WHEREOF, the parties hereto have caused this Warrant Agreement to be executed by its officers thereunto duly authorized as of the Effective Date.

COMPANY: CYTOKENETICS, INC.

By: /s/ JAMES SABRY

Title:_____

WARRANTHOLDER: COMDISCO, INC,

By: /s/ JILL C. HANSES

Title: SENIOR VICE PRESIDENT

EXHIBIT I

NOTICE OF EXERCISE

TO: _____

(1) The undersigned Warrantholder hereby elects to purchase. _____shares of the Series A Preferred Stock of _____, pursuant to the terms of the Warrant Agreement dated the _____ day of _____, 19__ (the "Warrant Agreement") between _____ and the Warrantholder, and tenders herewith payment of the purchase price for such shares in full, together with all applicable transfer taxes, if any.

(2) In exercising its rights to purchase the Series A Preferred Stock of ____, the undersigned hereby confirms and acknowledges the investment representations and warranties made in Section 10 of the Warrant Agreement.

(3) Please issue a certificate or certificates representing said shares of Series A Preferred Stock in the name of the undersigned or in such other name as is specified below.

_____
(Name)

_____
(Address)

WARRANTHOLDER: COMDISCO, INC.

By: _____

Title: _____

Date: _____

EXHIBIT II

ACKNOWLEDGMENT OF EXERCISE

The undersigned _____, hereby acknowledge receipt of the "Notice of Exercise" from Comdisco, Inc., to purchase _____ shares of the Series A Preferred Stock of _____ pursuant to the terms of the Warrant Agreement, and further acknowledges that _____ shares remain subject to purchase under the terms of the Warrant Agreement.

COMPANY:

By: _____

Title: _____

Date: _____

EXHIBIT III

TRANSFER NOTICE

(TO TRANSFER OR ASSIGN THE FOREGOING WARRANT AGREEMENT EXECUTE THIS FORM AND SUPPLY REQUIRED INFORMATION. DO NOT USE THIS FORM TO PURCHASE SHARES.)

FOR VALUE RECEIVED, the foregoing Warrant Agreement and all rights evidenced thereby are hereby transferred and assigned to

_____
(Please Print)

whose address is_____

_____

Dated: _____

Holder's Signature: _____

Holder's Address: _____

_____

Signature Guaranteed: _____

NOTE: The signature to this Transfer Notice must correspond with the name as it appears on the face of the Warrant Agreement, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant Agreement.

Exhibit 4.7

MASTER SECURITY AGREEMENT
dated as of FEBRUARY 2, 2001 ("AGREEMENT")

THIS AGREEMENT is between GENERAL ELECTRIC CAPITAL CORPORATION (together with its successors and assigns, if any, "SECURED PARTY") and CYTOKINETICS, INCORPORATED ("DEBTOR"). Secured Party has an office at 401 Merritt 7 2nd Floor, Norwalk, CT 06856. Debtor is a corporation organized and existing under the laws of the state of Delaware. Debtor's mailing address and chief place of business is 280 East Grand Avenue, Suite 2, South San Francisco, CA 9408O.

1. CREATION OF SECURITY INTEREST.

Debtor grants to Secured Party, its successors and assigns, a security interest in and against all property listed on any collateral schedule now or in the future annexed to or made a part of this Agreement ("COLLATERAL SCHEDULE"), and in and against all additions, attachments, accessories and accessions to such property, all substitutions, replacements or exchanges therefor, and all insurance and/or other proceeds thereof (all such property is individually and collectively called the "COLLATERAL"). This security interest is given to secure the payment and performance of all debts, obligations and liabilities of any kind whatsoever of Debtor to Secured Party, now existing or arising in the future, including but not limited to the payment and performance of certain Promissory Notes from time to time identified on any Collateral Schedule (collectively "NOTES" and each a "NOTE"), and any renewals, extensions and modifications of such debts, obligations and liabilities (such Notes, debts, obligations and liabilities are called the "INDEBTEDNESS"). Notwithstanding anything to the contrary contained in this Agreement, to the extent that Secured Party asserts a purchase money security interest in any items of Collateral ("PMSI COLLATERAL"): (i) the PMSI COLLATERAL shall secure only that portion of the Indebtedness which has been advanced by Secured Party to enable Debtor to purchase, or acquire rights in or the use of such PMSI Collateral (the "PMSI INDEBTEDNESS"), and (ii) no other Collateral shall secure the PMSI Indebtedness.

2. REPRESENTATIONS, WARRANTIES AND COVENANTS OF DEBTOR.

Debtor represents, warrants and covenants as of the date of this Agreement and as of the date of each Collateral Schedule that:

(a) Debtor is, and will remain, duly organized, existing and in good standing under the laws of the State set forth in the preamble of this Agreement, has its chief executive offices at the location specified in the preamble, and is, and will remain, duly qualified and licensed in every jurisdiction wherever necessary to carry on its business and operations;

(b) Debtor has adequate power and capacity to enter into, and to perform its obligations under this Agreement, each Note and any other documents evidencing, or given in connection with, any of the Indebtedness (all of the foregoing are called the "DEBT DOCUMENTS");

(c) This Agreement and the other Debt Documents have been duly authorized, executed and delivered by Debtor and constitute legal, valid and binding agreements enforceable in accordance with their terms, except to the extent that the enforcement of remedies may be limited under applicable bankruptcy and insolvency laws;

(d) No approval, consent or withholding of objections is required from any governmental authority or instrumentality with respect to the entry into, or performance by Debtor of any of the Debt Documents, except any already obtained;

(e) The entry into, and performance by, Debtor of the Debt Documents will not (i) violate any of the organizational documents of Debtor or any judgment, order, law or regulation applicable to Debtor, or (ii) result in any breach of or constitute a default under any contract to which Debtor is a party,

or result in the creation of any lien, claim or encumbrance on any of Debtor's property (except for liens in favor of Secured Party) pursuant to any indenture, mortgage, deed of trust, bank loan, credit agreement, or other agreement or instrument to which Debtor is a party;

(f) There are no suits or proceedings pending in court or before any commission, board or other administrative agency against or affecting Debtor which could, in the aggregate, have a material adverse effect on Debtor, its business or operations, or its ability to perform its obligations under the Debt Documents, nor does Debtor have reason to believe that any such suits or proceedings are threatened;

(g) All financial statements delivered to Secured Party in connection with the Indebtedness have been prepared in accordance with generally accepted accounting principles, and since the date of the most recent financial statement, there has been no material adverse change in Debtors financial condition;

(h) The Collateral is not, and will not be, used by Debtor for personal, family or household purposes;

(i) The Collateral is, and will remain, in good condition and repair and Debtor will not be negligent in its care and use;

(j) Debtor is, and will remain, the sole and lawful owner, and in possession of the Collateral, and has the sole right and lawful authority to grant the security interest described in this Agreement; and

(k) The Collateral is, and will remain, free and clear of all liens, claims and encumbrances of any kind whatsoever, except for (i) liens in favor of Secured Party, (ii) liens for taxes not yet due or for taxes being contested in good faith and which do not involve, in the judgment of Secured Party, any risk of the sale, forfeiture or loss of any of the Collateral, and (iii) inchoate materialmen's, mechanic's, repairmen's and similar liens arising by operation of law in the normal course of business for amounts which are not delinquent (all of such liens are called "PERMITTED LIENS").

3. COLLATERAL.

(a) Until the declaration of any default, Debtor shall remain in possession of the Collateral; except that Secured Party shall have the right to possess (i) any chattel paper or instrument that constitutes a part of the Collateral, and (ii) any other Collateral in which Secured Party's security interest may be perfected only by possession. Secured Party may inspect any of the Collateral during normal business hours after giving Debtor reasonable prior notice. If Secured Party asks, Debtor will promptly notify Secured Party in writing of the location of any Collateral.

(b) Debtor shall (i) use the Collateral only in its trade or business, (ii) maintain all of the Collateral in good operating order and repair, normal wear and tear excepted, (iii) use and maintain the Collateral only in compliance with manufacturers recommendations and all applicable laws, and (iv) keep all of the Collateral free and clear of all liens, claims and encumbrances (except for Permitted Liens).

(c) Debtor shall not, without the prior written consent of Secured Party, (i) part with possession of any of the Collateral (except to Secured Party or for maintenance and repair), (ii) remove any of the Collateral from the continental United States, or (iii) sell, rent, lease, mortgage, grant a security interest in or otherwise transfer or encumber (except for Permitted Liens) any of the Collateral.

(d) Debtor shall pay promptly when due all taxes, license fees, assessments and public and private charges levied or assessed on any of the Collateral, on its use, or on this Agreement or any of the other Debt Documents. At its option, Secured Party may discharge taxes, liens, security interests or

other encumbrances at any time levied or placed on the Collateral and may pay for the maintenance, insurance and preservation of the Collateral and effect compliance with the terms of this Agreement or any of the other Debt Documents. Debtor agrees to reimburse Secured Party, on demand, all costs and expenses incurred by Secured Party in connection with such payment or performance and agrees that such reimbursement obligation shall constitute Indebtedness.

(e) Debtor shall, at all times, keep accurate and complete records of the Collateral, and Secured Party shall have the right to inspect and make copies of all of Debtor's books and records relating to the Collateral during normal business hours, after giving Debtor reasonable prior notice.

(f) Debtor agrees and acknowledges that any third person who may at any time possess all or any portion of the Collateral shall be deemed to hold, and shall hold, the Collateral as the agent of, and as pledge holder for, Secured Parry. Secured Party may at any time give notice to any third person described in the preceding sentence that such third person is holding the Collateral as the agent of, and as pledge holder for, the Secured Party.

4. INSURANCE.

(a) Debtor shall at all times bear the entire risk of any loss, theft, damage to, or destruction of, any of the Collateral from any cause whatsoever.

(b) Debtor agrees to keep the Collateral insured against loss or damage by fire and extended coverage perils, theft, burglary, and for any or all Collateral which are vehicles, for risk of loss by collision, and if requested by Secured Party, against such other risks as Secured Party may reasonably require. The insurance coverage shall be in an amount no less than the full replacement value of the Collateral, and deductible amounts, insurers and policies shall be acceptable to Secured Party. Debtor shall deliver to Secured Party policies or certificates of insurance evidencing such coverage. Each policy shall name Secured Party as a loss payee, shall provide for coverage to Secured Party regardless of the breach by Debtor of any warranty or representation made therein, shall not be subject to co-insurance, and shall provide that coverage may not be canceled or altered by the insurer except upon thirty (30) days prior written notice to Secured Party. Debtor appoints Secured Party as its attorney-in-fact to make proof of loss, claim for insurance and adjustments with insurers, and to receive payment of and execute or endorse all documents, checks or drafts in connection with insurance payments. Secured Party shall not act as Debtors attorney-in-fact unless Debtor is in default. Proceeds of insurance shall be applied, at the option of Secured Party, to repair or replace the Collateral or to reduce any of the Indebtedness.

5. REPORTS.

(a) Debtor shall promptly notify Secured Party of (i) any change in the name of Debtor, (ii) any relocation of its chief executive offices, (iii) any relocation of any of the Collateral, (iv) any of the Collateral being lost, stolen, missing, destroyed, materially damaged or worn out, or (v) any lien, claim or encumbrance other than Permitted Liens attaching to or being made against any of the Collateral.

(b) Debtor will deliver to Secured Party Debtors complete financial statements, certified by a recognized firm of certified public accountants, within ninety (90) days of the close of each fiscal year of Debtor. If Secured Party requests, Debtor will deliver to Secured Party copies of Debtors quarterly financial reports certified by Debtors chief financial officer, within ninety (90) days after the close of each of Debtors fiscal quarter. Debtor will deliver to Secured Party copies of all Forms 10-K and 10-Q, if any, within 30 days after the dates on which they are filed with the Securities and Exchange Commission.

6. FURTHER ASSURANCES.

(a) Debtor shall, upon request of Secured Party, furnish to Secured Party such further information, execute and deliver to Secured Party such documents and instruments (including, without limitation, Uniform Commercial Code financing statements) and shall do such other acts and things as Secured

Party may at any time reasonably request relating to the perfection or protection of the security interest created by this Agreement or for the purpose of carrying out the intent of this Agreement. Without limiting the foregoing, Debtor shall cooperate and do all acts deemed necessary or advisable by Secured Party to continue in Secured Party a perfected first security interest in the Collateral, and shall obtain and furnish to Secured Party any subordinations, releases, landlord, lessor, or mortgagee waivers, and similar documents as may be from time to time requested by, and in form and substance satisfactory to, Secured Party.

(b) Debtor irrevocably grants to Secured Party the power to sign Debtor's name and generally to act on behalf of Debtor to execute and file applications for title, transfers of title, financing statements, notices of lien and other documents pertaining to any or all of the Collateral; this power is coupled with Secured Party's interest in the Collateral. Debtor shall, if any certificate of title be required or permitted by law for any of the Collateral, obtain and promptly deliver to Secured Party such certificate showing the lien of this Agreement with respect to the Collateral.

(c) Debtor shall indemnify and defend the Secured Party, its successors and assigns, and their respective directors, officers and employees, from and against all claims, actions and suits (including, without limitation, related attorneys' fees) of any kind whatsoever arising, directly or indirectly, in connection with any of the Collateral.

7. DEFAULT AND REMEDIES.

(a) Debtor shall be in default under this Agreement and each of the other Debt Documents if:

(i) Debtor breaches its obligation to pay when due any installment or other amount due or coming due under any of the Debt Documents

(ii) Debtor, without the prior written consent of Secured Party, attempts to or does sell, rent, lease, mortgage, grant a security interest in, or

otherwise transfer or encumber (except for Permitted Liens) any of the Collateral;

(iii) Debtor breaches any of its insurance obligations under Section 4;

(iv) Debtor breaches any of its other obligations under any of the Debt Documents and fails to cure that breach within thirty (30) days after written notice from Secured Party;

(v) Any warranty, representation or statement made by Debtor in any of the Debt Documents or otherwise in connection with any of the Indebtedness shall be false or misleading in any material respect;

(vi) Any of the Collateral is subjected to attachment, execution, levy, seizure or confiscation in any legal proceeding or otherwise, or if any legal or administrative proceeding is commenced against Debtor or any of the Collateral, which in the good faith judgment of Secured Party subjects any of the Collateral to a material risk of attachment, execution, levy, seizure or confiscation and no bond is posted or protective order obtained to negate such risk;

(vii) Debtor breaches or is in default under any other agreement between Debtor and Secured Party;

(viii) Debtor or any guarantor or other obligor for any of the Indebtedness (collectively "GUARANTOR") dissolves, terminates its existence, becomes insolvent or ceases to do business as a going concern;

(ix) If Debtor or any Guarantor is a natural person, Debtor or

any such Guarantor dies or becomes incompetent;

(x) A receiver is appointed for all or of any part of the property of Debtor or any Guarantor, or Debtor or any Guarantor makes any assignment for the benefit of creditors; or

(xi) Debtor or any Guarantor files a petition under any bankruptcy, insolvency or similar law, or any such petition is filed against Debtor or any Guarantor and is not dismissed within forty-five (45) days

(b) If Debtor is in default, the Secured Party, at its option, may declare any or all of the Indebtedness to be immediately due and payable, without demand or notice to Debtor or any Guarantor. The accelerated obligations and liabilities shall bear interest (both before and after any judgment) until paid in full at the lower of eighteen percent (18%) per annum or the maximum rate not prohibited by applicable law.

(c) After default, Secured Party shall have all of the rights and remedies of a Secured Party under the Uniform Commercial Code, and under any other applicable law. Without limiting the foregoing, Secured Party shall have the right to (i) notify any account debtor of Debtor or any obligor on any instrument which constitutes part of the Collateral to make payment to the Secured Party, (ii) with or without legal process, enter any premises where the Collateral may be and take possession of and remove the Collateral from the premises or store it on the premises, (iii) sell the Collateral at public or private sale, in whole or in part, and have the right to bid and purchase at said sale, or (iv) lease or otherwise dispose of all or part of the Collateral, applying proceeds from such disposition to the obligations then in default. If requested by Secured Party, Debtor shall promptly assemble the Collateral and make it available to Secured Party at a place to be designated by Secured Party which is reasonably convenient to both parties. Secured Party may also render any or all of the Collateral unusable at the Debtor's premises and may dispose of such Collateral on such premises without liability for rent or costs. Any notice that Secured Party is required to give to Debtor under the Uniform Commercial Code of the time and place of any public sale or the time after which any private sale or other intended disposition of the Collateral is to be made shall be deemed to constitute reasonable notice if such notice is given to the last known address of Debtor at least five (5) days prior to such action,

(d) Proceeds from any sale or lease or other disposition shall be applied: first, to all costs of repossession, storage, and disposition including without limitation attorneys', appraisers', and auctioneers' fees; second, to discharge the obligations then in default; third, to discharge any other Indebtedness of Debtor to Secured Party, whether as obligor, endorser, guarantor, surety or indemnitor; fourth, to expenses incurred in paying or settling liens and claims against the Collateral; and lastly, to Debtor, if there exists any surplus. Debtor shall remain fully liable for any deficiency.

(e) Debtor agrees to pay all reasonable attorneys' fees and other costs incurred by Secured Part)' in connection with the enforcement, assertion, defense or preservation of Secured Party's rights and remedies under this Agreement, or if prohibited by law, such lesser sum as may be permitted. Debtor further agrees that such fees and costs shall constitute Indebtedness.

(f) Secured Party's rights and remedies under this Agreement or otherwise arising are cumulative and may be exercised singularly or concurrently. Neither the failure nor any delay on the part of the Secured Party to exercise any right, power or privilege under this Agreement shall operate as a waiver, nor shall any single or partial exercise of any right, power or privilege preclude any other or further exercise of that or any other right, power or privilege. SECURED PARTY SHALL NOT BE DEEMED TO HAVE WAIVED ANY OF ITS RIGHTS UNDER THIS AGREEMENT OR UNDER ANY OTHER AGREEMENT, INSTRUMENT OR PAPER SIGNED BY DEBTOR UNLESS SUCH WAIVER IS EXPRESSED IN WRITING AND SIGNED BY SECURED PARTY. A waiver on any one occasion shall not be construed as a bar to or waiver of any right or remedy on any future occasion.

(g) DEBTOR AND SECURED PARTY UNCONDITIONALLY WAIVE THEIR RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS

AGREEMENT, ANY OF THE OTHER DEBT DOCUMENTS, ANY OF THE INDEBTEDNESS SECURED HEREBY, ANY DEALINGS BETWEEN DEBTOR AND SECURED PARTY RELATING TO THE SUBJECT MATTER OF THIS TRANSACTION OR ANY RELATED TRANSACTIONS, AND/OR THE RELATIONSHIP THAT IS BEING ESTABLISHED BETWEEN DEBTOR AND SECURED PARTY. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT. THIS WAIVER IS IRREVOCABLE. THIS WAIVER MAY NOT BE MODIFIED EITHER ORALLY OR IN WRITING. THE WAIVER ALSO SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS AGREEMENT, ANY OTHER DEBT DOCUMENTS, OR TO ANY OTHER DOCUMENTS OR AGREEMENTS RELATING TO THIS TRANSACTION OR ANY RELATED TRANSACTION. THIS AGREEMENT MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.

8. MISCELLANEOUS.

(a) This Agreement, any Note and/or any of the other Debt Documents may be assigned, in whole or in part, by Secured Party without notice to Debtor, and Debtor agrees not to assert against any such assignee, or assignee's assigns, any defense, set-off, recoupment claim or counterclaim which Debtor has or may at any time have against Secured Party for any reason whatsoever. Debtor agrees that if Debtor receives written notice of an assignment from Secured Party, Debtor will pay all amounts payable under any assigned Debt Documents to such assignee or as instructed by Secured Party. Debtor also agrees to

confirm in writing receipt of the notice of assignment as may be reasonably requested by assignee.

(b) All notices to be given in connection with this Agreement shall be in writing, shall be addressed to the parties at their respective addresses set forth in this Agreement (unless and until a different address may be specified in a written notice to the other party), and shall be deemed given (i) on the date of receipt if delivered in hand or by facsimile transmission, (ii) on the next business day after being sent by express mail, and (iii) on the fourth business day after being sent by regular, registered or certified mail. As used herein, the term "business day" shall mean and include any day other than Saturdays, Sundays, or other days on which commercial banks in New York, New York are required or authorized to be closed.

(c) Secured Party may correct patent errors and fill in all blanks in this Agreement or in any Collateral Schedule consistent with the agreement of the parties.

(d) Time is of the essence of this Agreement. This Agreement shall be binding, jointly and severally, upon all parties described as the "Debtor" and their respective heirs, executors, representatives, successors and assigns, and shall inure to the benefit of Secured Party, its successors and assigns.

(e) This Agreement and its Collateral Schedules constitute the entire agreement between the parties with respect to the subject matter of this Agreement and supersede all prior understandings (whether written, verbal or implied) with respect to such subject matter. THIS AGREEMENT AND ITS COLLATERAL SCHEDULES SHALL NOT BE CHANGED OR TERMINATED ORALLY OR BY COURSE OF CONDUCT, BUT ONLY BY A WRITING SIGNED BY BOTH PARTIES. Section headings contained in this Agreement have been included for convenience only, and shall not affect the construction or interpretation of this Agreement.

(f) This Agreement shall continue in full force and effect until all of the Indebtedness has been indefeasibly paid in full to Secured Party. The surrender, upon payment or otherwise, of any Note or any of the other documents evidencing any of the Indebtedness shall not affect the right of Secured Party to retain the Collateral for such other Indebtedness as may then exist or as it may be reasonably contemplated will exist in the future. This Agreement shall automatically be reinstated if Secured Party is ever required to return or restore the payment of all or any portion of the Indebtedness (all as though such payment had never been made).

(g) THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES

HEREUNDER SHALL IN ALL RESPECTS BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF CONNECTICUT (WITHOUT REGARD TO THE CONFLICT OF LAWS PRINCIPLES OF SUCH STATE), INCLUDING ALL MATTERS OF CONSTRUCTION, VALIDITY AND PERFORMANCE, REGARDLESS OF THE LOCATION OF THE EQUIPMENT.

IN WITNESS WHEREOF, Debtor and Secured Party, intending to be legally bound hereby, have duly executed this Agreement in one or more counterparts, each of which shall be deemed to be an original, as of the day and year first aforesaid.

SECURED PARTY:	DEBTOR:
GENERAL ELECTRIC CAPITAL CORPORATION	CYTOKINETICS, INCORPORATED
By: _____	By: /s/ James Sabry
Name: THOMAS ANNINO	Name:
Title: _____	Title: _____

GECC:

By: /s/ John Edel

Name: John Edel

Title: SVP

CROSS-COLLATERAL AND CROSS-DEFAULT AGREEMENT

General Electric Capital Corporation
401 Merritt 72nd Floor
Norwalk, CT 06856

Gentlemen:

You (and/or your successors or assigns, "you") have entered into or purchased one or more conditional sale contracts, lease agreements, chattel mortgages, security agreements, notes and other choses in action (herein designated "Accounts") arising from the bona fide sale or lease to us, by various vendors or lessors, of equipment and inventory (herein designated "Collateral") and/or you have made direct loans to or otherwise extended credit to us evidenced by Accounts creating security interests in Collateral.

In order to induce you to extend our time of payment on one or more Accounts and/or to make additional loans to us and/or to purchase additional Accounts and/or to lease us additional equipment, and in consideration of you so doing, and for other good and valuable consideration, the receipt of which we hereby acknowledge, we agree as follows:

All presently existing and hereafter acquired Collateral in which you have or shall have a security interest shall secure the payment and performance of all of our liabilities and obligations to you of every kind and character, whether joint or several, direct or indirect, absolute or contingent, due or to become due, and whether under presently existing or hereafter created Accounts or agreements, or otherwise.

We further agree that your security interest in the property covered by any Account now held or hereafter acquired by you shall not be terminated in whole or in part until and unless all indebtedness of every kind, due or to become due, owed by us to you is fully paid and satisfied and the terms of every Account have been fully performed by us. It is further agreed that you are to

retain your security interest in all property covered by all Accounts held or acquired by you, as security for payment and performance under each such Account, notwithstanding the fact that one or more of such Accounts may become fully paid.

This instrument is intended to create cross-default and cross-security between and among all the within described Accounts now owned or hereafter acquired by you.

A default under any Account or agreement shall be deemed to be a default under all other Accounts and agreements. A default shall result if we fail to pay any sum when due on any Account or agreement, or if we breach any of the other terms and conditions thereof, or if we become insolvent, cease to do business as a going concern, make an assignment for the benefit of creditors, or if a petition for a receiver or in bankruptcy is filed by or against us, or if any of our property is seized, attached or levied upon. Upon our default any or all Accounts and agreements shall, at your option, become immediately due and payable without notice or demand to us or any other party obligated thereon, and you shall have and may exercise any and all rights and remedies of a secured party under the Uniform Commercial Code as enacted in the applicable jurisdiction and as otherwise granted to you under any Account or other agreement. We hereby waive, to the maximum extent permitted by law, notices of default, notices of repossession and sale or other disposition of collateral, and all other notices, and in the event any such notice cannot be waived, we agree that if such notice is mailed to us postage prepaid at the address shown below at least five (5) days prior to the exercise by you of any of your rights or remedies, such notice shall be deemed to be reasonable and shall fully satisfy any requirement for giving notice.

All rights granted to you hereunder shall be cumulative and not alternative, shall be in addition to and shall in no manner impair or affect your rights and remedies under any existing Account, agreement, statute or rule of law, and remedies under any existing Account, agreement, statute or rule of law.

This agreement may not be varied or altered nor its provisions waived except by your duly executed written agreement. This agreement shall inure to the benefit of your successors and assigns and shall be binding upon our heirs. administrators, executors, legal representatives, successors and assigns.

IN WITNESS WHEREOF, this agreement is executed this___ day of___, ___.

CYTOKINETICS, INCORPORATED
(Name of Proprietorship, Partnership or Corporation, as applicable)

By: /s/ James Sabry

(Signature)

Title:_____
(Owner, Partner or Officer, as applicable)

Address: 280 East Grand Avenue Suite 2,
South San Francisco, CA 94080

Exhibit 4.8

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT IS AVAILABLE FOR SUCH OFFER, SALE. OR TRANSFER, PLEDGE OR HYPOTHECATION IN THE OPINION OF LEGAL COUNSEL REASONABLY SATISFACTORY TO THE COMPANY.

WARRANT

To Purchase Shares of Common Stock of
CYTOKINETICS, INC.

THIS CERTIFIES that, for value received Bristow Investments, L.P., a California limited partnership (the "Holder"), is entitled, upon the terms and subject to the conditions hereinafter set forth, at any time after the date hereof and prior to the Commencement Date (as defined below), to subscribe for and purchase from Cytokinetics, Inc., a Delaware corporation (the "Company"), 16,000 shares of the Company's Common Stock at an exercise price ("Exercise Price") of $0.29 per share, subject to adjustment as set forth below.

1. Title of Warrant. Prior to the expiration hereof and subject to compliance with applicable laws, this Warrant and all rights hereunder are transferable, in whole or in part, at the office or agency of the Company, referred to in Section 2 hereof, by the holder hereof in person or by duly authorized attorney, upon surrender of this Warrant together with the Assignment Form annexed hereto properly endorsed.

2. Exercise of Warrant. The purchase rights represented by this Warrant are exercisable by the registered holder hereof, in whole or in part, at any time after the effective date of the assignment and assumption to and by the Company of that certain Lease, dated April 13, 1998 (as amended) by and between MetaXen, LLC and Britannia Pointe Grand Limited Partnership ("BPGLP") and prior to the date that is five (5) years after the closing date of an underwritten initial public offering ("IPO") of the Company's Common Stock pursuant to a registration statement filed with the Securities and Exchange Commission (the "SEC") under the Act, subject to adjustment as hereinafter provided, by the surrender of this Warrant and the Notice of Exercise Form annexed hereto duly executed at the office of the Company, in South San Francisco. California (or such other office or agency of the Company as it may designate by notice in writing to the registered holder hereof at the address of such holder appearing on the books of the Company), and upon payment of the Exercise Price for the shares thereby purchased (i) by cash or check or bank draft payable to the order of the Company, (ii) by cancellation of indebtedness of the Company payable to the holder hereof at the time of exercise, or (iii) by delivery of an election in writing to receive a number of shares of Common Stock equal to the aggregate number of shares of Common Stock subject to this Warrant (or the portion thereof being cancelled upon such exercise), less that number of shares of Common Stock having a fair market value as of such date equal to the aggregate Exercise Price of the Warrant (or such

portion thereof); whereupon the holder of this Warrant shall be entitled to receive a certificate for the number of shares so purchased. The Company agrees that if at the time of the surrender of this Warrant and purchase the holder hereof shall be entitled to exercise this Warrant, the shares so purchased shall be and be deemed to be issued to such holder as the record owner of such shares as of the close of business on the date on which this Warrant shall have been exercised as aforesaid. For purposes of clause (iii) of the preceding sentence, the fair market value of one share of the Company's Common Stock shall be determined as follows: (1) if the Company's Common Stock is listed on a national stock exchange, on the NASDAQ National Market System or on any other over-the-counter market, then such fair market value shall be the closing price per share reported for such class on such national stock exchange or on the

NASDAQ National Market System, or the average of the final "bid" and "asked" prices reported on such over-the-counter market, as applicable, at the close of business on the date of calculation as reported in the Wall Street Journal; and (2) if the Company's Common Stock is not listed on any national stock exchange, on the NASDAQ National Market System or on any other over-the-counter market, then the Board of Directors of the Company shall determine such fair market value as of the date of calculation in its reasonable good faith judgment, and shall (upon written request by the holder hereof) advise the holder hereof of such determination prior to any decision by such holder to exercise its purchase rights under this Warrant.

Certificates for shares purchased hereunder shall be delivered to the holder hereof within a reasonable time, but not later than ten (10) days, after the date on which this Warrant shall have been exercised as aforesaid.

If this Warrant is exercised with respect to less than all of the shares covered hereby, the holder hereof shall be entitled to receive a new Warrant, in this form, covering the number of shares with respect to which this Warrant shall not have been exercised.

The Company covenants that all shares of stock which may be issued upon the exercise of rights represented by this Warrant will, upon exercise of the rights represented by this Warrant, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

3. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant.

4. Charges, Taxes and Expenses. Issuance of certificates for shares of Common Stock upon the exercise of this Warrant shall be made without charge to the holder hereof for any issue or transfer tax or other incidental expense in respect of the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the holder of this Warrant or in such name or names as may be directed by the holder of this Warrant; provided, however, that in the event certificates for shares of Common Stock are to be issued in a name other than the name of the holder of this Warrant, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the holder hereof; and provided further, that upon any transfer involved in the issuance or delivery of any

certificates for shares of Common Stock, the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

5. No Rights as Shareholders. This Warrant does not entitle the holder hereof to any voting rights or other rights as a shareholder of the Company prior to the exercise hereof. Notwithstanding the foregoing, the Company shall, upon written request by the holder hereof to the chief financial officer of the Company from time to time (but not more often than twice in any 12-month period) provide to such holder copies of the following documents within a reasonable time after such request (but in all events only to the extent that, and no sooner than the time that, such documents have been made available to the Company's shareholders): (i) the Company's most recent audited annual financial statements or, if audited statements are not available, then the Company's unaudited annual financial statements as of the end of the Company's most recently ended fiscal year and (ii) unaudited quarterly financial statements for each quarter of the Company's fiscal year since the date of the annual financial statements delivered pursuant to clause (i) above. Notwithstanding the preceding sentence, during any period in which the Company has outstanding a class of publicly-traded securities or is for any other reason reporting company under the Securities Exchange Act of 1934, it shall be sufficient compliance with any

information request from the holder hereof pursuant to such sentence for the Company to provide copies of its most recent Form 10-K and annual report, any Form 10-Qs and/or Form 8-Ks filed by the Company with the SEC since the date of such Form 10- K, and any proxy statements.

6. Exchange and Registry of Warrant. This Warrant is exchangeable, upon the surrender hereof by the registered holder at the above-mentioned office or agency of the Company, for a new Warrant of like tenor and dated as of such exchange.

The Company shall maintain at the above-mentioned office or agency a registry showing the name and address of the registered holder of this Warrant. This Warrant may be surrendered for exchange, transfer or exercise, in accordance with its terms, at such office or agency of the Company, and the Company shall be entitled to rely in all respects, prior to written notice to the contrary, upon such registry.

7. Loss, Theft, Destruction or Mutilation of Warrant. Upon receipt by the Company of evidence reasonably satisfactory to it (such as an affidavit of the holder hereof) of the loss, theft, destruction or mutilation of this Warrant, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it, and upon reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of this Warrant, if mutilated, the Company will make and deliver a new Warrant of like tenor and dated as of such cancellation, in lieu of this Warrant.

8. Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday, then such action may be taken or such right may be exercised on the next succeeding day not a legal holiday.

9. Adjustment. The number of shares for which this Warrant is exercisable and the time period for exercise are subject to adjustment from time to time as follows:

(a) Reclassification, etc. If the Company at any time shall, by subdivision, combination or reclassification of securities or otherwise, change any of the securities to which purchase rights under this Warrant exist into the same or a different number of securities of any class or classes, this Warrant shall thereafter be to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant immediately prior to such subdivision, combination, reclassification or other change and the Exercise Price shall be proportionately adjusted.

(b) Cash Distributions. No adjustment on account of cash dividends or interest on the Company's Common Stock or other securities purchasable hereunder will be made to the Exercise Price.

(c) This warrant shall be deemed rescinded in the event that the Company's assumption of that certain Lease, dated April 13, 1998 (as amended) by and between BPGLP and MetaXen, LLC shall not have occurred by September 30, 2000.

10. Miscellaneous.

(a) Termination Upon Merger, Sale of Assets, etc. If at any time after the date hereof the Company proposes to merge with or into any other corporation, effect a consolidation or reorganization with or into any other entity, or sell or convey all or substantially all of its assets to any other entity (collectively, a "Merger"), the Company shall give the Holder written notice ("Merger Notice") of such impending transaction not later than thirty (30) days prior to the closing of such transaction. The Merger Notice shall describe the material terms and conditions of the impending transaction,

including the aggregate value of consideration to be received by the Holder for the shares underlying this Warrant on an as exercised basis, and the Company shall thereafter give the Holder prompt notice of any material changes to such terms and conditions.

(i) If, pursuant to such Merger, the shareholders of the Company receive solely cash and/or publicly traded securities in exchange for their shares of stock in the Company, as stated in the Merger Notice, and this Warrant has not been exercised prior to the closing of such transaction, this Warrant shall terminate.

(ii) Notwithstanding anything to the contrary, if, pursuant to such Merger, the shareholders of the Company receive non-publicly traded securities in exchange for their shares of stock in the Company, or if the aggregate value of the consideration consisting of cash and/or publicly traded securities to be received by the Holder for the securities underlying this Warrant, as stated in the Merger Notice, does not equal or exceed the aggregate Exercise Price of such underlying securities, then this Warrant shall not terminate pursuant to the provisions of Section 10(a)(i) above, and the Company shall, as a condition precedent to such transaction, cause effective provisions to be made so that the holder hereof shall have the right thereafter, by exercising this Warrant (in lieu of the shares of the common stock of the Company immediately theretofore

purchasable and receivable upon exercise of this Warrant) to purchase the kind and amount of shares of stock and other securities and property (including cash) receivable upon such transaction. Any such provision shall include provisions for adjustments in respect of such shares of stock and other securities and property that shall be as nearly equivalent as may be practicable to the adjustments provided for in this Warrant. The foregoing provisions of this Section 10(a)(ii) shall similarly apply to successive transactions, unless this Warrant is first terminated pusuant to the provisions of Section 10(a)(i) above.

(b) Issue Date. The provisions of this Warrant shall be construed and shall be given effect in all respect as if it had been issued and delivered by the Company on the date hereof. This Warrant shall be binding upon any successors or assigns of the Company. This Warrant shall constitute a contract under the laws of the State of California and for all purposes shall be construed in accordance with and governed by the laws of said state.

(c) Restrictions. The holder hereof acknowledges that the Common Stock acquired upon the exercise of this Warrant shall have restrictions upon its resale imposed by state and federal securities laws.

(d) Authorized Shares. The Company covenants that during the period the Warrant is exercisable, it will reserve from its authorized and Unicode Common Stock a sufficient number of shares to provide for the issuance of Common Stock upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of the Company's Common Stock upon the exercise of the purchase rights under this Warrant.

(e) No Impairment. The Company will not, by amendment of its Articles of Incorporation or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holder hereof against impairment.

(f) Notices of Record Date. In case:

(i) the Company shall take a record of the holders of its Common Stock for the purposes of entitling them to receive any

dividend (other than a cash dividend) or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares or stock of any class or any other securities or property, or to receive any other right; or

(ii) of any capital reorganization of the Company, any reclassification of the capital stock of the Company, any consolidation or merger of the Company with or into another corporation, or any conveyance of all or substantially all of the assets of the Company to another corporation; or

(iii) of the voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then, and in each such case, the Company will mail or cause to be mailed to the holder of this Warrant a notice specifying, as the case may be, (i) the date on which a record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, or (ii) the date on which such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up is to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up. Such notice shall be mailed at least thirty (30) days prior to the date therein specified.

(g) Attorneys' Fees. In any litigation, arbitration or other legal proceeding between the Company and the holder hereto relating to or arising out of this Warrant, the prevailing party shall be entitled to recover all its fees, costs and expenses incurred in connection with such proceeding, including (but not limited to) reasonable fees and expenses of attorneys and accountants and including (but not limited to) all such fees, costs and expenses incurred in connection with any appeals and/or in connection with the enforcement of any judgment or award rendered in such proceeding.

IN WITNESS WHEREOF, Cytokinetics, Inc. has caused this Warrant to be executed by its officers thereunto duly authorized.

Dated: July 20, 1999

CYTOKINETICS, INC.

By: /s/ James Sabry

Title: CEO & President

NOTICE OF EXERCISE

To: CYTOKINETICS, INC.

(1) _____, the undersigned, hereby elects to purchase _____shares of Common Stock (the "Shares") at an exercise price of $0.29 per share of Cytokinetics, Inc. pursuant to the terms of the attached Warrant, and tenders herewith payment of the aggregate purchase price of $_____in full (if exercising pursuant to net exercise provisions, enter $-0-), together with all applicable transfer taxes, if any:

(choose one)

[ ] By cash, check or sale draft payable to Cytokinetics, Inc.; or

[ ] By cancellation of indebtedness of Cytokinetics, Inc., payable to the undersigned as of the date hereof; or

[ ] By net exercise pursuant to the provisions of Section 2(iii) of the attached warrant (no tender of payment for the Shares needed).

(2) Please issue a certificate or certificates representing the Shares (or the number of shares of Common Stock remaining after application of the net exercise provisions of Section 2 (iii) of the attached warrant) in the name of the undersigned or in such other name as is specified below:

_____
(Name)

_____

_____
(Address)

(3) The undersigned represents that the aforesaid shares of Common Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares.

_____
(Date) (Signature)

ASSIGNMENT FORM

(To assign the foregoing warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

_____
(Please Print)

whose address is _____

_____
(Please Print)

Dated: _____,_____.

Holder's Signature: _____

Holder's Address: _____

_____

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatever, and must be guaranteed by a bank or trust company. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

Exhibit 4.9

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") AND MAY NOT BE OFFERED. SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT IS AVAILABLE FOR SUCH OFFER, SALE, OR TRANSFER, PLEDGE OR HYPOTHECATION IN THE OPINION OF LEGAL COUNSEL REASONABLY SATISFACTORY TO THE COMPANY.

WARRANT

To Purchase Shares of Common Stock of
CYTOKINETICS, INC.

THIS CERTIFIES that, for value received Laurence S. Shuhsan and Magdalena Shushan, Trustees of the Laurence and Magdalena Shushan Family Trust, under agreement dated October 8, 1997 (the "Holder"), is entitled, upon the terms and subject to the conditions hereinafter set forth, at any time after the date hereof and prior to the Commencement Date (as defined below), to subscribe for and purchase from Cytokinetics, Inc., a Delaware corporation (the "Company"), 4,000 shares of the Company's Common Stock at an exercise price ("Exercise Price") of $0.29 per share, subject to adjustment as set forth below.

1. Title of Warrant. Prior to the expiration hereof and subject to compliance with applicable laws, this Warrant and all rights hereunder are transferable, in whole or in part, at the office or agency of the Company, referred to in Section 2 hereof, by the holder hereof in person or by duly authorized attorney, upon surrender of this Warrant together with the Assignment Form annexed hereto properly endorsed.

2. Exercise of Warrant. The purchase rights represented by this Warrant are exercisable by the registered holder hereof, in whole or in part, at any time after the effective date of the assignment and assumption to and by the Company of that certain Lease, dated April 13, 1998 (as amended) by and between MetaXen, LLC and Britannia Pointe Grand Limited Partnership ("BPGLP") and prior to the date that is five (5) years after the closing date of-an underwritten initial public offering ("IPO") of the Company's Common Stock pursuant to a registration statement filed with the Securities and Exchange Commission (the "SEC") under the Act, subject to adjustment as hereinafter provided, by the surrender of this Warrant and the Notice of Exercise Form annexed hereto duly executed at the office of the Company, in South San Francisco, California (or such other office or agency of the Company as it may designate by notice in writing to the registered holder hereof at the address of such holder appearing on the books of the Company), and upon payment of the Exercise Price for the shares thereby purchased (i) by cash or check or bank draft payable to the order of the Company, (ii) by cancellation of indebtedness of the Company payable to the holder hereof at the time of exercise, or (iii) by delivery of an election in writing to receive a number of shares of Common Stock equal to the aggregate number of shares of Common Stock subject to this Warrant (or the portion thereof being cancelled upon such exercise), less that number of shares of Common Stock having a

fair market value as of such date equal to the aggregate Exercise Price of the Warrant (or such portion thereof); whereupon the holder of this Warrant shall be entitled to receive a certificate for the number of shares so purchased. The Company agrees that if at the time of the surrender of this Warrant and purchase the holder hereof shall be entitled to exercise this Warrant, the shares so purchased shall be and be deemed to be issued to such holder as the record owner of such shares as of the close of business on the date on which this Warrant shall have been exercised as aforesaid. For purposes of clause (iii) of the preceding sentence, the fair market value of one share of the Company's Common Stock shall be determined as follows: (1) if the Company's Common Stock is listed on a national stock exchange, on the NASDAQ National Market System or on any other over-the-counter market, then such fair market value shall be the

closing price per share reported for such class on such national stock exchange or on the NASDAQ National Market System, or the average of the final "bid" and "asked" prices reported on such over-the-counter market, as applicable, at the close of business on the date of calculation, as reported in the Wall Street Journal; and (2) if the Company's Common Stock is not listed on any national stock exchange, on the NASDAQ National Market System or on any other over-the-counter market, then the Board of Directors of the Company shall determine such fair market value as of the date of calculation in its reasonable good faith judgment, and shall (upon written request by the holder hereof) advise the holder hereof of such determination prior to any decision by such holder to exercise its purchase rights under this Warrant.

Certificates for shares purchased hereunder shall be delivered to the holder hereof within a reasonable time, but not later than ten (10) days, after the date on which this Warrant shall have been exercised as aforesaid.

If this Warrant is exercised with respect to less than all of the shares covered hereby, the holder hereof shall be entitled to receive a new Warrant, in this form, covering the number of shares with respect to which this Warrant shall not have been exercised.

The Company covenants that all shares of stock which may be issued upon the exercise of rights represented by this Warrant will, upon exercise of the rights represented by this Warrant, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

3. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant.

4. Charges, Taxes and Expenses. Issuance of certificates for shares of Common Stock upon the exercise of this Warrant shall be made without charge to the holder hereof for any issue or transfer tax or other incidental expense in respect of the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the holder of this Warrant or in such name or names as may be directed by the holder of this Warrant; provided, however, that in the event certificates for shares of Common Stock are to be issued in a name other than the name of the holder of this Warrant, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the holder hereof; and provided further, that upon any transfer involved in the issuance or delivery of any

certificates for shares of Common Stock, the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

5. No Rights as Shareholders. This Warrant does not entitle the holder hereof to any voting rights or other rights as a shareholder of the Company prior to the exercise hereof. Notwithstanding the foregoing, the Company shall, upon written request by the holder hereof to the chief financial officer of the Company from time to time (but not more often than twice in any 12-month period) provide to such holder copies of the following documents within a reasonable time after such request (but in all events only to the extent that, and no sooner than the time that, such documents have been made available to the Company's shareholders): (i) the Company's most recent audited annual financial statements or, if audited statements are not available, then the Company's unaudited annual financial statements as of the end of the Company's most recently ended fiscal year and (ii) unaudited quarterly financial statements for each quarter of the Company's fiscal year since the date of the annual financial statements delivered pursuant to clause (i) above. Notwithstanding the preceding sentence, during any period in which the Company has outstanding a class of publicly-traded securities or is for any other reason reporting company under

the Securities Exchange Act of 1934, it shall be sufficient compliance with any information request from the holder hereof pursuant to such sentence for the Company to provide copies of its most recent Form 10-K and annual report, any Form 10-Qs and/or Form 8-Ks filed by the Company with the SEC since the date of such Form 10-K, and any proxy statements.

6. Exchange and Registry of Warrant. This Warrant is exchangeable, upon the surrender hereof by the registered holder at the above-mentioned office or agency of the Company, for a new Warrant of like tenor and dated as of such exchange.

The Company shall maintain at the above-mentioned office or agency a registry showing the name and address of the registered holder of this Warrant. This Warrant may be surrendered for exchange, transfer or exercise, in accordance with its terms, at such office or agency of the Company, and the Company shall be entitled to rely in all respects, prior to written notice to the contrary, upon such registry.

7. Loss, Theft, Destruction or Mutilation of Warrant. Upon receipt by the Company of evidence reasonably satisfactory to it (such as an affidavit of the holder hereof) of the loss, theft, destruction or mutilation of this Warrant, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it, and upon reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of this Warrant, if mutilated, the Company will make and deliver a new Warrant of like tenor and dated as of such cancellation, in lieu of this Warrant.

8. Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday, then such action may be taken or such right may be exercised on the next succeeding day not a legal holiday.

9. Adjustment. The number of shares for which this Warrant is exercisable and the time period for exercise are subject to adjustment from time to time as follows:

(a) Rectification, etc. If the Company at any time shall, by subdivision, combination or reclassification of securities or otherwise, change any of the securities to which purchase rights under this Warrant exist into the same or a different number of securities of any class or classes, this Warrant shall thereafter be to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant immediately prior to such subdivision, combination, reclassification or other change and the Exercise Price shall be proportionately adjusted.

(b) Cash Distributions. No adjustment on account of cash dividends or interest on the Company's Common Stock or other securities purchasable hereunder will be made to the Exercise Price.

(c) This warrant shall be deemed rescinded in the event that the Company's assumption of that certain Lease, dated April 13, 1998 (as amended) by and between BPGLP and MetaXen, LLC shall not have occurred by September 30, 2000.

10. Miscellaneous.

(a) Termination Upon Merger, Sale of Assets, etc. If at any time after the date hereof the Company proposes to merge with or into any other corporation, effect a consolidation or reorganization with or into any other entity, or sell or convey all or substantially all of its assets to any other entity (collectively, a "Merger"), the Company shall give the Holder written notice ("Merger Notice") of such impending transaction not later than thirty

(30) days prior to the closing of such transaction. The Merger Notice shall describe the material terms and conditions of the impending transaction, including the aggregate value of consideration to be received by the Holder for the shares underlying this Warrant on an as exercised basis, and the Company shall thereafter give the Holder prompt notice of any material changes to such terms and conditions.

(i) If, pursuant to such Merger, the shareholders of the Company receive solely cash and/or publicly traded securities in exchange for their shares of stock in the Company, as stated in the Merger Notice, and this Warrant has not been exercised prior to the closing of such transaction, this Warrant shall terminate.

(ii) Notwithstanding anything to the contrary, if, pursuant to such Merger, the shareholders of the Company receive non-publicly traded securities in exchange for their shares of stock in the Company, or if the aggregate value of the consideration consisting of cash and/or publicly traded securities to be received by the Holder for the securities underlying this Warrant, as stated in the Merger Notice, does not equal or exceed the aggregate Exercise Price of such underlying securities, then this Warrant shall not terminate pursuant to the provisions of Section 10(a)(i) above, and the Company shall, as a condition precedent to such transaction, cause effective provisions to be made so that the holder hereof shall have the right thereafter, by exercising this Warrant (in lieu of the shares of the common stock of the Company immediately theretofore

purchasable and receivable upon exercise of this Warrant) to purchase the kind and amount of shares of stock and other securities and property (including cash) receivable upon such transaction. Any such provision shall include provisions for adjustments in respect of such shares of stock and other securities and property that shall be as nearly equivalent as may be practicable to the adjustments provided for in this Warrant. The foregoing provisions of this Section 10(a)(ii) shall similarly apply to successive transactions, unless this Warrant is first terminated pusuant to the provisions of Section 10(a)(i) above.

(b) Issue Date. The provisions of this Warrant shall be construed and shall be given effect in all respect as if it had been issued and delivered by the Company on the date hereof. This Warrant shall be binding upon any successors or assigns of the Company. This Warrant shall constitute a contract under the laws of the State of California and for all purposes shall be construed in accordance with and governed by the laws of said state.

(c) Restrictions. The holder hereof acknowledges that the Common Stock acquired upon the exercise of this Warrant shall have restrictions upon its resale imposed by state and federal securities laws.

(d) Authorized Shares. The Company covenants that during the period the Warrant is exercisable, it will reserve from its authorized and Unicode Common Stock a sufficient number of shares to provide for the issuance of Common Stock upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of the Company's Common Stock upon the exercise of the purchase rights under this Warrant.

(e) No Impairment. The Company will not, by amendment of its Articles of Incorporation or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holder hereof against impairment.

(f) Notices of Record Date. In case:

(i) the Company shall take a record of the holders of its Common Stock for the purposes of entitling them to receive any dividend (other than a cash dividend) or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares or stock of any class or any other securities or property, or to receive any other right; or

(ii) of any capital reorganization of the Company, any reclassification of the capital stock of the Company, any consolidation or merger of the Company with or into another corporation, or any conveyance of all or substantially all of the assets of the Company to another corporation; or

(iii) of the voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then, and in each such case, the Company will mail or cause to be mailed to the holder of this Warrant a notice specifying, as the case may be, (i) the date on which a record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, or (ii) the date on which such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up is to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up. Such notice shall be mailed at least thirty (30) days prior to the date therein specified.

(g) Attorneys' Fees. In any litigation, arbitration or other legal proceeding between the Company and the holder hereto relating to or arising out of this Warrant, the prevailing party shall be entitled to recover all its fees, costs and expenses incurred in connection with such proceeding, including (but not limited to) reasonable fees and expenses of attorneys and accountants and including (but not limited to) all such fees, costs and expenses incurred in connection with any appeals and/or in connection with the enforcement of any judgment or award rendered in such proceeding.

IN WITNESS WHEREOF, Cytokinetics, Inc. has caused this Warrant to be executed by its officers thereunto duly authorized.

Dated: July 20, 1999

CYTOKINETICS, INC.

By: /s/ James Sabry

Title: CEO & President

NOTICE OF EXERCISE

To: CYTOKINETICS, INC.

(1) _____, the undersigned, hereby elects to purchase _____ shares of Common Stock (the "Shares") at an exercise price of $0.29 per share of

Cytokinetics, Inc. pursuant to the terms of the attached Warrant, and tenders herewith payment of the aggregate purchase price of $_____ in full (if exercising pursuant to net exercise provisions, enter $-0-), together with all applicable transfer taxes, if any:

(choose one)

[ ] By cash, check or sale draft payable to Cytokinetics, Inc.; or

[ ] By cancellation of indebtedness of Cytokinetics, Inc., payable to the undersigned as of the date hereof; or

[ ] By net exercise pursuant to the provisions of Section 2(iii) of the attached warrant (no tender of payment for the Shares needed).

(2) Please issue a certificate or certificates representing the Shares (or the number of shares of Common Stock remaining after application of the net exercise provisions of Section 2 (iii) of the attached warrant) in the name of the undersigned or in such other name as is specified below:

_____
(Name)

_____

_____
(Address)

(3) The undersigned represents that the aforesaid shares of Common Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares.

_____
(Date) (Signature)

ASSIGNMENT FORM

(To assign the foregoing warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

_____
(Please Print)

whose address is _____

_____
(Please Print)

Dated: _____, _____.

Holder's Signature: _____

Holder's Address: _____

_____

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatever, and must be guaranteed by a bank or trust company. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

Exhibit 4.10

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT IS AVAILABLE FOR SUCH OFFER, SALE, OR TRANSFER, PLEDGE OR HYPOTHECATION IN THE OPINION OF LEGAL COUNSEL REASONABLY SATISFACTORY TO THE COMPANY.

WARRANT

To Purchase Shares of Common Stock of
CYTOKINETICS, INC.

THIS CERTIFIES that, for value received Slough Estates USA Inc., a Delaware corporation (the "Holder"), is entitled, upon the terms and subject to the conditions hereinafter set forth, at any time after the date hereof and prior to the Commencement Date (as defined below), to subscribe for and purchase from Cytokinetics, Inc., a Delaware corporation (the "Company"), 180,000 shares of the Company's Common Stock at an exercise price ("Exercise Price") of $0.29 per share, subject to adjustment as set forth below.

1. Title of Warrant. Prior to the expiration hereof and subject to compliance with applicable laws, this Warrant and all rights hereunder are transferable, in whole or in part, at the office or agency of the Company, referred to in Section 2 hereof, by the holder hereof in person or by duly authorized attorney, upon surrender of this Warrant together with the Assignment Form annexed hereto properly endorsed.

2. Exercise of Warrant. The purchase rights represented by this Warrant are exercisable by the registered holder hereof, in whole or in part, at any time after the effective date of the assignment and assumption to and by the Company of that certain Lease, dated April 13, 1998 (as amended) by and between MetaXen, LLC and Britannia Pointe Grand Limited Partnership ("BPGLP") and prior to the date that is five (5) years after the closing date of an underwritten initial public offering ("IPO") of the Company's Common Stock pursuant to a registration statement filed with the Securities and Exchange Commission (the "SEC") under the Act, subject to adjustment as hereinafter provided, by the surrender of this Warrant and the Notice of Exercise Form annexed hereto duly executed at the office of the Company, in South San Francisco, California (or such other office or agency of the Company as it may designate by notice in writing to the registered holder hereof at the address of such holder appearing on the books of the Company), and upon payment of the Exercise Price for the shares thereby purchased (i) by cash or check or bank draft payable to the order of the Company, (ii) by cancellation of indebtedness of the Company payable to the holder hereof at the time of exercise, or (iii) by delivery of an election in writing to receive a number of shares of Common Stock equal to the aggregate number of shares of Common Stock subject to this Warrant (or the portion thereof being cancelled upon such exercise), less that number of shares of Common Stock having a fair market value as of such date equal to the aggregate Exercise Price of the Warrant (or such

portion thereof); whereupon the holder of this Warrant shall be entitled to receive a certificate for the number of shares so purchased. The Company agrees that if at the time of the surrender of this Warrant and purchase the holder hereof shall be entitled to exercise this Warrant, the shares so purchased shall be and be deemed to be issued to such holder as the record owner of such shares as of the close of business on the date on which this Warrant shall have been exercised as aforesaid. For purposes of clause (iii) of the preceding sentence, the fair market value of one share of the Company's Common Stock shall be determined as follows: (1) if the Company's Common Stock is listed on a national stock exchange, on the NASDAQ National Market System or on any other over-the-counter market, then such fair market value shall be the closing price per share reported for such class on such national stock exchange or on the

NASDAQ National Market System, or the average of the final "bid" and "asked" prices reported on such over-the-counter market, as applicable, at the close of business on the date of calculation, as reported in the Wall Street Journal; and (2) if the Company's Common Stock is not listed on any national stock exchange, on the NASDAQ National Market System or on any other over-the-counter market, then the Board of Directors of the Company shall determine such fair market value as of the date of calculation in its reasonable good faith judgment, and shall (upon written request by the holder hereof) advise the holder hereof of such determination prior to any decision by such holder to exercise its purchase rights under this Warrant.

Certificates for shares purchased hereunder shall be delivered to the holder hereof within a reasonable time, but not later than ten (10) days, after the date on which this Warrant shall have been exercised as aforesaid.

If this Warrant is exercised with respect to less than all of the shares covered hereby, the holder hereof shall be entitled to receive a new Warrant, in this form, covering the number of shares with respect to which this Warrant shall not have been exercised.

The Company covenants that all shares of stock which may be issued upon the exercise of rights represented by this Warrant will, upon exercise of the rights represented by this Warrant, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

3. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant.

4. Charges, Taxes and Expenses. Issuance of certificates for shares of Common Stock upon the exercise of this Warrant shall be made without charge to the holder hereof for any issue or transfer tax or other incidental expense in respect of the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the holder of this Warrant or in such name or names as may be directed by the holder of this Warrant; provided, however, that in the event certificates for shares of Common Stock are to be issued in a name other than the name of the holder of this Warrant, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the holder hereof; and provided further, that upon any transfer involved in the issuance or delivery of any

certificates for shares of Common Stock, the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

5. No Rights as Shareholders. This Warrant does not entitle the holder hereof to any voting rights or other rights as a shareholder of the Company prior to the exercise hereof. Notwithstanding the foregoing, the Company shall, upon written request by the holder hereof to the chief financial officer of the Company from time to time (but not more often than twice in any 12-month period) provide to such holder copies of the following documents within a reasonable time after such request (but in all events only to the extent that, and no sooner than the time that, such documents have been made available to the Company's shareholders): (i) the Company's most recent audited annual financial statements or, if audited statements are not available, then the Company's unaudited annual financial statements as of the end of the Company's most recently ended fiscal year and (ii) unaudited quarterly financial statements for each quarter of the Company's fiscal year since the date of the annual financial statements delivered pursuant to clause (i) above. Notwithstanding the preceding sentence, during any period in which the Company has outstanding a class of publicly-traded securities or is for any other reason reporting company under the Securities Exchange Act of 1934, it shall be sufficient compliance with any

information request from the holder hereof pursuant to such sentence for the Company to provide copies of its most recent Form 10-K and annual report, any Form 10-Qs and/or Form 8-Ks filed by the Company with the SEC since the date of such Form 10-K, and any proxy statements.

6. Exchange and Registry of Warrant. This Warrant is exchangeable, upon the surrender hereof by the registered holder at the above-mentioned office or agency of the Company, for a new Warrant of like tenor and dated as of such exchange.

The Company shall maintain at the above-mentioned office or agency a registry showing the name and address of the registered holder of this Warrant. This Warrant may be surrendered for exchange, transfer or exercise, in accordance with its terms, at such office or agency of the Company, and the Company shall be entitled to rely in all respects, prior to written notice to the contrary, upon such registry.

7. Loss, Theft, Destruction or Mutilation of Warrant. Upon receipt by the Company of evidence reasonably satisfactory to it (such as an affidavit of the holder hereof) of the loss, theft, destruction or mutilation of this Warrant, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it, and upon reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of this Warrant, if mutilated, the Company will make and deliver a new Warrant of like tenor and dated as of such cancellation, in lieu of this Warrant.

8. Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday, then such action may be taken or such right may be exercised on the next succeeding day not a legal holiday.

9. Adjustment. The number of shares for which this Warrant is exercisable and the time period for exercise are subject to adjustment from time to time as follows:

(a) Reclassification, etc. If the Company at any time shall, by subdivision, combination or reclassification of securities or otherwise, change any of the securities to which purchase rights under this Warrant exist into the same or a different number of securities of any class or classes, this Warrant shall thereafter be to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant immediately prior to such subdivision, combination, reclassification or other change and the Exercise Price shall be proportionately adjusted.

(b) Cash Distributions. No adjustment on account of cash dividends or interest on the Company's Common Stock or other securities purchasable hereunder will be made to the Exercise Price.

(c) This warrant shall be deemed rescinded in the event that the Company's assumption of that certain Lease, dated April 13, 1998 (as amended) by and between BPGLP and MetaXen, LLC shall not have occurred by September 30, 2000.

10. Miscellaneous.

(a) Termination Upon Merger, Sale of Assets, etc. If at any time after the date hereof the Company proposes to merge with or into any other corporation, effect a consolidation or reorganization with or into any other entity, or sell or convey all or substantially all of its assets to any other entity (collectively, a "Merger"), the Company shall give the Holder written notice ("Merger Notice") of such impending transaction not later than thirty (30) days prior to the closing of such transaction. The Merger Notice shall describe the material terms and conditions of the impending transaction,

including the aggregate value of consideration to be received by the Holder for the shares underlying this Warrant on an as exercised basis, and the Company shall thereafter give the Holder prompt notice of any material changes to such terms and conditions.

(i) If, pursuant to such Merger, the shareholders of the Company receive solely cash and/or publicly traded securities in exchange for their shares of stock in the Company, as stated in the Merger Notice, and this Warrant has not been exercised prior to the closing of such transaction, this Warrant shall terminate.

(ii) Notwithstanding anything to the contrary, if, pursuant to such Merger, the shareholders of the Company receive non-publicly traded securities in exchange for their shares of stock in the Company, or if the aggregate value of the consideration consisting of cash and/or publicly traded securities to be received by the Holder for the securities underlying this Warrant, as stated in the Merger Notice, does not equal or exceed the aggregate Exercise Price of such underlying securities, then this Warrant shall not terminate pursuant to the provisions of Section 10(a)(i) above, and the Company shall, as a condition precedent to such transaction, cause effective provisions to be made so that the holder hereof shall have the right thereafter, by exercising this Warrant (in lieu of the shares of the common stock of the Company immediately theretofore

purchasable and receivable upon exercise of this Warrant) to purchase the kind and amount of shares of stock and other securities and property (including cash) receivable upon such transaction. Any such provision shall include provisions for adjustments in respect of such shares of stock and other securities and property that shall be as nearly equivalent as may be practicable to the adjustments provided for in this Warrant. The foregoing provisions of this Section 10(a)(ii) shall similarly apply to successive transactions, unless this Warrant is first terminated pusuant to the provisions of Section 10(a)(i) above.

(b) Issue Date. The provisions of this Warrant shall be construed and shall be given effect in all respect as if it had been issued and delivered by the Company on the date hereof. This Warrant shall be binding upon any successors or assigns of the Company. This Warrant shall constitute a contract under the laws of the State of California and for all purposes shall be construed in accordance with and governed by the laws of said state.

(c) Restrictions. The holder hereof acknowledges that the Common Stock acquired upon the exercise of this Warrant shall have restrictions upon its resale imposed by state and federal securities laws.

(d) Authorized Shares. The Company covenants that during the period the Warrant is exercisable, it will reserve from its authorized and Unicode Common Stock a sufficient number of shares to provide for the issuance of Common Stock upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of the Company's Common Stock upon the exercise of the purchase rights under this Warrant.

(e) No Impairment. The Company will not, by amendment of its Articles of Incorporation or any other voluntary action, avoid or seek to avoid the observance or performance ot any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holder hereof against impairment.

(f) Notices of Record Date. In case:

(i) the Company shall take a record of the holders of its Common Stock for the purposes of entitling them to receive any dividend

(other than a cash dividend) or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares or stock of any class or any other securities or property, or to receive any other right; or

(ii) of any capital reorganization of the Company, any reclassification of the capital stock of the Company, any consolidation or merger of the Company with or into another corporation, or any conveyance of all or substantially all of the assets of the Company to another corporation; or

(iii) of the voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then, and in each such case, the Company will mail or cause to be mailed to the holder of this Warrant a notice specifying, as the case may be, (i) the date on which a record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, or (ii) the date on which such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up is to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up. Such notice shall be mailed at least thirty (30) days prior to the date therein specified.

(g) Attorneys' Fees. In any litigation, arbitration or other legal proceeding between the Company and the holder hereto relating to or arising out of this Warrant, the prevailing party shall be entitled to recover all its fees, costs and expenses incurred in connection with such proceeding, including (but not limited to) reasonable fees and expenses of attorneys and accountants and including (but not limited to) all such fees, costs and expenses incurred in connection with any appeals and/or in connection with the enforcement of any judgment or award rendered in such proceeding.

IN WITNESS WHEREOF, Cytokinetics, Inc. has caused this Warrant to be executed by its officers thereunto duly authorized.

Dated: July 20, 1999

CYTOKINETICS, INC.

By: /s/ James Sabry

Title: CEO & President

NOTICE OF EXERCISE

To: CYTOKINETICS, INC.

(1) _____, the undersigned, hereby elects to purchase_____shares of Common Stock (the "Shares") at an exercise price of $0.29 per share of Cytokinetics, Inc. pursuant to the terms of the attached Warrant, and tenders herewith payment of the aggregate purchase price of $_____in full (if exercising pursuant to net exercise provisions, enter $-0-), together with all applicable transfer taxes, if any:

(choose one)

[ ] By cash, check or sale draft payable to Cytokinetics,

Inc.; or

[ ] By cancellation of indebtedness of Cytokinetics, Inc., payable to the undersigned as of the date hereof; or

[ ] By net exercise pursuant to the provisions of Secton 2(iii) of the attached warrant (no tender of payment for the Shares needed).

(2) Please issue a certificate or certificates representing the Shares (or the number of shares of Common Stock remaining after application of the net exercise provisions of Section 2 (iii) of the attached warrant) in the name of the undersigned or in such other name as is specified below:

_____
(Name)

_____

_____
(Address)

(3) The undersigned represents that the aforesaid shares of Common Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares.

_____
(Date) (Signature)

ASSIGNMENT FORM

(To assign the foregoing warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

_____
(Please Print)

whose address is _____

_____
(Please Print)

Dated:_____,_____.

Holder's Signature:_____

Holder's Address: _____

_____

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatever, and must be guaranteed by a bank or trust company. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

Exhibit 4.11

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). THESE SECURITIES MAY BE OFFERED, SOLD OR OTHERWISE TRANSFERRED ONLY (A) TO THE CORPORATION, (B) OUTSIDE THE UNITED STATES IN ACCORDANCE WITH RULE 901 OR REGULATIONS UNDER THE SECURITIES ACT IF APPLICABLE, OR (C) INSIDE THE UNITED STATES (i) PURSUANT TO THE EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 THEREUNDER, IF APPLICABLE, AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS OR (ii) IN COMPLIANCE WITH ANOTHER APPLICABLE EXEMPTION UNDER THE SECURITIES ACT AND ANY APPLICABLE STATE SECURITIES LAWS, SUCH COMPLIANCE, AT THE OPTION OF THE CORPORATION, TO BE EVIDENCED BY AN OPINION OF COUNSEL, IN FORM ACCEPTABLE TO THE CORPORATION, THAT NO VIOLATION OF SUCH REGISTRATION PROVISIONS WOULD RESULT FROM ANY PROPOSED TRANSFER OR ASSIGNMENT.

No. W-_____ SERIES B PREFERRED STOCK PURCHASE WARRANT As of August 30, 1999

CYTOKINETICS, INCORPORATED

THIS CERTIFIES that, for value received, The Magnum Trust (the "Holder") or its assigns, is entitled to subscribe for and purchase, from Cytokinetics, Incorporated, a Delaware corporation (the "Company"), shares of the Company's Series B Preferred Stock, upon the terms and subject to the conditions set forth herein, at any time on or after the date of this Warrant, and on or before, but in no case after August 30, 2006.

1. Exercise Price; Number of Warrant Shares. The purchase price of one share of Series B Preferred Stock under this Warrant shall be $2.90 per share, subject to adjustment pursuant to Sections 7 and 8 (such price as it shall be adjusted, the "Exercise Price"). The number of shares of Series B Preferred Stock purchasable upon exercise of this Warrant is 100,000, which shares upon such purchase shall be fully paid and non-assessable (the "Warrant Shares").

2. Exercise, of Warrant.

(a) Exercise Procedure. The purchase rights represented by this Warrant are exercisable by the Holder or its assignee, in whole or in part, at any time before August 30, 2006, by the surrender of this Warrant and a Notice of Exercise in the form attached as Exhibit A duly executed at, the office of the Company in South San Francisco, California (or such other office or agency of the Company as it may designate by notice in writing to the Holder at the address of such holder appearing on the books of the Company), and upon payment of the Exercise Price of the shares thereby purchased (by cash or by check or bank draft payable to the order of the Company or by cancellation of indebtedness of the Company to the holder, if any, at the time of exercise in an amount equal to the Exercise Price of the shares thereby purchased or pursuant to the net exercise proceeding set forth in Section 2(b), below); whereupon the Holder shall be entitled to receive a certificate for the number of shares of Series B Preferred Stock so purchased. If this Warrant is exercised as to only a portion of the shares for which it is exercisable, the Company shall, upon such exercise, deliver to the Holder a new Warrant representing the remaining shares for which the Warrant shall then be exercisable. This Warrant shall be deemed to have been exercised

immediately prior to the close of business on the date of delivery of such Notice of Exercise and payment as provided above, and the person entitled to receive the shares issuable upon such exercise shall be treated for all purposes as the holder of such shares of record as of the close of business on such date. As promptly as practicable on or after such date, the Company shall issue and deliver to such person a certificate for the number of shares issuable upon such exercise.

(b) Net Exercise.

(1) In lieu of the cash payment set forth in Section 2(a) above, the Holder shall have the right ("Conversion Right") to convert this Warrant or any portion thereof (without payment of any kind) into that number of shares of Series B Preferred Stock equal to (i) the product of (A) the number of shares of Series B Preferred then issuable upon such whole or partial exercise of this Warrant and (B) the excess, if any, of (X) the Market Price Per Share (as determined pursuant to Section 2(b)(3) below) with respect to the date of conversion over (Y) the Exercise Price in effect on the business day next preceding the date of conversion, divided by (ii) the Market Price Per Share with respect to the date of conversion.

(2) Manner of Conversion. The conversion rights provided for in this Section 2(b) may be exercised in whole or in pan and at any time and from time to time while any portion of this Warrant remains outstanding. In order to exercise its conversion rights under this Section, the Holder shall surrender to the Company, at its offices, this Warrant certificate accompanied by a duly completed Notice of Conversion in the form annexed hereto as Exhibit B. The Warrant (or so much thereof as shall have been surrendered for conversion) shall be deemed to have been converted immediately prior to the close of business on the day of surrender of such Warrant certificate for conversion in accordance with the foregoing provisions. As promptly as practicable on or after the conversion date, the Company shall issue and shall deliver to the Warramholder (i) a certificate or certificates representing the number of shares of Series B Preferred to which the Warrantholder shall be entitled as a result of the conversion, and (ii) if the Warrant certificate is being converted in part only, a new certificate of like tenor and date for the balance of the unconverted portion of the Warrant certificate.

(3) Market Price Per Share. As used herein, the "Market Price Per Share" on any date shall mean the fair market value of each share of Series B Preferred Stock as determined in good faith by the Board of Directors of the Company, provided that, after the Company's registration and sale of shares of its Common Stock pursuant to a public offering, the term "Market Price Per Share" shall mean the closing price per share of the Company's Common Stock for the trading day immediately preceding the date of exercise. The closing price for each such day shall be the last sale price or, in case no such sale takes place on such day, the average of the closing bid and asked prices, in either case on the principal securities exchange on which the shares of such Common Stock of the Company are listed or admitted to trading or, if applicable, the last sale price, or, in case no sale takes place on such day, the average of the closing bid and asked prices of such Common Stock on NASDAQ or any comparable system, or if such Common Stock is not reported on NASDAQ, or a comparable system, the average of the closing bid and asked prices as furnished by two members of the National Association of Securities Dealers, Inc. selected from time to time by the Company for that purpose. If such bid and asked prices are not available, then "Market Price Per

Share" shall be equal to the fair market value of such Common Stock as determined in good faith by the Board of Directors of the Company.

3. Restrictions on Transfer.

(a) Investment Representation. The Holder agrees that the Holder will not offer, sell or otherwise dispose of this Warrant or any securities issued on exercise of this Warrant except under circumstances which will not result in a violation of the Securities Act. Upon exercise of this Warrant, the Holder shall confirm in writing, by executing the form attached as Exhibit C hereto, that the securities purchased thereby are being acquired for investment solely for the Holder's own account and not as a nominee for any other Person, and not with a view toward distribution or resale.

(b) Certificate Legends. This warrant and all securities issued upon exercise of this Warrant (unless registered under the Securities

Act) shall be stamped or imprinted with a legend in substantially the following form (in addition to any legends required by applicable state securities laws):

> THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF, NO SUCH SALE OR DISPOSITION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933.
>
> THE SHARES REPRESENTED BY THIS CERTIFICATE MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

(c) Disposition of Warrant or Shares. With respect to any offer, sale or other disposition of this Warrant or any securities issued upon exercise of this Warrant before an initial public offering, the Holder agrees to give written notice to the Company prior thereto, describing briefly the manner thereof, together with a written opinion of the Holder's counsel, if reasonably requested by the Company, to the effect that such offer, sale or other disposition may be effected without registration under the Securities Act or qualification under any applicable state securities laws of this Warrant or such shares, as the case may be, and indicating whether or not under the Securities Act certificates for this Warrant or such shares, as the case may be, to be sold or otherwise disposed of require any restrictive legend as to applicable restrictions on transferability in order to insure compliance with the Securities Act. Each certificate representing this Warrant or the securities thus transferred (except a transfer pursuant to Rule 144) shall bear a legend as to the applicable restrictions on transferability in order to insure compliance with the Securities Act, unless in the aforesaid reasonably satisfactory opinion of counsel for the Holder or the security holder, as the case may be, such legend is not necessary in order to insure compliance with the Securities Act. The Company may issue stop transfer instructions to its transfer agent in connection with such restriction.

4. No Rights as Shareholder. This Warrant does not entitle the Holder to any voting rights or other rights as a shareholder of the Company prior to exercise; provided, however, that the Holder shall have "piggy-back" registration rights equivalent to those given to holders of Series B Preferred Stock pursuant to that certain First Amended and Restated Investors' Rights Agreement dated August 30,1999 by and among such holders and the Company, as the same may be amended from time to time (the "Rights Agreement"), and, provided further, that the Holder shall be bound by the transfer restrictions set forth in the Rights Agreement, including, without limitation, the Market Stand-Off provisions contained therein.

5. Loss. Theft, Destruction or Mutilation of Warrant. Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant, and in case of loss, theft or destruction, of indemnity reasonably satisfactory to it, and upon reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of this Warrant, if mutilated, the Company shall make and deliver a new Warrant of like tenor in lieu of this Warrant.

6. Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday, then such action may be taken or such right may be exercised on the next succeeding day not a legal holiday.

7. Change of Control, Qualified IPO and Anti-Dilution.

(a) Merger, Sale of Assets, etc. If at any time

after the date hereof the Company proposes to merge with or into any other corporation, effect a consolidation or acquisition with or into any other entity, which merger, consolidation or acquisition is of 100% of the voting securities of the Company (a "Termination Transaction"), the Company shall give the Holder written notice ("Merger Notice") of such impending transaction not later than thirty (30) days prior to the closing of such transaction. The Merger Notice shall describe the material terms and conditions of the impending transaction, including the price and aggregate value of securities and other consideration to be received by holders of Series B Preferred stock, by holders of Common Stock and by the Holder for the shares underlying this Warrant on an as exercised basis, and the Company shall thereafter give the Holder prompt notice of any material changes to such terms and conditions. If this Warrant has not been exercised or converted prior to the closing of a Termination Transaction that is the subject of such a Merger Notice, this Warrant shall terminate. Notwithstanding anything to the contrary in this Section 7(a), if, after the closing of a Termination Transaction, the shareholders of the Company prior to the closing will hold securities representing more than 50% of the voting control of the surviving entity, this warrant shall not terminate. In the event of such a non-terminating transaction, and in the event of a transaction of the sale or conveyance of all or substantially all of the assets of the Company, the Company shall, as a condition precedent to such transaction, cause effective provisions to be made so that the holder hereof shall have the right thereafter, by exercising this Warrant (in lieu of the shares of the common stock of the Company immediately theretofore purchasable and receivable upon exercise of this Warrant) to purchase the kind and amount of shares of stock and other securities and property (including cash) receivable upon such transaction by any holders of Series B Preferred Stock or holders of Common Stock, as applicable. Any such provision shall include provisions for adjustments in respect of such shares of

stock and other securities and property that shall be as nearly equivalent as may be practicable to the adjustments provided for in this Warrant. The foregoing provisions of this Section 7(a) shall similarly apply to successive transactions, unless this Warrant is first terminated pursuant this Section 7(a).

(b) Splits and Combinations. If the Company at any time subdivides any of its outstanding shares of Series B Preferred Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision shall be proportionately reduced, and conversely, if the outstanding shares of Series B Preferred Stock are combined into a smaller number of shares, the Exercise Price in effect immediately prior to such combination shall be proportionately increased. Upon any adjustment of the Exercise Price under this Section 7(b), the number of shares of Series B Preferred Stock issuable upon exercise of this Warrant shall equal the number of shares determined by dividing (i) the aggregate Exercise Price payable for the purchase of all shares issuable upon exercise of this Warrant immediately prior to such adjustment by (ii) the Exercise Price per share in effect immediately after such adjustment.

(c) Reclassifications. If the Company changes any of the securities as to which purchase rights under this Warrant exist into the same or a different number of securities of any other class or classes, this Warrant shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities that were subject to the purchase rights under this Warrant immediately prior to such reclassification or other change and the Exercise Price therefor shall be appropriately and proportionately adjusted.

(d) Dividends and Distribution. If the Company declares a non-cash dividend or other distribution on the Series B Preferred Stock or the Company's Common Stock or if a dividend or other distribution on the Series B Preferred Stock or the Company's Common Stock occurs (other than a cash dividend) then, as part of such dividend or distribution, lawful provision shall be made so that there shall thereafter be deliverable upon the exercise of this

Warrant or any portion thereof, in addition to the number of shares of Series B Preferred Stock receivable thereupon and without payment of any additional consideration, the amount of the dividend or other distribution to which the holder of the number of shares of Series B Preferred Stock obtained upon exercise hereof, and the holder of the number of shares of Common Stock into which such Series B Preferred Stock shall be convertible, would have been entitled to receive had the exercise occurred as of the record date for such dividend or distribution.

(e) Liquidation; Dissolution. If the Company shall dissolve, liquidate or wind up its affairs, the Holder shall have the right, but not the obligation, to exercise this Warrant effective as of the date of such dissolution, liquidation or winding up. If any such dissolution, liquidation or winding up results in any cash distribution to the Holder in excess of the aggregate Exercise Price for the shares of Series B Preferred Stock for which this Warrant is exercised, then the Holder may, at its option, exercise this Warrant without making payment of such aggregate Exercise Price and, in such case, the Company shall, upon distribution to the Holder, consider such aggregate Exercise Price to have been paid in full, and in making such settlement to the Holder, shall deduct an amount equal to such aggregate Exercise Price from the amount payable to the Holder.

(f) Other Dilutive Events. If any event occurs as to which the other provisions of this Section 7 are not strictly applicable but the failure to make any adjustment would not fairly protect the purchase rights represented by this Warrant in accordance with the essential intent and principles hereof, then, in each such case, the Company shall appoint a firm of independent public accountants of recognized national standing (which may be the Company's regular auditors) which shall give their opinion upon the adjustment, if any, on a basis consistent with the essential intent and principles established in this Section 7, necessary to preserve, without dilution, the purchase rights represented by this Warrant. Upon receipt of such opinion, the Company shall promptly mail a copy thereof to the Holder and shall make the adjustments described therein.

(g) Certificates and Notices.

(i) Adjustment Certificates. Upon any adjustment of the Exercise Price and/or the number of shares of securities purchasable upon exercise of this Warrant, a certificate signed by (A) the Company's President and Chief Financial Officer, or (B) any independent firm of certified public accounts of recognized national standing the Company selects at its own expense, setting forth in reasonable detail the events requiring the adjustment and the method by which such adjustment was calculated, shall be mailed to the Holder and shall specify the adjusted Exercise Price and the number of shares of securities purchasable upon exercise of the Warrant after giving effect to the adjustment.

(ii) Extraordinary Corporate Events. If the Company, after the date hereof, proposes to effect (A) any transaction described in Section 7(c) hereof, (B) a liquidation, dissolution or winding up of the Company described in Section 7(f) hereof, (C) a sale of assets transaction described in Section 7(a) hereof, or (D) any public offering of securities of the Company or any payment of a dividend or distribution with respect to Series B Preferred Stock or Common Stock of the Company, then, in each such case, the Company shall mail to the Holder a notice describing such proposed action and specifying the date on which the Company's books shall close, or a record shall be taken, for determining the holders of stock entitled to participate in such action, or the date on which such reclassification, liquidation, dissolution, winding up or other action shall take place or commence, as the case may be, and the date as of which it is expected that holders of stock of record shall be entitled to receive securities and/or other property deliverable upon such action, if any such date is to be fixed. Such notice shall be mailed to the Holder at least thirty (30) days prior to the record date for such action in the

case of any action described in clause (A) or clause (C) above, and in the case of any action described in clause (B) above, at least fifteen (15) days prior to the date on which the action described is to take place and at least fifteen (15) days prior to the record date for determining holders of Series B Preferred Stock or Common Stock entitled to receive securities and/or other property in connection with such action.

(h) No Impairment. The Company shall not, by amendment of the Articles of Incorporation or through any reorganization, recapitalization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Company, but shall at all times in good faith assist in the carrying out of all the provisions of this Section 7 and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder against impairment.

(i) Application. Except as otherwise provided herein, all sections of this Section 7 are intended to operate independently of one another. If an event occurs that requires the application of more than one section, all applicable sections shall be given independent effect.

(j) Authorized Shares. The Company covenants that during the period the Warrant is outstanding, it shall reserve from its authorized and unissued Series B Preferred Stock and Common Stock a sufficient number of shares to provide for the issuance of Series B Preferred Stock upon the exercise of this Warrant and issuance of Common Stock upon conversion of such Series B Preferred Stock.

8. Exercise Price Adjustment. The number of shares of Common Stock issuable upon conversion of the Warrant Shares and the terms for such conversion, shall be subject to adjustment from time to time in the manner governing the Company's Series B Preferred Stock in the Company's Certificate of Incorporation. The provisions set forth for the Warrant Shares in the Company's Certificate of Incorporation relating to the above adjustments, as of the date of this Warrant, shall not be amended, modified or waived without the prior written consent of the Holder, unless such amendment, modification or waiver is in accordance with the Company's Certificate of Incorporation and applicable law and affects the Holder in the same manner as it affects all other shareholders of Series B Preferred Stock.

9. Notices. All notices permitted or required hereunder shall be in writing and shall be delivered by hand, by overnight courier providing regular nationwide service or by deposit in the United States mail, postage prepaid, by registered or certified mail, return receipt requested, addressed to the Company or the Holder, as the case may be, at the address of such party below:

(i) if to the Company to:

Cytokinetics, Incorporated
Attn: Robert Blum, Vice President, Business Development
280 East Grand Avenue
South San Francisco, CA 94080

(ii) if to the Holder to:

The Magnum Trust
c/o Peter E.F. Newbald
No. 1 Seaton Place
St. Helier, Jersey JE4 SYJ
Channel Islands

With a copy of any notice to Holder to:

Gregory Tolaram
Hamilton Capital Limited
101 Front Street
Mercury House
Hamilton HM 12, Bermuda

Notices given by mail shall be deemed to be effective on the earlier of the date shown on proof of receipt of such mail or, unless the recipient proves that the notice was received later or not received, five (5) days after the date of mailing thereof. Other notices shall be deemed given on the date of receipt. The Company and any Holder may change the address specified above by written notice to the other party hereto.

10. Miscellaneous. This Warrant may be amended and any term of this Warrant may be waived only by a written instrument signed by the Company and the Warrant holder. This Warrant shall be binding upon any successors or assigns of the Company. This Warrant shall constitute a contract under the laws of the State of California and for all purposes shall be construed in accordance with and governed by the laws of said state applied without reference to conflict of laws principles except to the extent that the Warrant Shares and terms relating thereto are governed by Delaware law.

Dated: As of August 30, 1999

CYTOKINETICS, INCORPORATED

/s/ James Sabry

Name: JAMES SABRY
Title: PRESIDENT AND CEO

EXHIBIT A

NOTICE OF EXERCISE

TO: CYTOKINETICS, INCORPORATED

(1) The undersigned hereby elects to purchase _____ shares of Series B Preferred Stock of Cytokinetics, Incorporated pursuant to the terms of the attached Warrant, and tenders payment of the purchase price in full, together with all applicable transfer taxes, if any.

(2) Please issue a certificate or certificates representing said shares of Series B Preferred Stock in the name of the undersigned.

(3) The undersigned represents that the aforesaid shares of Series B Preferred Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares.

(Date)

_____
(Signature)

_____
(Print Name)

EXHIBIT B

NOTICE OF CONVERSION

To: _____

(1) The undersigned Warrant Holder hereby elects to exercise its conversion rights under Section 2(b) of the Warrant dated as of_____, 1999 between Cytokinetics, Incorporated and such Holder (the "Warrant") and to acquire_____shares of stock of Cytokinetics, Incorporated pursuant to such Section 2(b).

(2) In exercising its rights to convert the Warrant, the undersigned hereby confirms and acknowledges the investment representations and warranties made in Section 3(a) of the Warrant.

(3) Please issue a certificate or certificates representing said shares in the name of the undersigned or in such other name as is specified below.

_____
(name for issuance)

_____
(address)

_____
(address)

WARRANT HOLDER:

_____
(Warrant Holder signature)

Date:_____

EXHIBIT C

INVESTMENT REPRESENTATION STATEMENT

STOCKHOLDER	:	_____
COMPANY	:	Cytokinetics, Incorporated
SECURITY	:	Series B Preferred Stock
AMOUNT	:	
DATE	:	

In connection with the purchase of the above-listed Securities, the undersigned Stockholder represents to the Company the following:

(a) Stockholder is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Stockholder is acquiring these Securities for investment for Stockholder's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Stockholder acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona

fide nature of Stockholder's investment intent as expressed herein. In this connection, Stockholder understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Stockholder's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one year or any other fixed period in the future. Stockholder further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Stockholder further acknowledges and understands that the Company is under no obligation to register the Securities except as described in the Amended and Restated Investor Rights Agreement of even date herewith. Stockholder understands that the certificate evidencing the Securities will be imprinted with a legend which prohibits the transfer of the Securities unless they are registered or such registration is not required in the opinion of counsel satisfactory to the Company, a legend prohibiting their transfer without the consent of the Commissioner of Corporations of the State of California and any other legend required under applicable state securities laws.

(c) Stockholder is familiar with the provision of Rule 144, promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired,

directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions.

The Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which requires the resale to occur not less than one year after the later of the date the Securities were sold by the Company or the date the Securities were sold by an affiliate of the Company, within the meaning of Rule 144; and, in the case of acquisition of the Securities by an affiliate, or by a non-affiliate who subsequently holds the Securities less than two years, the satisfaction of certain conditions of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities may be resold, subject to the satisfaction of certain of the conditions specified by Rule 144, including: (1) the resale being made through a broker in an unsolicited "broker's transaction" or in transactions directly with a market maker (as said term is defined under the Securities Exchange Act of 1934); and, in the case of an affiliate, (2) the availability of certain public information about the Company, (3) the amount of Securities being sold during any three month period not exceeding the limitations specified in Rule 144, and (4) the timely filing of a Form 144, if applicable.

(d) Stockholder further understands that in the event all of the applicable requirements of 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption will be required; and that, notwithstanding the fact that Rule 144 is not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rule 144 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Stockholder understands that no assurances can be given that any such other registration exemption will be available in such event.

Signature of Stockholder;

Date: _____

Exhibit 10.2

CYTOKINETICS, INCORPORATED

1997 STOCK OPTION/STOCK ISSUANCE PLAN

ARTICLE ONE

GENERAL PROVISIONS

I. PURPOSE OF THE PLAN

This 1997 Stock Option/Stock Issuance Plan is intended to promote the interests of Cytokinetics, Incorporated by providing eligible persons with the opportunity to acquire a proprietary interest, or otherwise increase their proprietary interest, in the Corporation as an incentive for them to remain in the service of the Corporation.

Capitalized terms shall have the meanings assigned to such terms in the attached Appendix.

II. STRUCTURE OF THE PLAN

A. The Plan shall be divided into two separate equity programs:

- the Discretionary Option Grant Program under which eligible persons may, at the discretion of the Plan Administrator, be granted options to purchase shares of Common Stock, and

- the Stock Issuance Program under which eligible persons may, at the discretion of the Plan Administrator, be issued shares of Common Stock directly, either through the immediate purchase of such shares or as a bonus for services rendered the Corporation (or any Parent or Subsidiary).

B. The provisions of Articles One and Four shall apply to all equity programs under the Plan and shall govern the interests of all persons under the Plan.

III. ADMINISTRATION OF THE PLAN

A. Except as provided in Paragraph B of this Section III, the Plan shall be administered by the Board or one or more committees appointed by the Board, provided that (1) beginning with the Section 12 Registration Date, the Primary Committee shall have sole and exclusive authority to administer the Plan with respect to Section 16 Insiders, and (2) administration of the Plan may otherwise, at the Board's discretion, be vested in the Primary Committee or a Secondary Committee.

B. Members of the Primary Committee or any Secondary Committee shall serve for such period of time as the Board may determine and may be removed by the Board at any time. The Board may also at any time terminate the functions of any Secondary Committee and reassume all powers and authority previously delegated to such committee.

C. Each Plan Administrator shall, within the scope of its administrative functions under the Plan, have full power and authority (subject to the provisions of the Plan) to establish such rules and regulations as it may deem appropriate for proper administration of the Discretionary Option Grant and Stock Issuance Programs and to make such determinations under, and issue such interpretations of, the provisions of such programs and any outstanding options or stock issuances thereunder as it may deem necessary or advisable. Decisions of the Plan Administrator within the scope of its

administrative functions under the Plan shall be final and binding on all parties who have an interest in the Discretionary Option Grant and Stock Issuance Programs under its jurisdiction or any option or stock issuance thereunder.

D. Service on the Primary Committee or the Secondary Committee shall constitute service as a Board member, and members of each such committee shall accordingly be entitled to full indemnification and reimbursement as Board members for their service on such committee. No member of the Primary Committee or the Secondary Committee shall be liable for any act or omission made in good faith with respect to the Plan or any option grants or stock issuances under the Plan.

IV. ELIGIBILITY

A. The persons eligible to participate in the Discretionary Option Grant and Stock Issuance Programs are as follows:

(i) Employees,

(ii) non-employee members of the Board or the board of directors of any Parent or Subsidiary, and

(iii) consultants and other independent advisors who provide services to the Corporation (or any Parent or Subsidiary).

B. Each Plan Administrator shall, within the scope of its administrative jurisdiction under the Plan, have full authority to determine, (i) with respect to the option grants under the Discretionary Option Grant Program, which eligible persons are to receive option grants, the time or times when such option grants are to be made, the number of shares to be covered by each such grant, the status of the granted option as either an Incentive Option or a Non-Statutory Option, the time or times when each option is to become exercisable, the vesting schedule (if any) applicable to the option shares and the maximum term for which the option is to remain outstanding and (ii) with respect to stock issuances under the Stock Issuance Program, which eligible persons are to receive stock issuances, the time or times when such issuances are

to be made, the number of shares to be issued to each Participant, the vesting schedule (if any) applicable to the issued shares and the consideration for such shares.

C. The Plan Administrator shall have the absolute discretion either to grant options in accordance with the Discretionary Option Grant Program or to effect stock issuances in accordance with the Stock Issuance Program.

V. STOCK SUBJECT TO THE PLAN

A. The stock issuable under the Plan shall be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Corporation on the open market. The maximum number of shares of Common Stock initially reserved for issuance over the term of the Plan shall not exceed 2,000,000 shares.

B. Shares of Common Stock subject to outstanding options shall be available for subsequent issuance under the Plan to the extent those options expire or terminate for any reason prior to exercise in full. Unvested shares issued under the Plan and subsequently cancelled or repurchased by the Corporation, at the original issue price paid per share, pursuant to the Corporation's repurchase rights under the Plan shall not be added back to the number of shares of Common Stock reserved for issuance under the Plan.

C. If any change is made to the Common Stock by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding Common Stock as a class without the Corporation's receipt of consideration, appropriate adjustments shall be made to (i) the maximum number and/or class of securities issuable under the Plan, (ii) the number and/or class of securities for which any one person may be granted stock options, separately exercisable stock appreciation rights and direct stock issuances under this Plan per calendar year, and (iii) the number and/or class of securities and the exercise price per share in effect under each outstanding option under the Plan. Such adjustments to the outstanding options are to be effected in a manner which shall preclude the enlargement or dilution of rights and benefits under such options. The adjustments determined by the Plan Administrator shall be final, binding and conclusive.

ARTICLE TWO

DISCRETIONARY OPTION GRANT PROGRAM

I. OPTION TERMS

Each option shall be evidenced by one or more documents in the form approved by the Plan Administrator; provided, however, that each such document shall comply with the terms specified below. Each document evidencing an Incentive Option shall, in addition, be subject to the provisions of the Plan applicable to such options.

A. EXERCISE PRICE.

1. The exercise price per share shall be fixed by the Plan Administrator but shall not be less than eighty-five percent (85%) of the Fair Market Value per share of Common Stock on the option grant date, provided that the Plan Administrator may fix the exercise price at less than 85% if the optionee, at the time of the option grant, shall have made a payment to the Company (including payment made by means of a salary reduction) equal to the excess of the Fair Market Value of the Common Stock on the option grant date over such exercise price.

2. The exercise price shall become immediately due upon exercise of the option and may, subject to the provisions of Section I of Article Four and the documents evidencing the option, be payable in one or more of the forms specified below:

(i) cash or check made payable to the Corporation,

(ii) with respect to the exercise of options after the Section 12 Registration Date, shares of Common Stock held for the requisite period necessary to avoid a charge to the Corporation's earnings for financial reporting purposes and valued at Fair Market Value on the Exercise Date, or

(iii) with respect to the exercise of options for vested shares after the Section 12 Registration Date and to the extent the sale complies with all applicable laws relating to the regulation and sale of securities, through a special sale and remittance procedure pursuant to which the Optionee shall concurrently provide irrevocable written instructions to (a) a Corporation-designated brokerage firm to effect the immediate sale of the purchased shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate exercise price payable for the purchased shares plus all applicable Federal, state and local income and employment taxes required to be withheld by the Corporation by reason of such exercise, and (b) the Corporation to deliver the certificates for the purchased

shares directly to such brokerage firm in order to complete the sale.

Except to the extent such sale and remittance procedure is utilized, payment of the exercise price for the purchased shares must be made on the Exercise Date.

B. EXERCISE AND TERM OF OPTIONS. Each option shall be exercisable at such time or times, during such period and for such number of shares as shall be determined by the Plan Administrator and set forth in the documents evidencing the option. However, no option shall have a term in excess of ten (10) years measured from the option grant date.

C. EFFECT OF TERMINATION OF SERVICE.

1. The following provisions shall govern the exercise of any options held by the Optionee at the time of cessation of Service or death:

(i) Any option outstanding at the time of the Optionee's cessation of Service for any reason shall remain exercisable for such period of time thereafter as shall be determined by the Plan Administrator and set forth in the documents evidencing the option (which shall in no event be less than six (6) months in the case of death or disability nor less than thirty (30) days in the case of any other cessation of Service), provided no such option shall be exercisable after the expiration of the option term.

(ii) Any option exercisable in whole or in part by the Optionee at the time of death may be subsequently exercised by the personal representative of the Optionee's estate or by the person or persons to whom the option is transferred pursuant to the Optionee's will or in accordance with the laws of descent and distribution.

(iii) Subject to clause C.2.(ii) below of this Section I, during the applicable post-Service exercise period, the option may not be exercised in the aggregate for more than the number of vested shares for which the option is exercisable on the date of the Optionee's cessation of Service. Upon the expiration of the applicable exercise period or (if earlier) upon the expiration of the option term, the option shall terminate and cease to be outstanding for any vested shares for which the option has not been exercised.

2. The Plan Administrator shall have complete discretion, exercisable either at the time an option is granted or at any time while the option remains outstanding, to:

(i) extend the period of time for which the option is to remain exercisable following the Optionee's cessation of Service from the limited exercise period otherwise in effect for that option to such greater period of time as the Plan Administrator shall deem appropriate, but in no event beyond the expiration of the option term, and/or

(ii) permit the option to be exercised, during the applicable post-Service exercise period, not only with respect to the number of vested shares of Common Stock for which such option is exercisable at the time of the Optionee's cessation of Service but also with respect to one or more additional installments in which the Optionee would have vested had the Optionee continued in Service.

D. STOCKHOLDER RIGHTS. The holder of an option shall have no stockholder rights with respect to the shares subject to the option until such person shall have exercised the option, paid the exercise price and

become a holder of record of the purchased shares.

E. VESTING. The vesting schedule imposed with respect to any option grant or share issuance shall be as determined by Plan Administrator and set forth in the documents evidencing such option.

F. REPURCHASE RIGHTS. The Plan Administrator shall have the discretion to grant options which are exercisable for unvested shares of Common Stock and to reserve the right to repurchase any or all of those unvested shares should the optionee thereafter cease to be in Service to the Corporation. The terms upon which such repurchase right shall be exercisable (including the period and procedure for exercise and the appropriate vesting schedule for the purchased shares) shall be established by the Plan Administrator and set forth in the document evidencing such repurchase right.

G. LIMITED TRANSFERABILITY OF OPTIONS. During the lifetime of the Optionee, options shall be exercisable only by the Optionee and shall not be assignable or transferable other than by will or by the laws of descent and distribution following the Optionee's death.

II. INCENTIVE OPTIONS

The terms specified below shall be applicable to all Incentive Options. Except as modified by the provisions of this Section II, all the provisions of Articles One, Two and Four shall be applicable to Incentive Options. Options which are specifically designated as Non-Statutory Options when issued under the Plan shall not be subject to the terms of this Section II.

A. ELIGIBILITY. Incentive Options may only be granted to Employees.

B. EXERCISE PRICE. The exercise price per share shall not be less than one hundred percent (100%) of the Fair Market Value per share of Common Stock on the option grant date.

C. DOLLAR LIMITATION. The aggregate Fair Market Value of the shares of Common Stock (determined as of the respective date or dates of grant) for which one or more options granted to any Employee under the Plan (or any other option plan of the Corporation or any Parent or Subsidiary) may for the first time become exercisable as Incentive Options during any one calendar year shall not exceed the sum of One Hundred Thousand Dollars ($100,000). To the extent the Employee holds two (2) or more such options which become exercisable for the first time in the same calendar year, the foregoing limitation on the exercisability of such options as Incentive Options shall be applied on the basis of the order in which such options are granted.

D. 10% STOCKHOLDER. If any Employee to whom an Incentive Option is granted is a 10% Stockholder, then the exercise price per share shall not be less than one hundred ten percent (110%) of the Fair Market Value per share of Common Stock on the option grant date, and the option term shall not exceed five (5) years measured from the option grant date.

III. CANCELLATION AND REGRANT OF OPTIONS

The Plan Administrator shall have the authority to effect, at any time and from time to time, with the consent of the affected option holders, the cancellation of any or all outstanding options under the Discretionary Option Grant Program and to grant in substitution

new options covering the same or different number of shares of Common Stock but with an exercise price per share based on the Fair Market Value per share of Common Stock on the new grant date.

ARTICLE THREE

STOCK ISSUANCE PROGRAM

I. STOCK ISSUANCES

Shares of Common Stock may be issued under the Stock Issuance Program through direct and immediate issuances without any intervening option grants. Each such stock issuance shall be evidenced by a Stock Issuance Agreement which complies with the terms specified below.

II. STOCK ISSUANCE TERMS

A. PURCHASE PRICE.

1. The purchase price per share shall be fixed by the Plan Administrator, but shall not be less than eighty-five percent (85%) of the Fair Market Value per share of Common Stock on the issuance date.

2. Subject to the provisions of Section I of Article Four, shares of Common Stock may be issued under the Stock Issuance Program for any of the following items of consideration which the Plan Administrator may deem appropriate in each individual instance:

(i) cash or check made payable to the Corporation, or

(ii) past services rendered to the Corporation (or any Parent or Subsidiary).

B. VESTING PROVISIONS.

1. Shares of Common Stock issued under the Stock Issuance Program may, in the discretion of the Plan Administrator, be fully and immediately vested upon issuance or may vest in one or more installments over the Participant's period of Service or upon attainment of specified performance objectives. The elements of the vesting schedule applicable to any unvested shares of Common Stock issued under the Stock Issuance Program, namely:

(i) the Service period to be completed by the Participant or the performance objectives to be attained,

(ii) the number of installments in which the shares are to vest,

(iii) the interval or intervals (if any) which are to lapse between installments, and

(iv) the effect which death, Permanent Disability or other event designated by the Plan Administrator is to have upon the vesting schedule,

shall be determined by the Plan Administrator and incorporated into the Stock Issuance Agreement.

2. Any new, substituted or additional securities or other property (including money paid other than as a regular cash dividend) which the Participant may have the right to receive with respect to the Participant's unvested shares of Common Stock by reason of any stock dividend, stock split, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding Common Stock as a class without the Corporation's receipt of consideration shall be issued subject to (i) the same vesting requirements applicable to the Participant's unvested shares of

Common Stock and (ii) such escrow arrangements as the Plan Administrator shall deem appropriate.

3. The Participant shall have full stockholder rights with respect to any shares of Common Stock issued to the Participant under the Stock Issuance Program, whether or not the Participant's interest in those shares is vested. Accordingly, the Participant shall have the right to vote such shares and to receive any regular cash dividends paid on such shares.

4. Should the Participant cease to remain in Service while holding one or more unvested shares of Common Stock issued under the Stock Issuance Program or should the performance objectives not be attained with respect to one or more such unvested shares of Common Stock, then those shares shall be immediately surrendered to the Corporation for cancellation, and the Participant shall have no further stockholder rights with respect to those shares. To the extent the surrendered shares were previously issued to the Participant for consideration paid in cash or cash equivalent (including the Participant's purchase-money indebtedness), the Corporation shall repay to the Participant the cash consideration paid for the surrendered shares and shall cancel the unpaid principal balance of any outstanding purchase-money note of the Participant attributable to the surrendered shares.

5. The Plan Administrator may in its discretion waive the surrender and cancellation of one or more unvested shares of Common Stock which would otherwise occur upon the cessation of the Participant's Service or the non-attainment of the performance objectives applicable to those shares. Such waiver shall result in the immediate vesting of the Participant's interest in the shares as to which the waiver applies. Such waiver may be effected at any time, whether before or after the Participant's cessation of Service or the attainment or non-attainment of the applicable performance objectives.

ARTICLE FOUR

MISCELLANEOUS

I. FINANCING

The Plan Administrator may permit any Optionee or Participant to pay the option exercise price under the Discretionary Option Grant Program or the purchase price of shares issued under the Stock Issuance Program by delivering a full-recourse, interest bearing promissory note payable in one or more installments. The terms of any such promissory note (including the interest rate and the terms of repayment) shall be established by the Plan Administrator in its sole discretion. In no event may the maximum credit available to the Optionee or Participant exceed the sum of (i) the aggregate option exercise price or purchase price payable for the purchased shares plus (ii) any Federal, state and local income and employment tax liability incurred by the Optionee or the Participant in connection with the option exercise or share purchase.

II. SHARE ESCROW/LEGENDS

Unvested shares issued under the Plan may, in the Plan Administrator's discretion, be held in escrow by the Corporation until the Participant's interest in such shares vests or may be issued directly to the Participant with restrictive legends on the certificates evidencing those unvested shares.

III. CORPORATE TRANSACTION

A. Except as otherwise provided in the agreements evidencing an option, each outstanding option under the Discretionary Option Grant Program shall automatically accelerate in the event of a Corporate Transaction so that each such option shall, immediately prior to the effective date of the Corporate Transaction, become fully exercisable with respect to the

total number of shares of Common Stock at the time subject to such option and may be exercised for any or all of those shares as fully-vested shares of Common Stock, provided that an outstanding option shall not so accelerate if and to the extent: (i) such option is, in connection with the Corporate Transaction, either to be assumed by the successor corporation (or parent thereof) or to be replaced with a comparable option to purchase shares of the capital stock of the successor corporation (or parent thereof), (ii) such option is to be replaced with a cash incentive program of the successor corporation which preserves the spread existing on the unvested option shares at the time of the Corporate Transaction and provides for subsequent payout in accordance with the same vesting schedule applicable to those option shares or (iii) the acceleration of such option is subject to other limitations imposed by the Plan Administrator at the time of the option grant. The determination of option comparability under clause (i) above shall be made by the Plan Administrator, and its determination shall be final, binding and conclusive.

B. Except as otherwise provided in the agreements creating the repurchase rights, outstanding repurchase rights, if any, shall terminate automatically, and the shares of

Common Stock subject to those terminated rights shall immediately vest in full, in the event of any Corporate Transaction, provided that such repurchase right shall not lapse to the extent: (i) those repurchase rights are to be assigned to the successor corporation (or parent thereof) in connection with such Corporate Transaction or (ii) such accelerated vesting is precluded by other limitations imposed by the Plan Administrator at the time the option is issued or the repurchase right is created.

C. Immediately following the consummation of the Corporate Transaction, all outstanding options shall terminate and cease to be outstanding, except to the extent assumed by the successor corporation (or parent thereof).

D. Each option which is assumed in connection with a Corporate Transaction shall be appropriately adjusted, immediately after such Corporate Transaction, to apply to the number and class of securities which would have been issuable to the Optionee in consummation of such Corporate Transaction had the option been exercised immediately prior to such Corporate Transaction. Appropriate adjustments to reflect such Corporate Transaction shall also be made to (i) the exercise price payable per share under each outstanding option, provided the aggregate exercise price payable for such securities shall remain the same, (ii) the maximum number and/or class of securities available for issuance over the remaining term of the Plan and (iii) the maximum number and/or class of securities for which any one person may be granted stock options, separately exercisable stock appreciation rights and direct stock issuances under the Plan per calendar year.

E. Repurchase rights which are assigned in connection with a Corporate Transaction shall be exercisable with respect to the property issued to the Optionee of Participant upon consummation of such Corporate Transaction in exchange for the Common Stock held by the Optionee or Participant subject to the repurchase rights immediately prior to the Corporate Transaction.

F. Except as otherwise limited by the Plan Administrator at the time an Option is granted, vesting under outstanding options will automatically accelerate in the event the Optionee's Service subsequently terminates by reason of an Involuntary Termination within twenty-four (24) months following the effective date of any Corporate Transaction in which those options are assumed or replaced and do not otherwise accelerate. Any options so accelerated shall remain exercisable for fully-vested shares until the earlier of (i) the expiration of the option term or (ii) the expiration of the one (l)-year period measured from the effective date of the Involuntary Termination. The portion of any Incentive Option accelerated in connection with a Corporate Transaction or Change in Control shall remain exercisable as an Incentive Option only to the extent the applicable One Hundred Thousand Dollar limitation is not

exceeded and the provisions governing the exercise and holding period are met. To the extent such dollar limitation is exceeded, the accelerated portion of such option shall be exercisable as a Non-Statutory Option under the Federal tax laws.

G. Except as otherwise limited by the Plan Administrator at the time the option is granted under the Discretionary Option Program or the repurchase rights are created, the

outstanding repurchase rights with respect to shares held by an Optionee or Participant will automatically lapse and cease to be exercisable in the event the Optionee's or the Participant's Service subsequently terminates by means of an Involuntary Termination within twenty-four (24) months following the effective date of any Corporate Transaction in which those repurchase rights are assigned or otherwise continue.

H. The outstanding options or repurchase rights shall in no way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

IV. HOSTILE CHANGE IN CONTROL

A. In the event of any Hostile Change in Control, each outstanding option under the Discretionary Option Grant Program shall automatically accelerate so that each such option shall, immediately prior to the effective date of the Hostile Change in Control, become fully exercisable with respect to the total number of shares of Common Stock at the time subject to such option and may be exercised for any or all of those shares as fully-vested shares of Common Stock.

B. Outstanding repurchase rights, if any, shall terminate automatically, and the shares of Common Stock subject to those terminated rights shall immediately vest in full, in the event of any Hostile Change in Control.

V. TAX WITHHOLDING

A. The Corporation's obligation to deliver shares of Common Stock upon the exercise of options or the issuance or vesting of such shares under the Plan shall be subject to the satisfaction of all applicable Federal, state and local income and employment tax withholding requirements.

B. The Plan Administrator may, in its discretion, provide any or all holders of Non-Statutory Options or unvested shares of Common Stock under the Plan with the right to use shares of Common Stock in satisfaction of all or part of the Taxes incurred by such holders in connection with the exercise of their options or the vesting of their shares. Such right may be provided to any such holder in either or both of the following formats:

Stock Withholding: The election to have the Corporation withhold, from the shares of Common Stock otherwise issuable upon the exercise of such Non-Statutory Option or the vesting of such shares, a portion of those shares with an aggregate Fair Market Value equal to the percentage of the Taxes (not to exceed one hundred percent (100%)) designated by the holder.

Stock Delivery: The election to deliver to the Corporation, at the time the Non-Statutory Option is exercised or the shares vest, one or more shares of Common Stock

previously acquired by such holder (other than in connection with the option exercise or share vesting triggering the Taxes) with an aggregate Fair Market Value equal to the percentage of the Taxes (not to exceed one hundred percent (100%)) designated by the holder.

VI. EFFECTIVE DATE AND TERM OF THE PLAN

A. The Plan shall become effective immediately upon the Plan Effective Date. Options may be granted under the Discretionary Option Grant at any time on or after the Plan Effective Date. However, no options granted under the Plan may be exercised, and no shares shall be issued under the Plan, until the Plan is approved by the Corporation's stockholders. If such stockholder approval is not obtained within twelve (12) months after the Plan Effective Date, then all options previously granted under this Plan shall terminate and cease to be outstanding, and no further options shall be granted and no shares shall be issued under the Plan.

B. The Plan shall terminate upon the earliest of (i) the tenth anniversary of the Plan Effective Date, (ii) the date on which all shares available for issuance under the Plan shall have been issued as fully-vested shares or (iii) the termination of all outstanding options in connection with a Corporate Transaction. Upon such plan termination, all outstanding option grants and unvested stock issuances shall thereafter continue to have force and effect in accordance with the provisions of the documents evidencing such grants or issuances.

VII. AMENDMENT OF THE PLAN

A. The Board shall have complete and exclusive power and authority to amend or modify the Plan in any or all respects. However, no such amendment or modification shall adversely affect the rights and obligations with respect to stock options or unvested stock issuances at the time outstanding under the Plan unless the Optionee or the Participant consents to such amendment or modification. In addition, certain amendments may require stockholder approval if so determined by the Board or pursuant to applicable laws or regulations.

B. Options to purchase shares of Common Stock may be granted under the Discretionary Option Grant and shares of Common Stock may be issued under the Stock Issuance Program that are in each instance in excess of the number of shares then available for issuance under the Plan, provided any excess shares actually issued under those programs shall be held in escrow until there is obtained any required approval of an amendment sufficiently increasing the number of shares of Common Stock available for issuance under the Plan. If such approval is not obtained within twelve (12) months after the date the first such excess issuances are made, then (i) any unexercised options granted on the basis of such excess shares shall terminate and cease to be outstanding and (ii) the Corporation shall promptly refund to the Optionees and the Participants the exercise or purchase price paid for any excess shares issued under the Plan and held in escrow, together with interest (at the applicable Short Term Federal Rate) for the period the shares were held in escrow, and such shares shall thereupon be automatically cancelled and cease to be outstanding.

VIII. USE OF PROCEEDS

Any cash proceeds received by the Corporation from the sale of shares of Common Stock under the Plan shall be used for general corporate purposes.

IX. REGULATORY APPROVALS

A. The implementation of the Plan, the granting of any stock option under the Plan and the issuance of any shares of Common Stock (i) upon the exercise of any granted option or (ii) under the Stock Issuance Program shall be subject to the Corporation's procurement of all approvals and permits

required by regulatory authorities having jurisdiction over the Plan, the stock options granted under it and the shares of Common Stock issued pursuant to it.

B. No shares of Common Stock or other assets shall be issued or delivered under the Plan unless and until there shall have been compliance with all applicable requirements of Federal and state securities laws, including the filing and effectiveness of the Form S-8 registration statement for the shares of Common Stock issuable under the Plan, and all applicable listing requirements of any stock exchange (or the Nasdaq National Market, if applicable) on which Common Stock is then listed for trading.

X. NO EMPLOYMENT/SERVICE RIGHTS

Nothing in the Plan shall confer upon the Optionee or the Participant any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Corporation (or any Parent or Subsidiary employing or retaining such person) or of the Optionee or the Participant, which rights are hereby expressly reserved by each, to terminate such person's Service at any time for any reason, with or without cause.

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APPENDIX

The following definitions shall be in effect under the Plan:

A. BOARD shall mean the Corporation's Board of Directors.

B. CODE shall mean the Internal Revenue Code of 1986, as amended.

C. COMMON STOCK shall mean the Corporation's common stock.

D. CORPORATE TRANSACTION shall mean either of the following stockholder-approved transactions to which the Corporation is a party:

(i) a merger or consolidation in which securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities are transferred to a person or persons different from the persons holding those securities immediately prior to such transaction, or

(ii) the sale, transfer or other disposition of all or substantially all of the Corporation's assets.

E. CORPORATION shall mean Cytokinetics, Incorporated, a Delaware corporation, and its successors.

F. DISCRETIONARY OPTION GRANT PROGRAM shall mean the discretionary option grant program in effect under the Plan.

G. EMPLOYEE shall mean an individual who is in the employ of the Corporation (or any Parent or Subsidiary), subject to the control and direction of the employer entity as to both the work to be performed and the manner and method of performance.

H. EXERCISE DATE shall mean the date on which the Corporation shall have received written notice of the option exercise.

I. FAIR MARKET VALUE per share of Common Stock on any relevant date shall be determined in accordance with the following provisions:

(i) If the Common Stock is at the time traded on the Nasdaq National Market, then the Fair Market Value shall be deemed equal to the closing selling price per share of Common Stock on the

date in question, as such price is reported on the Nasdaq National Market or any successor system. If there is no closing selling price for the Common Stock on the date in question, then the Fair

Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(ii) If the Common Stock is at the time listed on any Stock Exchange, then the Fair Market Value shall be deemed equal to the closing selling price per share of Common Stock on the date in question on the Stock Exchange determined by the Plan Administrator to be the primary market for the Common Stock, as such price is officially quoted in the composite tape of transactions on such exchange. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(iii) For purposes of any option grants made on the Underwriting Date, the Fair Market Value shall be deemed to be equal to the price per share at which the Common Stock is to be sold in the initial public offering pursuant to the Underwriting Agreement.

(iv) For purposes of any option grants made prior to the Underwriting Date, the Fair Market Value shall be determined by the Plan Administrator, after taking into account such factors as it deems appropriate.

J. HOSTILE CHANGE IN CONTROL shall mean a change in ownership or control of the Corporation effected through either of the following transactions;

(i) the acquisition, directly or indirectly by any person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by, or is under common control with, the Corporation), of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders which the Board does not recommend such stockholders to accept, or

(ii) a change in the composition of the Board over a period of thirty-six (36) consecutive months or less such that a majority of the Board members ceases, by reason of one or more contested elections for Board membership, to be comprised of individuals who either (A) have been Board members continuously since the beginning of such period or (B) have been elected or nominated for election as Board members during such period by at least a majority of the Board members described in clause (A) who were still in office at the time the Board approved such election or nomination.

K. INCENTIVE OPTION shall mean an option which satisfies the requirements of Code Section 422.

L. INVOLUNTARY TERMINATION shall mean the termination of the Service of any individual which occurs by reason of:

(i) such individual's involuntary dismissal or discharge by the Corporation for reasons other than Misconduct, or

(ii) such individual's voluntary resignation following (A) a change in his or her position with the Corporation

which materially reduces his or her level of responsibility, (B) a reduction in his or her level of compensation (including base salary, fringe benefits and participation in any corporate-performance based bonus or incentive programs) by more than fifteen percent (15%) or (C) a relocation of such individual's place of employment by more than fifty (50) miles, provided and only if such change, reduction or relocation is effected by the Corporation without the individual's consent.

M. MISCONDUCT shall mean the commission of any act of fraud, embezzlement or dishonesty by the Optionee or Participant, any unauthorized use or disclosure by such person of confidential information or trade secrets of the Corporation (or any Parent or Subsidiary), or any other intentional misconduct by such person adversely affecting the business or affairs of the Corporation (or any Parent or Subsidiary) in a material manner. The foregoing definition shall not be deemed to be inclusive of all the acts or omissions which the Corporation (or any Parent or Subsidiary) may consider as grounds for the dismissal or discharge of any Optionee, Participant or other person in the Service of the Corporation (or any Parent or Subsidiary).

N. 1934 ACT shall mean the Securities Exchange Act of 1934, as amended.

O. NON-STATUTORY OPTION shall mean an option not intended to satisfy the requirements of Code Section 422.

P. OPTIONEE shall mean any person to whom an option is granted under the Discretionary Option Grant Program.

Q. PARENT shall mean any corporation (other than the Corporation) in an unbroken chain of corporations ending with the Corporation, provided each corporation in the unbroken chain (other than the Corporation) owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

R. PARTICIPANT shall mean any person who is issued shares of Common Stock under the Stock Issuance Program.

S. PERMANENT DISABILITY OR PERMANENTLY DISABLED shall mean the inability of the Optionee or the Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment expected to result in death or to be of continuous duration of twelve (12) months or more.

T. PLAN shall mean the Corporation's 1997 Stock Option/Stock Issuance Plan, as set forth in this document.

U. PLAN ADMINISTRATOR shall mean the particular entity, whether the Primary Committee, the Board or the Secondary Committee, which is authorized to administer the Discretionary Option Grant and Stock Issuance Programs with respect to one or more classes of eligible persons, to the extent such entity is carrying out its administrative functions under those programs with respect to the persons under its jurisdiction.

V. PLAN EFFECTIVE DATE shall mean the date on which the Plan was adopted by the Board.

W. PRIMARY COMMITTEE shall mean the committee of two (2) or more non-employee Board members appointed by the Board to administer the Discretionary Option Grant and Stock Issuance Programs with respect to Section 16 Insiders following the Section 12 Registration Date.

X. SECONDARY COMMITTEE shall mean a committee of two (2) or more Board members appointed by the Board to administer any aspect of Plan not

required hereunder to be administered by the Primary Committee. The members of the Secondary Committee may be Board members who are Employees eligible to receive discretionary option grants or direct stock issuances under the Plan or any other stock option, stock appreciation, stock bonus or other stock plan of the Corporation (or any Parent or Subsidiary).

Y. SECTION 12 REGISTRATION DATE shall mean the date on which the Common Stock is first registered under Section 12(g) or Section 15 of the 1934 Act.

Z. SECTION 16 INSIDER shall mean an officer or director of the Corporation subject to the short-swing profit liabilities of Section 16 of the 1934 Act.

AA. SERVICE shall mean the performance of services for the Corporation (or any Parent or Subsidiary) by a person in the capacity of an Employee, a non-employee member of the board of directors or a consultant or independent advisor, except to the extent otherwise specifically provided in the documents evidencing the option grant or stock issuance.

AB. STOCK EXCHANGE shall mean either the American Stock Exchange or the New York Stock Exchange.

AC. STOCK ISSUANCE AGREEMENT shall mean the agreement entered into by the Corporation and the Participant at the time of issuance of shares of Common Stock under the Stock Issuance Program.

AD. STOCK ISSUANCE PROGRAM shall mean the stock issuance program in effect under the Plan.

AE. SUBSIDIARY shall mean any corporation (other than the Corporation) in an unbroken chain of corporations beginning with the Corporation, provided each corporation (other than the last corporation) in the unbroken chain owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

AF. TAXES shall mean the Federal, state and local income and employment tax liabilities incurred by the holder of Non-Statutory Options or unvested shares of Common Stock in connection with the exercise of those options or the vesting of those shares.

AG. 10% STOCKHOLDER shall mean the owner of stock (as determined under Code Section 424(d)) possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Corporation (or any Parent or Subsidiary).

AH. UNDERWRITING AGREEMENT shall mean the agreement between the Corporation and the underwriter or underwriters managing the initial public offering of the Common Stock.

AI. UNDERWRITING DATE shall mean the date on which the Underwriting Agreement is executed and priced in connection with an initial public offering of the Common Stock.

CYTOKINETICS, INCORPORATED
STOCK OPTION AGREEMENT

RECITALS

A. The Board of Directors of the Corporation has adopted the Cytokinetics, Incorporated 1997 Stock Option/Stock Issuance Plan (the "Plan")

for the purpose of attracting and retaining the services of persons who contribute to the growth and financial success of the Corporation.

B. Optionee is a person who the Plan Administrator believes has and will contribute to the growth and financial success of the Corporation and this Agreement is executed pursuant to and is intended to carry out the purposes of the Plan.

AGREEMENT

NOW, THEREFORE, it is hereby agreed as follows:

1. GRANT OF OPTION. Subject to and upon the terms and conditions set forth in this Agreement, the Corporation hereby grants to Optionee, as of the grant date (the "Grant Date") specified in the accompanying Notice of Grant of Stock Option (the "Grant Notice"), a stock option to purchase up to that number of shares of the Corporation's Common Stock (the "Option Shares") as is specified in the Grant Notice. The Option Shares shall be purchasable from time to time during the option term at the option price per share (the "Option Price") specified in the Grant Notice. Capitalized terms used herein which are not otherwise defined shall have the meaning ascribed to such terms in the Plan.

2. OPTION TERM. This option shall have a maximum term of ten (10) years measured from the Grant Date and shall expire at the close of business on the expiration date (the "Expiration Date") specified in the Grant Notice, unless sooner terminated in accordance with Paragraph 5, 6 or 17.

3. LIMITED TRANSFERABILITY. This option shall be neither transferable nor assignable by Optionee other than by will or by the laws of descent and distribution following Optionee's death and may be exercised, during Optionee's lifetime, only by Optionee.

4. DATES OF EXERCISE. This option may not be exercised in whole or in part at any time prior to the time the Plan is approved by the Corporation's shareholders in accordance with Paragraph 17. Provided such shareholder approval is obtained, this option shall thereupon become exercisable for the Option Shares in one or more installments as is specified in the Grant Notice. As the option becomes exercisable in one or more installments, the installments shall accumulate and the option shall remain

exercisable for such installments until the Expiration Date or the sooner termination of the option term under Paragraph 5 or Paragraph 6 of this Agreement.

5. SPECIAL TERMINATION OF OPTION TERM. The option term specified in Paragraph 2 shall terminate (and this option shall cease to be exercisable) prior to the Expiration Date should any of the following provisions become applicable:

(i) Except as otherwise provided in subparagraph (ii) or (iii) below, should Optionee cease to remain in Service while this option is outstanding, then the period for exercising this option shall be reduced to a three (3)-month period commencing with the date of such cessation of Service, but in no event shall this option be exercisable at any time after the Expiration Date. Upon the expiration of such three (3)-month period or (if earlier) upon the Expiration Date, this option shall terminate and cease to be outstanding.

(ii) Should Optionee die while this option is outstanding, then the personal representative of the Optionee's estate or the person or persons to whom the option is transferred pursuant to the Optionee's will or in accordance with the law of descent and distribution shall have the right to exercise this option. Such right shall lapse and this option shall cease to be exercisable upon the earlier of (A) the expiration of the twelve (12) month period measured

from the date of Optionee's death or (B) the Expiration Date. Upon the expiration of such twelve (12) month period or (if earlier) upon the Expiration Date, this option shall terminate and cease to be outstanding.

(iii) Should Optionee become permanently disabled and cease by reason thereof to remain in Service while this option is outstanding, then the Optionee shall have a period of twelve (12) months (commencing with the date of such cessation of Service) during which to exercise this option, but in no event shall this option be exercisable at any time after the Expiration Date. Optionee shall be deemed to be permanently disabled if Optionee is unable to engage in any substantial gainful activity for the Corporation or the parent or subsidiary corporation retaining his/her services by reason of any medically determinable physical or mental impairment, which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than twelve (12) months. Upon the expiration of such limited period of exercisability or (if earlier) upon the Expiration Date, this option shall terminate and cease to be outstanding.

(iv) During the limited period of exercisability applicable under subparagraph (i), (ii) or (iii) above, this option may be exercised for any or all of the Option Shares for which this option is, at the time of the

Optionee's cessation of Service, exercisable in accordance with the exercise schedule specified in the Grant Notice and the provisions of Paragraph 6 of this Agreement.

(v) For purposes of this Paragraph 5 and for all other purposes under this Agreement:

A. The Optionee shall be deemed to remain in SERVICE for so long as the Optionee continues to render periodic services to the Corporation or any parent or subsidiary corporation, whether as an Employee, a non-employee member of the board of directors, or an independent contractor or consultant.

B. The Optionee shall be deemed to be an EMPLOYEE of the Corporation and to continue in the Corporation's employ for so long as the Optionee remains in the employ of the Corporation or one or more of its parent or subsidiary corporations, subject to the control and direction of the employer entity as to both the work to be performed and the manner and method of performance.

C. A corporation shall be considered to be a SUBSIDIARY corporation of the Corporation if it is a member of an unbroken chain of corporations beginning with the Corporation, provided each such corporation in the chain (other than the last corporation) owns, at the time of determination, stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

D. A corporation shall be considered to be a PARENT corporation of the Corporation if it is a member of an unbroken chain ending with the Corporation, provided each such corporation in the chain (other than the Corporation) owns, at the time of determination, stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

6. EFFECT OF CORPORATE TRANSACTION.

A. Optionee shall automatically vest with respect to a

portion of the Option Shares in the event of a Corporate Transaction so that such portion shall, immediately prior to the effective date of the Corporate Transaction, become fully exercisable with for vested shares of Common Stock, provided that no Option Shares shall automatically vest in full if and to the extent: (i) this option is, in connection with the Corporate Transaction, either to be assumed by the successor corporation (or parent thereof) or to be replaced with a comparable option to purchase shares of the capital stock of the successor corporation (or parent thereof), or (ii) such option is to be

replaced with a cash incentive program of the successor corporation which preserves the spread existing on the unvested option shares at the time of the Corporate Transaction and provides for subsequent payout in accordance with the same vesting schedule applicable to those option shares. The determination of option comparability under clause (i) above shall be made by the Plan Administrator, and its determination shall be final, binding and conclusive. The portion of the Option Shares which will automatically vest hereunder shall be a number of shares equal to the number of unvested Option Shares immediately prior to the Corporate Transaction multiplied by a fraction, the numerator of which is the number of complete months of which elapsed after the Vesting Commencement Date set forth in the Grant Notice and the date of the Corporate Transaction, and the denominator of which is the number of months required under the Grant Notice for the rights of Optionee to become fully vested.

B. To the extent not previously exercised, this Option shall terminate and cease to be exercisable upon the consummation of a Corporate Transaction unless it is expressly assumed by the successor corporation or parent thereof.

C. Option Shares available under any options which are assumed or replaced in the Corporate Transaction and do not otherwise accelerate at that time, shall automatically vest in full in the event the Optionee's Service should subsequently terminated by reason of an Involuntary Termination within twenty-four (24) months following the effective date of such Corporate Transaction. Any options so accelerated shall remain exercisable for fully-vested shares until the earlier of (i) the expiration of the option term or (ii) the expiration of the one (l)-year period measured from the effective date of the Involuntary Termination.

D. This Agreement shall not in any way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise make changes in its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

6. EFFECT OF HOSTILE CHANGE IN CONTROL

In the event of any Hostile Change in Control, Optionee shall automatically vest in full with respect to all Option Shares so that each such option shall, immediately prior to the effective date of the Hostile Change in Control, be fully exercisable for any or all of Option Shares as fully-vested shares of Common Stock.

7. ADJUSTMENT IN OPTION SHARES.

A. In the event any change is made to the Corporation's outstanding Common Stock by reason of any stock split, stock dividend, combination of shares, exchange of shares, or other change affecting the outstanding Common Stock as a class without receipt of consideration, then appropriate adjustments shall be made to (i) the total number of Option Shares subject to this option, (ii) the number of Option Shares

for which this option is to be exercisable from and after each installment date specified in the Grant Notice and (iii) the Option Price payable per share in

order to reflect such change and thereby preclude a dilution or enlargement of benefits hereunder.

B. If this option is to be assumed in connection with a Corporate Transaction described in Paragraph 6 or is otherwise to remain outstanding, then this option shall be appropriately adjusted, immediately after such Corporate Transaction, to apply and pertain to the number and class of securities which would have been issuable to the Optionee in the consummation of such Corporate Transaction had the option been exercised immediately prior to such Corporate Transaction, and appropriate adjustments shall also be made to the Option Price payable per share, provided the aggregate Option Price payable hereunder shall remain the same.

8. PRIVILEGE OF STOCK OWNERSHIP. The holder of this option shall not have any of the rights of a shareholder with respect to the Option Shares until such individual shall have exercised the option and paid the Option Price.

9. MANNER OF EXERCISING OPTION.

A. In order to exercise this option with respect to all or any part of the Option Shares for which this option is at the time exercisable, Optionee (or in the case of exercise after Optionee's death, the Optionee's executor, administrator, heir or legatee, as the case may be) must take the following actions:

(i) Execute and deliver to the Secretary of the Corporation a stock purchase agreement (the "Purchase Agreement") in substantially the form of Exhibit B to the Grant Notice.

(ii) Pay the aggregate Option Price for the purchased shares in one or more forms approved under the Plan.

(iii) Furnish to the Corporation appropriate documentation that the person or persons exercising the option, if other than Optionee, have the right to exercise this option.

B. For purposes of this Agreement, the Exercise Date shall be the date on which the executed Purchase Agreement shall have been delivered to the Corporation, and the fair market value of a share of Common Stock on any relevant date shall be determined in accordance with subparagraphs (i) through (iii) below:

(i) If the Common Stock is not at the time listed or admitted to trading on any stock exchange but is traded on the NASDAQ National Market System, the fair market value shall be the closing selling price of one share of Common Stock on the date in question, as such price is reported by the National Association of Securities Dealers through its

NASDAQ system or any successor system. If there is no closing selling price for the Common Stock on the date in question, then the closing selling price on the last preceding date for which such quotation exists shall be determinative of fair market value.

(ii) If the Common Stock is at the time listed or admitted to trading on any stock exchange, then the fair market value shall be the closing selling price per share of Common Stock on the date in question on the stock exchange determined by the Plan Administrator to be the primary market for the Common Stock, as such price is officially quoted in the composite tape of transactions on such exchange. If there is no reported sale of Common Stock on such exchange on the date in question, then the fair market value shall be the closing selling price on the exchange on the last preceding date for which such quotation exists.

(iii) If the Common Stock at the time is neither listed nor admitted to trading on any stock exchange nor traded in the over-the-counter market, or if the Plan Administrator determines that the value determined pursuant to subparagraphs (i) and (ii) above does not accurately reflect the fair market value of the Common Stock, then such fair market value shall be determined by the Plan Administrator after taking into account such factors as the Plan Administrator shall deem appropriate.

C. As soon after the Exercise Date as practical, the Corporation shall mail or deliver to Optionee or to the other person or persons exercising this option a certificate or certificates representing the shares so purchased and paid for, with the appropriate legends affixed thereto.

D. In no event may this option be exercised for any fractional shares.

10. COMPLIANCE WITH LAWS AND REGULATIONS.

A. The exercise of this option and the issuance of Option Shares upon such exercise shall be subject to compliance by the Corporation and the Optionee with all applicable requirements of law relating thereto and with all applicable regulations of any stock exchange on which shares of the Corporation's Common Stock may be listed at the time of such exercise and issuance.

B. In connection with the exercise of this option, Optionee shall execute and deliver to the Corporation such representations in writing as may be requested by the Corporation in order for it to comply with the applicable requirements of Federal and State securities laws.

11. SUCCESSORS AND ASSIGNS. Except to the extent otherwise provided in Paragraph 3 or 6, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, administrators, heirs, legal representatives and assigns of Optionee and the successors and assigns of the Corporation.

12. LIABILITY OF CORPORATION.

A. If the Option Shares covered by this Agreement exceed, as of the Grant Date, the number of shares of Common Stock which may without shareholder approval be issued under the Plan, then this option shall be void with respect to such excess shares, unless shareholder approval of an amendment sufficiently increasing the number of shares of Common Stock issuable under the Plan is obtained in accordance with the provisions of Article IV, Section 3, of the Plan.

B. The inability of the Corporation to obtain approval from any regulatory body having authority deemed by the Corporation to be necessary to the lawful issuance and sale of any Common Stock pursuant to this option shall relieve the Corporation of any liability with respect to the non-issuance or sale of the Common Stock as to which such approval shall not have been obtained. The Corporation, however, shall use its best efforts to obtain all such approvals.

13. NOTICES. Any notice required to be given or delivered to the Corporation under the terms of this Agreement shall be in writing and addressed to the Corporation in care of the Corporate Secretary at its principal corporate offices. Any notice required to be given or delivered to Optionee shall be in writing and addressed to Optionee at the address indicated below Optionee's signature line on the Grant Notice. All notices shall be deemed to have been given or delivered upon personal delivery or upon deposit in the U.S. mail, postage prepaid and properly addressed to the party to be notified.

14. LOANS. The Plan Administrator may, in its absolute discretion and without any obligation to do so, assist the Optionee in the exercise of this option by (i) authorizing the extension of a loan to the Optionee from the Corporation or (ii) permitting the Optionee to pay the option price for the purchased Common Stock in installments over a period of years. The terms of any such loan or installment method of payment (including the interest rate, the requirements for collateral and the terms of repayment) shall be established by the Plan Administrator in its sole discretion.

15. CONSTRUCTION. This Agreement and the option evidenced hereby are made and granted pursuant to the Plan and are in all respects limited by and subject to the express terms and provisions of the Plan. All decisions of the Plan Administrator with respect to any question or issue arising under the Plan or this Agreement shall be conclusive and binding on all persons having an interest in this option.

16. GOVERNING LAW. The interpretation, performance, and enforcement of this Agreement shall be governed by the laws of the State of California without resort to that State's conflict-of-laws rules.

17. SHAREHOLDER APPROVAL. The grant of this option is subject to approval of the Plan by the Corporation's shareholders within twelve (12) months after the adoption of the Plan by the Board of Directors. Notwithstanding any provision of this Agreement to the contrary, this option may not be exercised in whole or in part until such shareholder approval is obtained. In the event that such shareholder approval is not obtained, then this option shall thereupon terminate in its entirety and the Optionee shall have no further rights to acquire any Option Shares hereunder.

18. ADDITIONAL TERMS APPLICABLE TO AN INCENTIVE STOCK OPTION. In the event this option is designated an incentive stock option in the Grant Notice, the following terms and conditions shall also apply to the grant:

A. This option shall cease to qualify for favorable tax treatment as an incentive stock option under the Federal tax laws if (and to the extent) this option is exercised for one or more Option Shares: (i) more than three (3) months after the date the Optionee ceases to be an Employee for any reason other than death or permanent disability (as defined in Paragraph 5) or (ii) more than one (1) year after the date the Optionee ceases to be an Employee by reason of permanent disability.

B. Should this option be designated as immediately exercisable in the Grant Notice, then this option shall not become exercisable in the calendar year in which granted if (and to the extent) the aggregate fair market value (determined at the Grant Date) of the Corporation's Common Stock for which this option would otherwise first become exercisable in such calendar year would, when added to the aggregate fair market value (determined as of the respective date or dates of grant) of the Corporation's Common Stock for which this option or one or more other incentive stock options granted to the Optionee prior to the Grant Date (whether under the Plan or any other option plan of the Corporation or its parent or subsidiary corporations) first become exercisable during the same calendar year, exceed One Hundred Thousand Dollars ($100,000) in the aggregate. To the extent the exercisability of this option is deferred by reason of the foregoing limitation, the deferred portion will first become exercisable in the first calendar year or years thereafter in which the One Hundred Thousand Dollar ($100,000) limitation of this Paragraph 18.B would not be contravened.

C. Should this option be designated as exercisable in installments in the Grant Notice, then no installment under this option (whether annual or monthly) shall qualify for favorable tax treatment as an incentive stock option under the Federal tax laws if (and to the extent) the aggregate fair market value (determined at the Grant Date) of the Corporation's Common Stock for which such installment first becomes exercisable hereunder will, when added to the aggregate fair market value (determined as of the respective date

or dates of grant) of the Corporation's Common Stock for

which one or more other incentive stock options granted to the Optionee prior to the Grant Date (whether under the Plan or any other option plan of the Corporation or any parent or subsidiary corporation) first become exercisable during the same calendar year, exceed One Hundred Thousand Dollars ($100,000) in the aggregate.

19. WITHHOLDING. Optionee hereby agrees to make appropriate arrangements with the Corporation or parent or subsidiary corporation employing Optionee for the satisfaction of all Federal, State or local income tax withholding requirements and Federal social security employee tax requirements applicable to the exercise of this option.

Immediately Exercisable

CYTOKINETICS, INCORPORATED
STOCK PURCHASE AGREEMENT

AGREEMENT made as of this __ day of_____, 19_, by and among Cytokinetics, Incorporated, (the "Corporation"),_____, the holder of a stock option (the "Optionee") under the Corporation's 1997 Stock Option/Stock Issuance Plan and _____, the Optionee's spouse.

I. EXERCISE OF OPTION

1.1 EXERCISE. Optionee hereby purchases_____shares ("Purchased Shares") of the Corporation's common stock ("Common Stock") pursuant to that certain option ("Option") granted Optionee on_____, 19____("Grant Date") to purchase up to_____shares of the Common Stock ("Total Purchasable Shares") under the Corporation's 1997 Stock Option/Stock Issuance Plan (the "Plan") at an option price of $_____ per share ("Option Price").

1.2 PAYMENT. Concurrently with the delivery of this Agreement to the Corporate Secretary of the Corporation, Optionee shall pay the Option Price for the Purchased Shares in accordance with the provisions of the agreement between the Corporation and Optionee evidencing the Option (the "Option Agreement") and shall deliver whatever additional documents may be required by the Option Agreement as a condition for exercise, together with a duly-executed blank Assignment Separate from Certificate (in the form attached hereto as Exhibit I) with respect to the Purchased Shares.

1.3 DELIVERY OF CERTIFICATES. The certificates representing the Purchased Shares hereunder shall be held in escrow by the Corporate Secretary of the Corporation in accordance with the provisions of Article VII.

1.4 SHAREHOLDER RIGHTS. Until such time as the Corporation actually exercises its repurchase right, rights of first refusal or special purchase right under this Agreement, Optionee (or any successor in interest) shall have all the rights of a shareholder (including voting and dividend rights) with respect to the Purchased Shares, including the Purchased Shares held in escrow under Article VII, subject, however, to the transfer restrictions of Article IV.

II. SECURITIES LAW COMPLIANCE

2.1 EXEMPTION FROM REGISTRATION. The Purchased Shares have not been registered under the Securities Act of 1933, as amended (the "1933 Act"), and are accordingly being issued to Optionee in reliance upon the exemption from such registration provided by Rule 701 of the Securities and

Exchange Commission for stock issuances under compensatory

benefit plans such as the Plan. Optionee hereby acknowledges previous receipt of a copy of the documentation for such Plan in the form of Exhibit C to the Notice of Grant of Stock Option (the "Grant Notice") accompanying the Option Agreement.

2.2 RESTRICTED SECURITIES.

A. Optionee hereby confirms that Optionee has been informed that the Purchased Shares are restricted securities under the 1933 Act and may not be resold or transferred unless the Purchased Shares are first registered under the Federal securities laws or unless an exemption from such registration is available. Accordingly, Optionee hereby acknowledges that Optionee is prepared to hold the Purchased Shares for an indefinite period and that Optionee is aware that Rule 144 of the Securities and Exchange Commission issued under the 1933 Act is not presently available to exempt the sale of the Purchased Shares from the registration requirements of the 1933 Act.

B. Upon the expiration of the ninety (90)-day period immediately following the date on which the Corporation first becomes subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the Purchased Shares, to the extent vested under Article V, may be sold (without registration) pursuant to the applicable requirements of Rule 144. If Optionee is at the time of such sale an affiliate of the Corporation for purposes of Rule 144 or was such an affiliate during the preceding three (3) months, then the sale must comply with all the requirements of Rule 144 (including the volume limitation on the number of shares sold, the broker/market-maker sale requirement and the requisite notice to the Securities and Exchange Commission); however, the two (2)-year holding period requirement of the Rule will not be applicable. If Optionee is not at the time of the sale an affiliate of the Corporation nor was such an affiliate during the preceding three (3) months, then none of the requirements of Rule 144 (other than the broker/market-maker sale requirement for Purchased Shares held for less than three (3) years following payment in cash of the Option Price therefor) will be applicable to the sale.

C. Should the Corporation not become subject to the reporting requirements of the Exchange Act, then Optionee may, provided he/she is not at the time an affiliate of the Corporation (nor was such an affiliate during the preceding three (3) months), sell the Purchased Shares (without registration) pursuant to paragraph (k) of Rule 144 after the Purchased Shares have been held for a period of three (3) years following the payment in cash of the Option Price for such shares.

2.3 DISPOSITION OF SHARES. Optionee hereby agrees that Optionee shall make no disposition of the Purchased Shares (other than a permitted transfer under paragraph 4.1) unless and until there is compliance with all of the following requirements:

(a) Optionee shall have notified the Corporation of the proposed disposition and provided a written summary of the terms and conditions of the proposed disposition.

(b) Optionee shall have complied with all requirements of this Agreement applicable to the disposition of the Purchased Shares.

(c) Optionee shall have provided the Corporation with written assurances, in form and substance satisfactory to the Corporation, that (i) the proposed disposition does not require registration of the Purchased Shares under the 1933 Act or (ii) all appropriate action necessary for compliance with the registration requirements of the 1933 Act or of any exemption from registration

available under the 1933 Act (including Rule 144) has been taken.

(d) Optionee shall have provided the Corporation with written assurances, in form and substance satisfactory to the Corporation, that the proposed disposition will not result in the contravention of any transfer restrictions applicable to the Purchased Shares pursuant to the provisions of the Commissioner Rules identified in paragraph 2.5.

The Corporation shall not be required (i) to transfer on its books any Purchased Shares which have been sold or transferred in violation of the provisions of this Article II nor (ii) to treat as the owner of the Purchased Shares, or otherwise to accord voting or dividend rights to, any transferee to whom the Purchased Shares have been transferred in contravention of this Agreement.

2.4 RESTRICTIVE LEGENDS. In order to reflect the restrictions on disposition of the Purchased Shares, the stock certificates for the Purchased Shares will be endorsed with restrictive legends, including one or more of the following legends:

(i) "The shares represented by this certificate have not been registered under the Securities Act of 1933. The shares may not be sold or offered for sale in the absence of (a) an effective registration statement for the shares under such Act, (b) a 'no action' letter of the Securities and Exchange Commission with respect to such sale or offer, or (c) satisfactory assurances to the Corporation that registration under such Act is not required with respect to such sale or offer."

(ii) "The shares represented by this certificate are unvested and accordingly may not be sold, assigned, transferred, encumbered, or in any manner disposed of except in conformity with the terms of a written agreement dated_____, 19__ between the Corporation and the registered holder of the shares (or the predecessor in interest to the shares). Such agreement grants certain repurchase rights and rights of first refusal to the Corporation (or its assignees) upon the sale, assignment, transfer, encumbrance or other disposition of the Corporation's shares or upon termination of service with the Corporation. The Corporation will upon written request furnish a copy of such agreement to the holder hereof without charge."

III. SPECIAL TAX ELECTION

3.1 SECTION 83(b) ELECTION APPLICABLE TO THE EXERCISE OF A NON-STATUTORY STOCK OPTION. If the Purchased Shares are acquired hereunder pursuant to the exercise of a non-statutory stock option, as specified in the Grant Notice, then the Optionee understands that under Section 83 of the Internal Revenue Code of 1986, as amended (the "Code"), the excess of the fair market value of the Purchased Shares on the date any forfeiture restrictions applicable to such shares lapse over the Option Price paid for such shares will be reportable as ordinary income on such lapse date. For this purpose, the term "forfeiture restrictions" includes the right of the Corporation to repurchase the Purchased Shares pursuant to the Repurchase Right provided under Article V of this Agreement. Optionee understands that he/she may elect under Section 83(b) of the Code to be taxed at the time the Purchased Shares are acquired hereunder, rather than when and as such Purchased Shares cease to be subject to such forfeiture restrictions. Such election must be filed with the Internal Revenue Service within thirty (30) days after the date of this Agreement. Even if the fair market value of the Purchased Shares at the date of this Agreement equals the Option Price paid (and thus no tax is payable), the election must be made to avoid adverse tax consequences in the future. THE FORM FOR MAKING THIS ELECTION IS ATTACHED AS EXHIBIT II HERETO. OPTIONEE UNDERSTANDS THAT FAILURE TO MAKE THIS FILING WITHIN THE THIRTY (30)-DAY PERIOD WILL RESULT IN THE RECOGNITION OF ORDINARY INCOME BY THE OPTIONEE AS THE FORFEITURE RESTRICTIONS LAPSE.

3.2 CONDITIONAL SECTION 83(b) ELECTION APPLICABLE TO THE EXERCISE OF AN INCENTIVE STOCK OPTION. If the Purchased Shares are acquired hereunder pursuant to the exercise of an incentive stock option under the Federal tax laws, as specified in the Grant Notice, then the following tax principles shall be applicable to the Purchased Shares:

A. For regular tax purposes, no taxable income will be recognized at the time the Option is exercised.

B. The excess of (i) the fair market value of the Purchased Shares on the date the Option is exercised or (if later) on the date any forfeiture restrictions applicable to the Purchased Shares lapse over (ii) the Option Price paid for the Purchased Shares will be includible in the Optionee's taxable income for alternative minimum tax purposes.

C. If the Optionee makes a disqualifying disposition of the Purchased Shares, then the Optionee will recognize ordinary income in the year of such disposition equal in amount to the excess of (i) the fair market value of the Purchased Shares on the date the Option is exercised or (if later) on the date any forfeiture restrictions applicable to the Purchased Shares lapse over (ii) the Option Price paid for the Purchased Shares. Any additional gain recognized upon the disqualifying disposition will be either short-term or long-

term capital gain depending upon the period for which the Purchased Shares are held prior to the disposition.

D. For purposes of the foregoing, the term "forfeiture restrictions" will include the right of the Corporation to repurchase the Purchased Shares pursuant to the Repurchase Right provided under Article V of this Agreement. The term "disqualifying disposition" means any sale or other disposition (1/) of the Purchased Shares within two (2) years after the Grant Date or within one (1) year after the execution date of this Agreement.

E. In the absence of final Treasury Regulations relating to incentive stock options, it is not certain whether the Optionee may, in connection with the exercise of the Option for any Purchased Shares at the time subject to forfeiture restrictions, file a protective election under Section 83(b) of the Code which would limit (I) the Optionee's alternative minimum taxable income upon exercise and (II) the Optionee's ordinary income upon a disqualifying disposition, to the excess of (i) the fair market value of the Purchased Shares on the date the Option is exercised over (ii) the Option Price paid for the Purchased Shares. THE APPROPRIATE FORM FOR MAKING SUCH A PROTECTIVE ELECTION IS ATTACHED AS EXHIBIT II TO THIS AGREEMENT AND MUST BE FILED WITH THE INTERNAL REVENUE SERVICE WITHIN THIRTY (30) DAYS AFTER THE DATE OF THIS AGREEMENT. HOWEVER, SUCH ELECTION IF PROPERLY FILED WILL ONLY BE ALLOWED TO THE EXTENT THE FINAL TREASURY REGULATIONS PERMIT SUCH A PROTECTIVE ELECTION.

3.3 OPTIONEE ACKNOWLEDGES THAT IT IS OPTIONEE'S SOLE RESPONSIBILITY, AND NOT THE CORPORATION'S, TO FILE A TIMELY ELECTION UNDER SECTION 83(b), EVEN IF OPTIONEE REQUESTS THE CORPORATION OR ITS REPRESENTATIVES TO MAKE THIS FILING ON HIS/HER BEHALF. This filing should be made by registered or certified mail, return receipt requested, and Optionee must retain two (2) copies of the completed form for filing with his or her State and Federal tax returns for the current tax year and an additional copy for his or her records.

1/ Generally, a disposition of shares purchased under an incentive stock option includes any transfer of legal title, including a transfer by sale,

exchange or gift, but does not include a transfer to the Optionee's spouse, a transfer into joint ownership with right of survivorship if Optionee remains one of the joint owners, a pledge, a transfer by bequest or inheritance or certain tax free exchanges permitted under the Code.

IV. TRANSFER RESTRICTIONS

4.1 RESTRICTION ON TRANSFER. Optionee shall not transfer, assign, encumber or otherwise dispose of any of the Purchased Shares which are subject to the Corporation's Repurchase Right under Article V. In addition, Purchased Shares which are released from the Repurchase Right shall not be transferred, assigned, encumbered or otherwise made the subject of disposition in contravention of the Corporation's First Refusal Right under Article VI. Such restrictions on transfer, however, shall not be applicable to (i) a gratuitous transfer of the Purchased Shares made to the Optionee's spouse or issue, including adopted children, or to a trust for the exclusive benefit of the Optionee or the Optionee's spouse or issue, provided and only if the Optionee obtains the Corporation's prior written consent to such transfer, (ii) a transfer of title to the Purchased Shares effected pursuant to the Optionee's will or the laws of intestate succession or (iii) a transfer to the Corporation in pledge as security for any purchase-money indebtedness incurred by the Optionee in connection with the acquisition of the Purchased Shares.

4.2 TRANSFEREE OBLIGATIONS. Each person (other than the Corporation) to whom the Purchased Shares are transferred by means of one of the permitted transfers specified in paragraph 4.1 must, as a condition precedent to the validity of such transfer, acknowledge in writing to the Corporation that such person is bound by the provisions of this Agreement and that the transferred shares are subject to (i) both the Corporation's Repurchase Right and the Corporation's First Refusal Right granted hereunder and (ii) the market stand-off provisions of paragraph 4.4, to the same extent such shares would be so subject if retained by the Optionee.

4.3 DEFINITION OF OWNER. For purposes of Articles IV, V, VI and VII of this Agreement, the term "Owner" shall include the Optionee and all subsequent holders of the Purchased Shares who derive their chain of ownership through a permitted transfer from the Optionee in accordance with paragraph 4.1.

4.4 MARKET STAND-OFF PROVISIONS.

A. In connection with any underwritten public offering by the Corporation of its equity securities pursuant to an effective registration statement filed under the 1933 Act, including the Corporation's initial public offering, Owner shall not sell, make any short sale of, loan, hypothecate, pledge, grant any option for the purchase of, or otherwise dispose or transfer for value or otherwise agree to engage in any of the foregoing transactions with respect to, any Purchased Shares without the prior written consent of the Corporation or its underwriters. Such limitations shall be in effect for such period of time from and after the effective date of such registration statement as may be requested by the Corporation or such underwriters; provided, however, that in no event shall such period exceed one hundred-eighty (180) days. The limitations of this paragraph 4.4 shall remain in effect for the two-year period immediately following the effective date of the Corporation's initial public offering and shall thereafter terminate and cease to have any force or effect.

B. Owner shall be subject to the market stand-off provisions of this paragraph 4.4 provided and only if the officers and directors of the Corporation are also subject to similar arrangements.

C. In the event of any stock dividend, stock split,

recapitalization or other change affecting the Corporation's outstanding Common Stock effected as a class without receipt of consideration, then any new, substituted or additional securities distributed with respect to the Purchased Shares shall be immediately subject to the provisions of this paragraph 4.4, to the same extent the Purchased Shares are at such time covered by such provisions.

D. In order to enforce the limitations of this paragraph 4.4, the Corporation may impose stop-transfer instructions with respect to the Purchased Shares until the end of the applicable stand-off period.

V. REPURCHASE RIGHT

5.1 GRANT. The Corporation is hereby granted the right (the "Repurchase Right"), exercisable at any time during the sixty (60)-day period following the date the Optionee ceases for any reason to remain in Service or (if later) during the sixty (60)-day period following the execution date of this Agreement, to repurchase at the Option Price all or (at the discretion of the Corporation and with the consent of the Optionee) any portion of the Purchased Shares in which the Optionee has not acquired a vested interest in accordance with the vesting provisions of paragraph 5.3 (such shares to be hereinafter called the "Unvested Shares"). For purposes of this Agreement, the Optionee shall be deemed to remain in Service for so long as the Optionee continues to render periodic services to the Corporation or any parent or subsidiary corporation, whether as an employee, a non-employee member of the board of directors, or an independent contractor or consultant.

5.2 EXERCISE OF THE REPURCHASE RIGHT. The Repurchase Right shall be exercisable by written notice delivered to the Owner of the Unvested Shares prior to the expiration of the applicable sixty (60)-day period specified in paragraph 5.1. The notice shall indicate the number of Unvested Shares to be repurchased and the date on which the repurchase is to be effected, such date to be not more than thirty (30) days after the date of notice. To the extent one or more certificates representing Unvested Shares may have been previously delivered out of escrow to the Owner, then Owner shall, prior to the close of business on the date specified for the repurchase, deliver to the Secretary of the Corporation the certificates representing the Unvested Shares to be repurchased, each certificate to be properly endorsed for transfer. The Corporation shall, concurrently with the receipt of such stock certificates (either from escrow in accordance with paragraph 7.3 or from Owner as herein provided), pay to Owner in cash or cash equivalents (including the cancellation of any purchase-money indebtedness), an amount equal to the Option Price previously paid for the Unvested Shares which are to be repurchased.

5.3 TERMINATION OF THE REPURCHASE RIGHT. The Repurchase Right shall terminate with respect to any Unvested Shares for which it is not timely exercised under paragraph 5.2. In addition, the Repurchase Right shall terminate, and cease to be exercisable, with respect to any and all Purchased Shares in which the Optionee vests in accordance with the vesting schedule specified in the Grant Notice. All Purchased Shares as to which the Repurchase Right lapses shall, however, continue to be subject to (i) the First Refusal Right of the Corporation and its assignees under Article VI, (ii) the market stand-off provisions of paragraph 4.4 and (iii) the Special Purchase Right under Article VIII.

5.4 AGGREGATE VESTING LIMITATION. If the Option is exercised in more than one increment so that the Optionee is a party to one or more other Stock Purchase Agreements ("Prior Purchase Agreements") which are executed prior to the date of this Agreement, then the total number of Purchased Shares as to which the Optionee shall be deemed to have a fully-vested interest under this Agreement and all Prior Purchase Agreements shall not exceed in the aggregate the number of Purchased Shares in which the Optionee would otherwise at the time be vested, in accordance with the vesting provisions of paragraph 5.3, had all the Purchased Shares been acquired exclusively under this Agreement.

5.5 FRACTIONAL SHARES. No fractional shares shall be repurchased by the Corporation. Accordingly, should the Repurchase Right extend to a fractional share (in accordance with the vesting provisions of paragraph 5.3) at the time the Optionee ceases Service, then such fractional share shall be added to any fractional share in which the Optionee is at such time vested in order to make one whole vested share no longer subject to the Repurchase Right.

5.6 ADDITIONAL SHARES OR SUBSTITUTED SECURITIES. In the event of any stock dividend, stock split, recapitalization or other change affecting the Corporation's outstanding Common Stock as a class effected without receipt of consideration, then any new, substituted or additional securities or other property (including money paid other than as a regular cash dividend) which is by reason of any such transaction distributed with respect to the Purchased Shares shall be immediately subject to the Repurchase Right, but only to the extent the Purchased Shares are at the time covered by such right. Appropriate adjustments to reflect the distribution of such securities or property shall be made to the number of Purchased Shares and Total Purchasable Shares hereunder and to the price per share to be paid upon the exercise of the Repurchase Right in order to reflect the effect of any such transaction upon the Corporation's capital structure; provided, however, that the aggregate purchase price shall remain the same.

5.7 CORPORATE TRANSACTION.

A. The Repurchase Rights shall automatically terminate and cease to be exercisable with respect to a portion of the Purchased Shares upon the consummation of any Corporate Transaction, provided that such repurchase right shall not terminate if and to the extent the those repurchase rights are assigned to the successor corporation (or parent thereof) in connection with such Corporate Transaction. The portion of the Purchased Shares with

respect to which the repurchase rights will terminate shall be a number of Purchased Shares equal to the total number of Unvested Shares immediately prior to the Corporate Transaction multiplied by a fraction, the numerator of which is the number of complete months which elapsed after the Vesting Commencement Date set forth in the Grant Notice and the date of the Corporate Transaction, and the denominator of which is the number of months required under the Grant Notice for all of the Purchased Shares to become fully vested. Any and all repurchase rights which will not be either assigned or terminate at the time of the Corporate Transaction may be exercised by the Company immediately prior to the Corporate Transaction.

B. Repurchase rights which are assigned in connection with a Corporate Transaction shall be exercisable with respect to the property issued to the Optionee upon consummation of such Corporate Transaction in exchange for the Common Stock held by the Optionee subject to the repurchase rights immediately prior to the Corporate Transaction.

C. Any Repurchase Rights which are assigned in a Corporate Transaction and do not otherwise become vested at that time, shall automatically terminate and cease to be exercisable in the event the Optionee's Service should subsequently terminate by reason of an Involuntary Termination within twenty-four (24) months following the effective date of such Corporate Transaction.

D. This Agreement shall not in any way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise make changes in its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

VI. RIGHT OF FIRST REFUSAL

6.1 GRANT. The Corporation is hereby granted rights of

first refusal (the "First Refusal Right"), exercisable in connection with any proposed transfer of the Purchased Shares in which the Optionee has vested in accordance with the vesting provisions of Article V. For purposes of this Article VI, the term "transfer" shall include any sale, assignment, pledge, encumbrance or other disposition for value of the Purchased Shares intended to be made by the Owner, but shall not include any of the permitted transfers under paragraph 4.1.

6.2 NOTICE OF INTENDED DISPOSITION. In the event the Owner desires to accept a bona fide third-party offer for the transfer of any or all of the Purchased Shares (the shares subject to such offer to be hereinafter called the "Target Shares"), Owner shall promptly (i) deliver to the Corporate Secretary of the Corporation written notice (the "Disposition Notice") of the terms and conditions of the offer, including the purchase price and the identity of the third-party offeror, and (ii) provide satisfactory proof that the disposition of the Target Shares to such third-party offeror would not be in contravention of the provisions set forth in Articles II and IV of this Agreement.

6.3 EXERCISE OF RIGHT. The Corporation shall, for a period of forty-five (45) days following receipt of the Disposition Notice, have the right to repurchase any or all of the Target Shares specified in the Disposition Notice upon the same terms and conditions specified therein or upon terms and conditions which do not materially vary from those specified therein. Such right shall be exercisable by delivery of written notice (the "Exercise Notice") to Owner prior to the expiration of the forty-five (45)-day exercise period. If such right is exercised with respect to all the Target Shares specified in the Disposition Notice, then the Corporation (or its assignees) shall effect the repurchase of the Target Shares, including payment of the purchase price, not more than ten (10) business days after delivery of the Exercise Notice; and at such time Owner shall deliver to the Corporation the certificates representing the Target Shares to be repurchased, each certificate to be properly endorsed for transfer. To the extent any of the Target Shares are at the time held in escrow under Article VII, the certificates for such shares shall automatically be released from escrow and delivered to the Corporation for purchase. Should the purchase price specified in the Disposition Notice be payable in property other than cash or evidences of indebtedness, the Corporation (or its assignees) shall have the right to pay the purchase price in the form of cash equal in amount to the value of such property. If the Owner and the Corporation (or its assignees) cannot agree on such cash value within ten (10) days after the Corporation's receipt of the Disposition Notice, the valuation shall be made by an appraiser of recognized standing selected by the Owner and the Corporation (or its assignees) or, if they cannot agree on an appraiser within twenty (20) days after the Corporation's receipt of the Disposition Notice, each shall select an appraiser of recognized standing and the two appraisers shall designate a third appraiser of recognized standing, whose appraisal shall be determinative of such value. The cost of such appraisal shall be shared equally by the Owner and the Corporation. The closing shall then be held on the later of (i) the tenth business day following delivery of the Exercise Notice or (ii) the tenth business day after such cash valuation shall have been made.

6.4 NON-EXERCISE OF RIGHT. In the event the Exercise Notice is not given to Owner within forty-five (45) days following the date of the Corporation's receipt of the Disposition Notice, Owner shall have a period of thirty (30) days thereafter in which to sell or otherwise dispose of the Target Shares to the third-party offeror identified in the Disposition Notice upon terms and conditions (including the purchase price) no more favorable to such third-party offeror than those specified in the Disposition Notice; provided, however, that any such sale or disposition must not be effected in contravention of the provisions of Article II of this Agreement. To the extent any of the Target Shares are at the time held in escrow under Article VII, the certificates for such shares shall automatically be released from escrow and surrendered to the Owner. The third-party offeror shall acquire the Target Shares free and clear of the Corporation's Repurchase Right under Article V and

the Corporation's First Refusal Right hereunder, but the acquired shares shall remain subject to (i) the securities law restrictions of paragraph 2.2(a) and (ii) the market stand-off provisions of paragraph 4.4. In the event Owner does not effect such sale or disposition of the Target Shares within the specified thirty (30)-day period, the Corporation's First Refusal Right shall continue to be applicable to any subsequent disposition of the Target Shares by Owner until such right lapses in accordance with paragraph 6.7.

6.5 PARTIAL EXERCISE OF RIGHT. In the event the Corporation (or its assignees) makes a timely exercise of the First Refusal Right with respect to a portion, but not all, of the Target Shares specified in the Disposition Notice, Owner shall have the option, exercisable by written notice to the Corporation delivered within thirty (30) days after the date of the Disposition Notice, to effect the sale of the Target Shares pursuant to one of the following alternatives:

(i) sale or other disposition of all the Target Shares to the third-party offeror identified in the Disposition Notice, but in full compliance with the requirements of paragraph 6.4, as if the Corporation did not exercise the First Refusal Right hereunder; or

(ii) sale to the Corporation (or its assignees) of the portion of the Target Shares which the Corporation (or its assignees) has elected to purchase, such sale to be effected in substantial conformity with the provisions of paragraph 6.3.

Failure of Owner to deliver timely notification to the Corporation under this paragraph 6.5 shall be deemed to be an election by Owner to sell the Target Shares pursuant to alternative (i) above.

6.6 RECAPITALIZATION/MERGER.

(a) In the event of any stock dividend, stock split, recapitalization or other transaction affecting the Corporation's outstanding Common Stock as a class effected without receipt of consideration, then any new, substituted or additional securities or other property which is by reason of such transaction distributed with respect to the Purchased Shares shall be immediately subject to the Corporation's First Refusal Right hereunder, but only to the extent the Purchased Shares are at the time covered by such right.

(b) In the event of any of the following transactions:

(i) a merger or consolidation in which the Corporation is not the surviving entity,

(ii) a sale, transfer or other disposition of all or substantially all of the Corporation's assets,

(iii) a reverse merger in which the Corporation is the surviving entity but in which the Corporation's outstanding voting securities are transferred in whole or in part to person or persons other than those who held such securities immediately prior to the merger, or

(iv) any transaction effected primarily to change the State in which the Corporation is incorporated, or to create a holding company structure,

the Corporation's First Refusal Right shall remain in full force and effect and shall apply to the new capital stock or other property received in exchange for the Purchased Shares in consummation of the transaction

but only to the extent the Purchased Shares are at the time covered by such right.

6.7 LAPSE. The First Refusal Right under this Article VI shall lapse and cease to have effect upon the earliest to occur of (i) the first date on which shares of the Corporation's Common Stock are held of record by more than five hundred (500) persons, (ii) a determination is made by the Corporation's Board of Directors that a public market exists for the outstanding shares of the Corporation's Common Stock, or (iii) a firm commitment underwritten public offering pursuant to an effective registration statement under the 1933 Act, covering the offer and sale of the Corporation's Common Stock in the aggregate amount of at least $5,000,000. However, the market stand-off provisions of paragraph 4.4 shall continue to remain in full force and effect following the lapse of the First Refusal Right hereunder.

VII. ESCROW

7.1 DEPOSIT. Upon issuance, the certificates for any Unvested Shares purchased hereunder shall be deposited in escrow with the Corporate Secretary of the Corporation to be held in accordance with the provisions of this Article VII. Each deposited certificate shall be accompanied by a duly-executed Assignment Separate from Certificate in the form of Exhibit I. The deposited certificates, together with any other assets or securities from time to time deposited with the Corporate Secretary pursuant to the requirements of this Agreement, shall remain in escrow until such time or times as the certificates (or other assets and securities) are to be released or otherwise surrendered for cancellation in accordance with paragraph 7.3. Upon delivery of the certificates (or other assets and securities) to the Corporate Secretary of the Corporation, the Owner shall be issued an instrument of deposit acknowledging the number of Unvested Shares (or other assets and securities) delivered in escrow.

7.2 RECAPITALIZATION. All regular cash dividends on the Unvested Shares (or other securities at the time held in escrow) shall be paid directly to the Owner and shall not be held in escrow. However, in the event of any stock dividend, stock split, recapitalization or other change affecting the Corporation's outstanding Common Stock as a class effected without receipt of consideration or in the event of a Corporate Transaction, any new, substituted or additional securities or other property which is by reason of such transaction distributed with respect to the Unvested Shares shall be immediately delivered to the Corporate Secretary to be held in escrow under this Article VII, but only to the extent the Unvested Shares are at the time subject to the escrow requirements of paragraph 7.1.

7.3 RELEASE/SURRENDER. The Unvested Shares, together with any other assets or securities held in escrow hereunder, shall be subject to the following terms and conditions relating to their release from escrow or their surrender to the Corporation for repurchase and cancellation:

(i) Should the Corporation (or its assignees) elect to exercise the Repurchase Right under Article V with respect to any Unvested Shares, then the escrowed certificates for such Unvested Shares (together with any other assets or securities issued with respect thereto) shall be delivered to the Corporation concurrently with the payment to the Owner, in cash or cash equivalent (including the cancellation of any purchase-money indebtedness), of an amount equal to the aggregate Option Price for such Unvested Shares, and the Owner shall cease to have any further rights or claims with respect to such Unvested Shares (or other assets or securities attributable to such Unvested Shares).

(ii) Should the Corporation (or its assignees) elect to exercise its First Refusal Right under Article VI with respect to any vested Target Shares held at the time in escrow hereunder, then

the escrowed certificates for such Target Shares (together with any other assets or securities attributable thereto) shall, concurrently with the payment of the paragraph 6.3 purchase price for such Target Shares to the Owner, be surrendered to the Corporation, and the Owner shall cease to have any further rights or claims with respect to such Target Shares (or other assets or securities).

(iii) Should the Corporation (or its assignees) elect not to exercise its First Refusal Right under Article VI with respect to any Target Shares held at the time in escrow hereunder, then the escrowed certificates for such Target Shares (together with any other assets or securities attributable thereto) shall be surrendered to the Owner for disposition in accordance with provisions of paragraph 6.4.

(iv) As the interest of the Optionee in the Unvested Shares (or any other assets or securities attributable thereto) vests in accordance with the provisions of Article V, the certificates for such vested shares (as well as all other vested assets and securities) shall be released from escrow and delivered to the Owner in accordance with the following schedule:

a. The initial release of vested shares (or other vested assets and securities) from escrow shall be effected within thirty (30) days following the expiration of the initial twelve (12)-month period measured from the Grant Date.

b. Subsequent releases of vested shares (or other vested assets and securities) from escrow shall be effected

at semi-annual intervals thereafter, with the first such semiannual release to occur eighteen (18) months after the Grant Date.

c. Upon the Optionee's cessation of Service, any escrowed Purchased Shares (or other assets or securities) in which the Optionee is at the time vested shall be promptly released from escrow.

d. Upon any earlier termination of the Corporation's Repurchase Right in accordance with the applicable provisions of Article V, any Purchased Shares (or other assets or securities) at the time held in escrow hereunder shall promptly be released to the Owner as fully-vested shares or other property.

(v) All Purchased Shares (or other assets or securities) released from escrow in accordance with the provisions of subparagraph (iv) above shall nevertheless remain subject to (I) the Corporation's First Refusal Right under Article VI until such right lapses pursuant to paragraph 6.7, (II) the market stand-off provisions of paragraph 4.4 until such provisions terminate in accordance therewith and (III) the Special Purchase Right under Article VIII.

VIII. MARITAL DISSOLUTION OR LEGAL SEPARATION

8.1 GRANT. In connection with the dissolution of the Optionee's marriage or the legal separation of the Optionee and the Optionee's spouse, the Corporation shall have the right (the "Special Purchase Right"), exercisable at any time during the thirty (30)-day period following the Corporation's receipt of the required Dissolution Notice under paragraph 8.2, to purchase from the Optionee's spouse, in accordance with the provisions of

paragraph 8.3, all or any portion of the Purchased Shares which would otherwise be awarded to such spouse in settlement of any community property or other marital property rights such spouse may have in such shares.

8.2 NOTICE OF DECREE OR AGREEMENT. The Optionee shall promptly provide the Secretary of the Corporation with written notice (the "Dissolution Notice") of (i) the entry of any judicial decree or order resolving the property rights of the Optionee and the Optionee's spouse in connection with their marital dissolution or legal separation or (ii) the execution of any contract or agreement relating to the distribution or division of such property rights. The Dissolution Notice shall be accompanied by a copy of the actual decree of dissolution or settlement agreement between the Optionee and the Optionee's spouse which provides for the award to the spouse of one or more Purchased Shares in settlement of any community property or other marital property rights such spouse may have in such shares.

8.3 EXERCISE OF SPECIAL PURCHASE RIGHT. The Special Purchase Right shall be exercisable by delivery of written notice (the "Purchase Notice") to the Optionee and the Optionee's spouse within thirty (30) days after the Corporation's receipt of the Dissolution Notice. The Purchase Notice shall indicate the number of shares to be purchased by the Corporation, the date such purchase is to be effected (such date to be not less than five (5) business days, nor more than ten (10) business days, after the date of the Purchase Notice), and the fair market value to be paid for such Purchased Shares. The Optionee (or the Optionee's spouse, to the extent such spouse has physical possession of the Purchased Shares) shall, prior to the close of business on the date specified for the purchase, deliver to the Corporate Secretary of the Corporation the certificates representing the shares to be purchased, each certificate to be properly endorsed for transfer. To the extent any of the shares to be purchased by the Corporation are at the time held in escrow under Article VII, the certificates for such shares shall be promptly delivered out of escrow to the Corporation. The Corporation shall, concurrently with the receipt of the stock certificates, pay to the Optionee's spouse (in cash or cash equivalents) an amount equal to the fair market value specified for such shares in the Purchase Notice.

If the Optionee's spouse does not agree with the fair market value specified for the shares in the Purchase Notice, then the spouse shall promptly notify the Corporation in writing of such disagreement and the fair market value of such shares shall thereupon be determined by an appraiser of recognized standing selected by the Corporation and the spouse. If they cannot agree on an appraiser within twenty (20) days after the date of the Purchase Notice, each shall select an appraiser of recognized standing, and the two appraisers shall designate a third appraiser of recognized standing whose appraisal shall be determinative of such value. The cost of the appraisal shall be shared equally by the Corporation and the Optionee's spouse. The closing shall then be held on the fifth business day following the completion of such appraisal; provided, however, that if the appraised value is more than fifteen percent (15%) greater than the fair market value specified for the shares in the Purchase Notice, the Corporation shall have the right, exercisable prior to the expiration of such five (5)-business-day period, to rescind the exercise of the Special Purchase Right and thereby revoke its election to purchase the shares awarded to the spouse.

8.4 LAPSE. The Special Purchase Right under this Article VIII shall lapse and cease to have effect upon the earlier to occur of (i) the first date on which the First Refusal Right under Article VI lapses or (ii) the expiration of the thirty (30)-day exercise period specified in paragraph 8.3, to the extent the Special Purchase Right is not timely exercised in accordance with such paragraph.

IX. GENERAL PROVISIONS

9.1 ASSIGNMENT. The Corporation may assign its Repurchase

Right under Article V, its First Refusal Right under Article VI and/or its Special Purchase Right under Article VIII to any person or entity selected by the Corporation's Board of Directors, including (without limitation) one or more shareholders of the Corporation.

If the assignee of the Repurchase Right is other than a one hundred percent (100%) owned subsidiary corporation of the Corporation or the parent corporation owning one hundred percent (100%) of the Corporation, then such assignee must make a cash payment to the Corporation, upon the assignment of the Repurchase Right, in an amount equal to the excess (if any) of (i) the fair market value of the Unvested Shares at the time subject to the assigned Repurchase Right over (ii) the aggregate repurchase price payable for the Unvested Shares thereunder.

9.2 DEFINITIONS. For purposes of this Agreement, the following provisions shall be applicable in determining the parent and subsidiary corporations of the Corporation:

(i) Any corporation (other than the Corporation) in an unbroken chain of corporations ending with the Corporation shall be considered to be a parent corporation of the Corporation, provided each such corporation in the unbroken chain (other than the Corporation) owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

(ii) Each corporation (other than the Corporation) in an unbroken chain of corporations beginning with the Corporation shall be considered to be a subsidiary of the Corporation, provided each such corporation (other than the last corporation) in the unbroken chain owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

9.3 No EMPLOYMENT OR SERVICE CONTRACT. Nothing in this Agreement or in the Plan shall confer upon the Optionee any right to continue in the Service of the Corporation (or any parent or subsidiary corporation of the Corporation employing or retaining Optionee) for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Corporation (or any parent or subsidiary corporation of the Corporation employing or retaining Optionee) or the Optionee, which rights are hereby expressly reserved by each, to terminate the Optionee's Service at any time for any reason whatsoever, with or without cause.

9.4 NOTICES. Any notice required in connection with (i) the Repurchase Right, the Special Purchase Right or the First Refusal Right or (ii) the disposition of any Purchased Shares covered thereby shall be given in writing and shall be deemed effective upon personal delivery or upon deposit in the United States mail, registered or certified, postage prepaid and addressed to the party entitled to such notice at the address indicated below such party's signature line on this Agreement or at such other address as such party may designate by ten (10) days advance written notice under this paragraph 9.4 to all other parties to this Agreement.

9.5 No WAIVER. The failure of the Corporation (or its assignees) in any instance to exercise the Repurchase Right granted under Article V, or the failure of the Corporation (or its assignees) in any instance to exercise the First Refusal Right granted under Article VI, or the failure of the Corporation (or its assignees) in any instance to exercise the Special Purchase Right granted under Article VIII shall not constitute a waiver of any

other repurchase rights and/or rights of first refusal that may subsequently arise under the provisions of this Agreement or any other agreement between the Corporation and the Optionee or the Optionee's spouse. No waiver of any breach or condition of this Agreement shall be deemed to be a waiver of any other or subsequent breach or condition, whether of like or different nature.

9.6 CANCELLATION OF SHARES. If the Corporation (or its assignees) shall make available, at the time and place and in the amount and form provided in this Agreement, the consideration for the Purchased Shares to be repurchased in accordance with the provisions of this Agreement, then from and after such time, the person from whom such shares are to be repurchased shall no longer have any rights as a holder of such shares (other than the right to receive payment of such consideration in accordance with this Agreement), and such shares shall be deemed purchased in accordance with the applicable provisions hereof and the Corporation (or its assignees) shall be deemed the owner and holder of such shares, whether or not the certificates therefor have been delivered as required by this Agreement.

X. MISCELLANEOUS PROVISIONS

10.1 OPTIONEE UNDERTAKING. Optionee hereby agrees to take whatever additional action and execute whatever additional documents the Corporation may in its judgment deem necessary or advisable in order to carry out or effect one or more of the obligations or restrictions imposed on either the Optionee or the Purchased Shares pursuant to the express provisions of this Agreement.

10.2 AGREEMENT IS ENTIRE CONTRACT. This Agreement constitutes the entire contract between the parties hereto with regard to the subject matter hereof. This Agreement is made pursuant to the provisions of the Plan and shall in all respects be construed in conformity with the express terms and provisions of the Plan.

10.3 GOVERNING LAW. This Agreement shall be governed by, and construed in accordance with, the laws of the State of California, as such laws are applied to contracts entered into and performed in such State without resort to that State's conflict-of-laws rules.

10.4 COUNTERPARTS. This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

10.5 SUCCESSORS AND ASSIGNS. The provisions of this Agreement shall inure to the benefit of, and be binding upon, the Corporation and its successors and assigns and the

Optionee and the Optionee's legal representatives, heirs, legatees, distributees, assigns and transferees by operation of law, whether or not any such person shall have become a party to this Agreement and have agreed in writing to join herein and be bound by the terms and conditions hereof,

10.6 POWER OF ATTORNEY. Optionee's spouse hereby appoints Optionee his or her true and lawful attorney in fact, for him or her and in his or her name, place and stead, and for his or her use and benefit, to agree to any amendment or modification of this Agreement and to execute such further instruments and take such further actions as may reasonably be necessary to carry out the intent of this Agreement. Optionee's spouse further gives and grants unto Optionee as his or her attorney in fact full power and authority to do and perform every act necessary and proper to be done in the exercise of any of the foregoing powers as fully as he or she might or could do if personally present, with full power of substitution and revocation, hereby ratifying and confirming all that Optionee shall lawfully do and cause to be done by virtue of this power of attorney.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first indicated above.

Cytokinetics, Incorporated

By: _____

Title: _____

Address: _____

_____

_____

*/

Optionee -

Address: _____

_____

The undersigned spouse of Optionee has read and hereby approves the foregoing Stock Purchase Agreement. In consideration of the Corporation's granting the Optionee the right to acquire the Purchased Shares in accordance with the terms of such Agreement, the undersigned hereby agrees to be irrevocably bound by all the terms and provisions of such Agreement, including (specifically) the right of the Corporation (or its assignees) to purchase any and all interest or right the undersigned may otherwise have in such shares pursuant to community property laws or other marital property rights.

_____

Optionee's Spouse

Address: _____

_____

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- I have executed the Section 83(b) election that was attached hereto as an Exhibit. As set forth in Article III, I understand that I, and not the Corporation, will be responsible for completing the form and filing the election with the appropriate office of the Federal and State tax authorities and that if such filing is not completed within thirty (30) days after the date of this Agreement, I will not be entitled to the tax benefits provided by Section 83(b).

EXHIBIT I

ASSIGNMENT SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED_____ hereby sell(s), assign(s) and transfer(s) unto Cytokinetics, Incorporated (the "Corporation"),_____(_____) shares of the Common Stock of the Corporation standing in his\her name on the books of the Corporation represented by Certificate No. _____and do hereby irrevocably constitute and appoint_____as Attorney to transfer the said stock on the books of the Corporation with full power of substitution in the premises.

Dated: _____

Signature _____

INSTRUCTION: Please do not fill in any blanks other than the signature line. The purpose of this assignment is to enable the Corporation to exercise its Repurchase Right set forth in the Agreement without requiring additional signatures on the part of the Optionee.

REPURCHASE RIGHTS

EXHIBIT II

SECTION 83(b) TAX ELECTION

This statement is being made under Section 83(b) of the Internal Revenue Code, pursuant to Treas. Reg. Section 1.83-2.

(1) The taxpayer who performed the services is:

Name:
Address:
Taxpayer Ident. No.:

(2) The property with respect to which the election is being made is _____ shares of the common stock of Cytokinetics, Incorporated.

(3) The property was issued on _____ ,19 ____.

(4) The taxable year in which the election is being made is the calendar year 19____.

(5) The property is subject to a repurchase right pursuant to which the issuer has the right to acquire the property at the original purchase price if for any reason taxpayer's employment with the issuer is terminated. The issuer's repurchase right lapses in a series of annual and monthly installments over a four year period ending on _____ , 19____.

(6) The fair market value at the time of transfer (determined without regard to any restriction other than a restriction which by its terms will never lapse) is $ _____ per share.

(7) The amount paid for such property is $ _____ per share.

(8) A copy of this statement was furnished to Cytokinetics, Incorporated for whom taxpayer rendered the services underlying the transfer of property.

(9) This statement is executed as of: _____.

_____ _____
Spouse (if any) Taxpayer

This form must be filed with the Internal Revenue Service Center with which taxpayer files his/her Federal income tax returns. The filing must be made within 30 days after the execution date of the Stock Purchase Agreement.

SPECIAL PROTECTIVE ELECTION PURSUANT TO SECTION 83(b) OF THE INTERNAL REVENUE CODE WITH RESPECT TO PROPERTY ACQUIRED UPON EXERCISE OF AN INCENTIVE STOCK OPTION

The property described in the above Section 83(b) election is comprised of shares of common stock acquired pursuant to the exercise of an incentive stock option under Section 422 of the Code. Accordingly, it is the intent of the Taxpayer to utilize this election to achieve the following tax results:

1. The purpose of this election is to have the

alternative minimum taxable income attributable to the purchased shares measured by the amount by which the fair market value of such shares at the time of their transfer to the Taxpayer exceeds the purchase price paid for the shares. In the absence of this election, such alternative minimum taxable income would be measured by the spread between the fair market value of the purchased shares and the purchase price which exists on the various lapse dates in effect for the forfeiture restrictions applicable to such shares. The election is to be effective to the full extent permitted under the Internal Revenue Code.

2. Section 421(a)(1) of the Code expressly excludes from income any excess of the fair market value of the purchased shares over the amount paid for such shares. Accordingly, this election is also intended to be effective in the event there is a "disqualifying disposition" of the shares, within the meaning of Section 421(b) of the Code, which would otherwise render the provisions of Section 83(a) of the Code applicable at that time. Consequently, the Taxpayer hereby elects to have the amount of disqualifying disposition income measured by the excess of the fair market value of the purchased shares on the date of transfer to the Taxpayer over the amount paid for such shares. Since Section 421(a) presently applies to the shares which are the subject of this Section 83(b) election, no taxable income is actually recognized for regular tax purposes at this time, and no income taxes are payable, by the Taxpayer as a result of this election.

This form should be filed with the Internal Revenue Service Center with which taxpayer files his/her Federal income tax returns. The filing must be made within 30 days after the execution date of the Stock Purchase Agreement.

NOTE: PAGE 2 SHOULD BE ATTACHED ONLY IF YOU ARE EXERCISING AN INCENTIVE STOCK OPTION.

Exhibit 10.3

CYTOKINETICS, INCORPORATED

2004 EQUITY INCENTIVE PLAN

1. Purposes of the Plan. The purposes of this Plan are:

- to attract and retain the best available personnel for positions of substantial responsibility,

- to provide additional incentive to Employees, Directors and Consultants, and

- to promote the success of the Company's business.

The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Restricted Stock, Stock Appreciation Rights, Performance Units and Performance Shares.

2. Definitions. As used herein, the following definitions will apply:

(a) "Administrator" means the Board or any of its Committees as will be administering the Plan, in accordance with Section 4 of the Plan.

(b) "Affiliated SAR" means an SAR that is granted in connection with a related Option, and which automatically will be deemed to be exercised at the same time that the related Option is exercised.

(c) "Applicable Laws" means the requirements relating to the administration of equity-based awards under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.

(d) "Award" means, individually or collectively, a grant under the Plan of Options, SARs, Restricted Stock, Performance Units or Performance Shares.

(e) "Award Agreement" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.

(f) "Board" means the Board of Directors of the Company.

(g) "Change in Control" means the occurrence of any of the following events:

(i) Any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "beneficial owner" (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company's then outstanding voting securities; or

(ii) The consummation of the sale or disposition by the Company of all or substantially all of the Company's assets;

(iii) A change in the composition of the Board occurring within a two-year period, as a result of which fewer than a majority of the directors are Incumbent Directors. "Incumbent Directors" means directors who either (A) are Directors as of the effective date of the Plan, or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or

nomination (but will not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of directors to the Company); or

(iv) The consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation.

(h) "Code" means the Internal Revenue Code of 1986, as amended. Any reference to a section of the Code herein will be a reference to any successor or amended section of the Code.

(i) "Committee" means a committee of Directors appointed by the Board in accordance with Section 4 of the Plan.

(j) "Common Stock" means the common stock of the Company.

(k) "Company" means Cytokinetics, Incorporated, a Delaware corporation, or any successor thereto.

(l) "Consultant" means any person, including an advisor, engaged by the Company or a Parent or Subsidiary to render services to such entity.

(m) "Director" means a member of the Board.

(n) "Disability" means total and permanent disability as defined in Section 22(e)(3) of the Code, provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.

(o) "Employee" means any person, including Officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. Neither service as a Director nor payment of a director's fee by the Company will be sufficient to constitute "employment" by the Company.

(p) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(q) "Exchange Program" means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for Awards of the same type (which may have lower exercise prices and different terms), Awards of a different type, and/or cash, and/or (ii) the exercise price of an outstanding Award is reduced. The terms and conditions of any Exchange Program will be determined by the Administrator in its sole discretion.

(r) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq National Market or The Nasdaq SmallCap Market of The Nasdaq Stock Market, its Fair Market Value will be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share of Common Stock will be the mean between the high bid and low asked prices for the Common Stock on the day of determination, as reported in The Wall

Street Journal or such other source as the Administrator deems reliable;

(iii) For purposes of any Awards granted on the Registration Date, the Fair Market Value will be the initial price to the public as set forth in the final prospectus included within the registration statement in Form S-1 filed with the Securities and Exchange Commission for the initial public offering of the Company's Common Stock; or

(iv) In the absence of an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.

(s) "Fiscal Year" means the fiscal year of the Company.

(t) "Freestanding SAR" means a SAR that is granted independently of any Option.

(u) "Incentive Stock Option" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(v) "Inside Director" means a Director who is an Employee.

(w) "Nonstatutory Stock Option" means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.

(x) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(y) "Option" means a stock option granted pursuant to the Plan.

(z) "Optioned Stock" means the Common Stock subject to an Award.

(aa) "Outside Director" means a Director who is not an Employee.

(bb) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(cc) "Participant" means the holder of an outstanding Award.

(dd) "Performance Share" means an Award granted to a Participant pursuant to Section 9.

(ee) "Performance Unit" means an Award granted to a Participant pursuant to Section 9.

(ff) "Period of Restriction" means the period during which the transfer of Shares of Restricted Stock are subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.

(gg) "Plan" means this 2004 Equity Incentive Plan.

(hh) "Registration Date" means the effective date of the first registration statement that is filed by the Company and declared effective pursuant to Section 12(g) of the Exchange Act, with respect to any class of the Company's securities.

(ii) "Restricted Stock" means shares of Common Stock issued pursuant to a Restricted Stock award under Section 7 of the Plan, or issued pursuant to the early exercise of an Option.

(jj) "Retirement" means a termination of an Outside Director's

status as a Director when (i) the Outside Director's age is 55 or over and he or she has continuously been a Director for at least seven (7) years on the date of such termination or (ii) the Outside Director has continuously been a Director for at least ten (10) years from the date of such termination.

(kk) "Rule 16b-3" means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.

(ll) "Section 16(b) " means Section 16(b) of the Exchange Act.

(mm) "Service Provider" means an Employee, Director or Consultant.

(nn) "Share" means a share of the Common Stock, as adjusted in accordance with Section 13 of the Plan.

(oo) "Stock Appreciation Right" or "SAR" means an Award, granted alone or in connection with an Option, that pursuant to Section 8 is designated as a SAR.

(pp) "Subsidiary" means a "subsidiary corporation", whether now or hereafter existing, as defined in Section 424(f) of the Code.

(qq) "Tandem SAR" means a SAR that is granted in connection with a related Option, the exercise of which will require forfeiture of the right to purchase an equal number of Shares under the related Option (and when a Share is purchased under the Option, the SAR will be canceled to the same extent).

(rr) "Unvested Awards" will mean Options or Restricted Stock that (i) were granted to an individual in connection with such individual's position as an Employee and (ii) are still subject to vesting or lapsing of Company repurchase rights or similar restrictions.

3. Stock Subject to the Plan.

(a) Stock Subject to the Plan. Subject to the provisions of Section 13 of the Plan, the maximum aggregate number of Shares that may be optioned and sold under the Plan is 3,200,000 Shares plus (i) any Shares returned to the 1997 Stock Option/Stock Issuance Plan as a result of termination of options or repurchase of Shares issued under such plan, and (ii) an annual increase to be added on the first day of the Company's fiscal year beginning in 2005, equal to the lesser of (A) 3,000,000 Shares, (B) 3.5% of the outstanding Shares on such date or (C) an amount determined by the Board. The Shares may be authorized, but unissued, or reacquired Common Stock. Shares will not be deemed to have been issued pursuant to the Plan with respect to any portion of an Award that is settled in cash. Upon payment in Shares pursuant to the exercise of an SAR, the number of Shares available for issuance under the Plan will be reduced only by the number of Shares actually issued in such payment. If the exercise price of an Option is paid by tender to the Company, or attestation to the ownership, of Shares owned by the Participant, the number of Shares available for issuance under the Plan will be reduced by the gross number of Shares for which the Option is exercised.

(b) Lapsed Awards. If an Award expires or becomes unexercisable without having been exercised in full, or is surrendered pursuant to an Exchange Program, the unpurchased Shares which were subject thereto will become available for future grant or sale under the Plan (unless the Plan has terminated); provided, however, that Shares that have actually been issued under the Plan, whether upon exercise of an Award, will not be returned to the Plan and will not become available for future distribution under the Plan, except that if unvested Shares are forfeited or repurchased by the Company, such Shares will become available for future grant under the Plan.

(c) Share Reserve. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. Administration of the Plan.

(a) Procedure.

(i) Multiple Administrative Bodies. Different Committees with respect to different groups of Service Providers may administer the Plan.

(ii) Section 162(m). To the extent that the Administrator determines it to be desirable to qualify Options granted hereunder as "performance-based compensation" within the meaning of Section 162(m) of the Code, the Plan will be administered by a Committee of two or more "outside directors" within the meaning of Section 162(m) of the Code.

(iii) Rule 16b-3. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder will be structured to satisfy the requirements for exemption under Rule 16b-3.

(iv) Other Administration. Other than as provided above, the Plan will be administered by (A) the Board or (B) a Committee, which committee will be constituted to satisfy Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator will have the authority, in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Awards may be granted hereunder;

(iii) to determine the number of Shares to be covered by each Award granted hereunder;

(iv) to approve forms of agreement for use under the Plan;

(v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator will determine;

(vi) to institute an Exchange Program;

(vii) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

(viii) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws;

(ix) to modify or amend each Award (subject to Section 17(c) of the Plan), including the discretionary authority to extend the post-termination exercisability period of Awards longer than is otherwise provided for in the Plan;

(x) to allow Participants to satisfy withholding tax obligations by electing to have the Company withhold from the Shares to be issued upon exercise of an Award that number of Shares having a Fair Market Value equal to the minimum amount required to be withheld (the Fair Market Value

of the Shares to be withheld will be determined on the date that the amount of tax to be withheld is to be determined and all elections by a Participant to have Shares withheld for this purpose will be made in such form and under such conditions as the Administrator may deem necessary or advisable);

(xi) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

(xii) to allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that would otherwise be due to such Participant under an Award

(xiii) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards.

5. Eligibility. Nonstatutory Stock Options, Restricted Stock, Stock Appreciation Rights, Performance Units and Performance Shares may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

6. Stock Options.

(a) Limitations.

(i) Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds $100,000, such Options will be treated as Nonstatutory Stock Options. For purposes of this Section 6(a), Incentive Stock Options will be taken into account in the order in which they were granted. The Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted.

(ii) The following limitations will apply to grants of Options and Stock Appreciation Rights:

(1) No Service Provider will be granted, in any Fiscal Year, Options to purchase more than 1,500,000 Shares.

(2) In connection with his or her initial service, a Service Provider may be granted Options to purchase up to an additional 1,500,000 Shares, which will not count against the limit set forth in Section 6(a)(2)(ii)(1) above.

(3) The foregoing limitations will be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 13.

(4) If an Option is cancelled in the same Fiscal Year in which it was granted (other than in connection with a transaction described in Section 13), the cancelled Option will be counted against the limits set forth in subsections (1) and (2) above. For this purpose, if the exercise price of an Option is reduced, the transaction will be treated as a cancellation of the Option and the grant of a new Option.

(b) Term of Option. The term of each Option will be stated in the Award Agreement. In the case of an Incentive Stock Option, the term will be ten (10) years from the date of grant or such shorter term as may be provided in the Award Agreement. Moreover, in the case of an Incentive Stock Option granted to a Participant who, at the time the Incentive Stock Option is granted, owns stock

representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option will be five (5) years from the date of grant or such shorter term as may be provided in the Award Agreement.

(c) Option Exercise Price and Consideration.

(i) Exercise Price. The per share exercise price for the Shares to be issued pursuant to exercise of an Option will be determined by the Administrator, subject to the following:

(1) In the case of an Incentive Stock Option

a) granted to an Employee who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price will be no less than 110% of the Fair Market Value per Share on the date of grant.

b) granted to any Employee other than an Employee described in paragraph (A) immediately above, the per Share exercise price will be no less than 100% of the Fair Market Value per Share on the date of grant.

c) Notwithstanding the foregoing, Incentive Stock Options may be granted with a per Share exercise price of less than 100% of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code.

(2) In the case of a Nonstatutory Stock Option, the per Share exercise price will be determined by the Administrator. In the case of a Nonstatutory Stock Option intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code, the per Share exercise price will be no less than 100% of the Fair Market Value per Share on the date of grant.

(ii) Waiting Period and Exercise Dates. At the time an Option is granted, the Administrator will fix the period within which the Option may be exercised and will determine any conditions that must be satisfied before the Option may be exercised.

(iii) Form of Consideration. The Administrator will determine the acceptable form of consideration for exercising an Option, including the method of payment. In the case of an Incentive Stock Option, the Administrator will determine the acceptable form of consideration at the time of grant. Such consideration may consist entirely of: (1) cash; (2) check; (3) promissory note; (4) other Shares, provided Shares acquired directly or indirectly from the Company, (A) have been owned by the Participant and not subject to substantial risk of forfeiture for more than six months on the date of surrender, and (B) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option will be exercised; (5) consideration received by the Company under a cashless exercise program implemented by the Company in connection with the Plan; (6) a reduction in the amount of any Company liability to the Participant, including any liability attributable to the Participant's participation in any Company-sponsored deferred compensation program or arrangement; (7) any combination of the foregoing methods of payment; or (8) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws.

(d) Exercise of Option.

(i) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder will be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. An Option may not be exercised for a fraction of a

Share.

An Option will be deemed exercised when the Company receives: (i) written or electronic notice of exercise (in accordance with the Award Agreement) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised. Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option will be issued in the name of the Participant or, if requested by the Participant, in the name of the Participant and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Optioned Stock, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 13 of the Plan.

Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(ii) Termination of Relationship as a Service Provider. If a Participant ceases to be a Service Provider, other than upon the Participant's death or Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for three (3) months following the Participant's termination. Unless otherwise provided by the Administrator, if on the

date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified by the Administrator, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iii) Disability of Participant. If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for twelve (12) months following the Participant's termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iv) Death of Participant. If a Participant dies while a Service Provider, the Option may be exercised following the Participant's death within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of death (but in no event may the option be exercised later than the expiration of the term of such Option as set forth in the Award Agreement), by the Participant's designated beneficiary, provided such beneficiary has been designated prior to Participant's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. In the absence of a specified time in the

Award Agreement, the Option will remain exercisable for twelve (12) months following Participant's death. Unless otherwise provided by the Administrator, if at the time of death Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will immediately revert to the Plan. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

7. Restricted Stock.

(a) Grant of Restricted Stock. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator, in its sole discretion, will determine.

(b) Restricted Stock Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the Period of Restriction, the number of Shares granted, and such other terms and conditions as the Administrator, in its sole discretion, will determine. Unless the Administrator determines otherwise, Shares of Restricted Stock will be held by the Company as escrow agent until the restrictions on such Shares have lapsed.

(c) Transferability. Except as provided in this Section 7, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.

(d) Other Restrictions. The Administrator, in its sole discretion, may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.

(e) Removal of Restrictions. Except as otherwise provided in this Section 7, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of the Period of Restriction. The Administrator, in its discretion, may accelerate the time at which any restrictions will lapse or be removed.

(f) Voting Rights. During the Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

(g) Dividends and Other Distributions. During the Period of Restriction, Service Providers holding Shares of Restricted Stock will be entitled to receive all dividends and other distributions paid with respect to such Shares unless otherwise provided in the Award Agreement. If any such dividends or distributions are paid in Shares, the Shares will be subject to the same restrictions on transferability and forfeitability as the Shares of Restricted Stock with respect to which they were paid.

(h) Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

8. Stock Appreciation Rights.

(a) Grant of SARs. Subject to the terms and conditions of the Plan, a SAR may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion. The Administrator may grant Affiliated SARs, Freestanding SARs, Tandem SARs, or any combination thereof.

(b) Number of Shares. The Administrator will have complete discretion to determine the number of SARs granted to any Service Provider.

(c) Exercise Price and Other Terms. The Administrator, subject to the provisions of the Plan, will have complete discretion to determine the terms and conditions of SARs granted under the Plan. However, the exercise price of Tandem or Affiliated SARs will equal the exercise price of the related Option.

(d) Exercise of Tandem SARs. Tandem SARs may be exercised for all or part of the Shares subject to the related Option upon the surrender of the right to exercise the equivalent portion of the related Option. A Tandem SAR may be exercised only with respect to the Shares for which its related Option is then exercisable. With respect to a Tandem SAR granted in connection with an Incentive Stock Option: (a) the Tandem SAR will expire no later than the expiration of the

underlying Incentive Stock Option; (b) the value of the payout with respect to the Tandem SAR will be for no more than one hundred percent (100%) of the difference between the exercise price of the underlying Incentive Stock Option and the Fair Market Value of the Shares subject to the underlying Incentive Stock Option at the time the Tandem SAR is exercised; and (c) the Tandem SAR will be exercisable only when the Fair Market Value of the Shares subject to the Incentive Stock Option exceeds the Exercise Price of the Incentive Stock Option.

(e) Exercise of Affiliated SARs. An Affiliated SAR will be deemed to be exercised upon the exercise of the related Option. The deemed exercise of an Affiliated SAR will not necessitate a reduction in the number of Shares subject to the related Option.

(f) Exercise of Freestanding SARs. Freestanding SARs will be exercisable on such terms and conditions as the Administrator, in its sole discretion, will determine.

(g) SAR Agreement. Each SAR grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the SAR, the conditions of exercise, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(h) Expiration of SARs. An SAR granted under the Plan will expire upon the date determined by the Administrator, in its sole discretion, and set forth in the Award Agreement. Notwithstanding the foregoing, the rules of Section 6(d) also will apply to SARs.

(i) Payment of SAR Amount. Upon exercise of an SAR, a Participant will be entitled to receive payment from the Company in an amount determined by multiplying:

(i) The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; times

(ii) The number of Shares with respect to which the SAR is exercised.

At the discretion of the Administrator, the payment upon SAR exercise may be in cash, in Shares of equivalent value, or in some combination thereof.

9. Performance Units and Performance Shares.

(a) Grant of Performance Units/Shares. Performance Units and Performance Shares may be granted to Service Providers at any time and from time to time, as will be determined by the Administrator, in its sole discretion. The Administrator will have complete discretion in determining the number of Performance Units and Performance Shares granted to each Participant.

(b) Value of Performance Units/Shares. Each Performance Unit will have an initial value that is established by the Administrator on or before the date of grant. Each Performance Share will have an initial value equal to the Fair Market Value of a Share on the date of grant.

(c) Performance Objectives and Other Terms. The Administrator will set performance objectives or other vesting provisions in its discretion which, depending on the extent to which they are met, will determine the number or value of Performance Units/Shares that will be

paid out to the Service Providers. The time period during which the performance objectives or other vesting provisions must be met will be called the "Performance Period." Each Award of Performance Units/Shares will be evidenced by an Award Agreement that will specify the Performance Period, and such other terms and conditions as the Administrator, in its sole discretion, will determine. The Administrator may set performance objectives based upon the achievement of Company-wide, divisional, or individual goals, applicable federal or state securities laws, or any other basis determined by the Administrator in its discretion.

(d) Earning of Performance Units/Shares. After the applicable Performance Period has ended, the holder of Performance Units/Shares will be entitled to receive a payout of the number of Performance Units/Shares earned by the Participant over the Performance Period, to be determined as a function of the extent to which the corresponding performance objectives or other vesting provisions have been achieved. After the grant of a Performance Unit/Share, the Administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such Performance Unit/Share.

(e) Form and Timing of Payment of Performance Units/Shares. Payment of earned Performance Units/Shares will be made as soon as practicable after the expiration of the applicable Performance Period. The Administrator, in its sole discretion, may pay earned Performance Units/Shares in the form of cash, in Shares (which have an aggregate Fair Market Value equal to the value of the earned Performance Units/Shares at the close of the applicable Performance Period) or in a combination thereof.

(f) Cancellation of Performance Units/Shares. On the date set forth in the Award Agreement, all unearned or unvested Performance Units/Shares will be forfeited to the Company, and again will be available for grant under the Plan.

10. Formula Option Grants to Outside Directors.

All grants of Options to Outside Directors pursuant to this Section will be automatic and nondiscretionary and will be made in accordance with the following provisions:

(a) Type of Option. All Options granted pursuant to this Section will be Nonstatutory Stock Options and, except as otherwise provided herein, will be subject to the other terms and conditions of the Plan.

(b) No Discretion. No person will have any discretion to select which Outside Directors will be granted Options under this Section or to determine the number of Shares to be covered by such Options (except as provided in Sections 10(f) and 13).

(c) First Option. Each person who first becomes an Outside Director following the Registration Date will be automatically granted an Option to purchase 20,000 Shares (the "First Option") on or about the date on which such person first becomes an Outside Director, whether through election by the stockholders of the Company or appointment by the Board to fill a vacancy; provided, however, that an Inside Director who ceases to be an Inside Director, but who remains a Director, will not receive a First Option.

(d) Subsequent Option. Each Outside Director will be automatically granted an Option to purchase 15,000 Shares (a "Subsequent Option") on each date

of the annual meeting of the stockholders of the Company beginning in 2005, if as of such date, he or she will have served on the Board for at least the preceding six (6) months.

(e) Terms. The terms of each Option granted pursuant to this Section will be as follows:

(i) The term of the Option will be ten (10) years.

(ii) The exercise price per Share will be 100% of the Fair Market Value per Share on the date of grant of the Option.

(iii) Subject to Section 14, the First Option will vest and become exercisable as to 33 1/3% of the Shares subject to such First Option on each anniversary of its date of grant, provided that the Participant continues to serve as a Director through each such date.

(iv) Subject to Section 14, the Subsequent Option will vest and become exercisable as to 100% of the Shares subject to such Option on the date of grant, provided that the Participant continues to serve as a Director through such date.

(v) If an Outside Director ceases to be a Director, other than upon the Outside Director's death, Disability or Retirement, the Outside Director may exercise his or her Option granted pursuant to this Section 10 within twelve (12) months following such termination to the extent that the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option). If an Outside Director ceases to be a Director as a result of the Outside Director's death, Disability or Retirement, the Outside Director may exercise his or her Option granted pursuant to this Section 10 within three years of such termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). If on the date of termination the Outside Director is not vested as to his or her entire Option granted pursuant to this Section 10, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Outside Director does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(f) Amendment. The Administrator in its discretion may change the number of Shares subject to the First Options and Subsequent Options.

11. Leaves of Absence. Unless the Administrator provides otherwise, vesting of Awards granted hereunder will be suspended during any unpaid leave of absence. A Service Provider will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, or any Subsidiary. For purposes of Incentive Stock Options, no such leave may exceed ninety (90) days, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then three months following the 91st day of such leave any Incentive Stock Option held by the Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

12. Transferability of Awards. Unless determined otherwise by the Administrator, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, such Award will contain such additional terms and conditions as the Administrator deems appropriate.

13. Adjustments; Dissolution or Liquidation; Merger or Change in Control.

(a) Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, may (in its sole discretion) adjust the number and class of Shares that may be delivered under the Plan and/or the number, class, and price of Shares covered by each outstanding Award, the numerical Share limits in Sections 3 and 6 of the Plan and the number of Shares issuable pursuant to Section 10.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

(c) Change in Control. In the event of a Change in Control, each outstanding Award will be assumed or an equivalent option or right substituted by the successor corporation or a Parent or Subsidiary of the successor corporation. In the event that the successor corporation refuses to assume or substitute for the Award, the Participant will fully vest in and have the right to exercise all of his or her outstanding Options and Stock Appreciation Rights, including Shares as to which such Awards would not otherwise be vested or exercisable, all restrictions on Restricted Stock shall lapse, and, with respect to Performance Shares and Performance Units, all performance goals will be deemed achieved at target levels and all other terms and conditions met. In addition, if an Option or Stock Appreciation Right becomes fully vested and exercisable in lieu of assumption or substitution in the event of a Change in Control, the Administrator will notify the Participant in writing or electronically that the Option or Stock Appreciation Right will be fully vested and exercisable for a period of time determined by the Administrator in its sole discretion, and the Option or Stock Appreciation Right will terminate upon the expiration of such period.

With respect to Awards granted to an Outside Director that are assumed or substituted for, if on the date of or following such assumption or substitution the Participant's status as a Director or a director of the successor corporation, as applicable, is terminated other than upon a voluntary resignation by the Participant, then the Participant will fully vest in and have the right to exercise Options and/or Stock Appreciation Rights as to all of the Optioned Stock, including Shares as to which such Awards would not otherwise be vested or exercisable, all restrictions on Restricted Stock shall lapse, and, with respect to Performance Shares and Performance Units, all performance goals will be deemed achieved at target levels and all other terms and conditions met.

For the purposes of this subsection (c), an Award will be considered assumed if, following the Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the Change in Control, the consideration (whether stock, cash, or other securities or property) or, in the case of a Stock Appreciation Right upon the exercise of which the Administrator determines to pay cash or a Performance Share or Performance Unit which the Administrator can determine to pay in cash, the fair market value of the consideration received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the Change in Control is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of an Option or Stock Appreciation Right or upon the payout of a Performance Share or Performance Unit, for each Share subject to such Award (or in the case of Performance Units, the number of implied shares determined by dividing the value of the Performance

Units by the per share consideration received by holders of Common Stock in the Change in Control), to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the Change in Control.

Notwithstanding anything in this Section 13(c) to the contrary, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant's consent; provided, however, a modification to such performance goals only to reflect the successor corporation's post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

14. No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company, nor will they interfere in any way with the Participant's right or the Company's right to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.

15. Date of Grant. The date of grant of an Award will be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such other later date as is determined by the Administrator. Notice of the determination will be provided to each Participant within a reasonable time after the date of such grant.

16. Term of Plan. Subject to Section 20 of the Plan, the Plan will become effective upon its adoption by the Board. It will continue in effect for a term of five (5) years unless terminated earlier under Section 17 of the Plan.

17. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan.

(b) Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan will impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

18. Conditions Upon Issuance of Shares.

(a) Legal Compliance. Shares will not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

19. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, will relieve the Company of any liability in

respect of the failure to issue or sell such Shares as to which such requisite authority will not have been obtained.

20. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

Exhibit 10.4

CYTOKINETICS, INCORPORATED

2004 EMPLOYEE STOCK PURCHASE PLAN

The following constitutes the provisions of the 2004 Employee Stock Purchase Plan of Cytokinetics, Incorporated

1. Purpose. The purpose of the Plan is to provide Employees with an opportunity to purchase Common Stock through accumulated payroll deductions. It is the intention of the Company to have the Plan qualify as an "employee stock purchase plan" under Section 423 of the Code. The provisions of the Plan, accordingly, shall be construed so as to extend and limit Plan participation in a manner that is consistent with the requirements of that section of the Code.

2. Definitions.

(a) "Administrator" means the Board or any committee thereof designated by the Board in accordance with Section 14.

(b) "Board" means the Board of Directors of the Company.

(c) "Change of Control" means the occurrence of any of the following events:

(i) Any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "beneficial owner" (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company's then outstanding voting securities; or

(ii) The consummation of the sale or disposition by the Company of all or substantially all of the Company's assets; or

(iii) The consummation of a merger or consolidation of the Company, with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company, or such surviving entity or its parent outstanding immediately after such merger or consolidation.

(iv) A change in the composition of the Board, as a result of which fewer than a majority of the Directors are Incumbent Directors. "Incumbent Directors" means Directors who either (A) are Directors as of the effective date of the Plan (pursuant to Section 23), or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of those Directors whose election or nomination was not in connection with any transaction described in subsections (i), (ii) or (iii) or in connection with an actual or threatened proxy contest relating to the election of Directors of the Company.

(d) "Code" means the Internal Revenue Code of 1986, as amended. Any reference to a section of the Code herein shall be a reference to any successor or amended section of the Code.

(e) "Common Stock" means the common stock of the Company.

(f) "Company" means Cytokinetics, Incorporated, a Delaware corporation.

(g) "Compensation" means an Employee's base straight time gross earnings, commissions (to the extent such commissions are an integral, recurring

part of compensation), overtime and shift premium, but exclusive of payments for incentive compensation, bonuses and other compensation.

(h) "Designated Subsidiary" means any Subsidiary that has been designated by the Administrator from time to time in its sole discretion as eligible to participate in the Plan.

(i) "Director" means a member of the Board.

(j) "Employee" means any individual who is a common law employee of an Employer and is customarily employed for at least twenty (20) hours per week and more than five (5) months in any calendar year by the Employer. For purposes of the Plan, the employment relationship shall be treated as continuing intact while the individual is on sick leave or other leave of absence approved by the Employer. Where the period of leave exceeds ninety (90) days and the individual's right to reemployment is not guaranteed either by statute or by contract, the employment relationship shall be deemed to have terminated on the 91st day of such leave.

(k) "Employer" means any one or all of the Company and its Designated Subsidiaries.

(l) "Enrollment Date" means the first Trading Day of each Offering Period.

(m) "Exchange Act" means the Securities Exchange Act of 1934, as amended, including the rules and regulations promulgated thereunder.

(n) "Exercise Date" means the first Trading Day on or after [May 1] and [November 1] of each year. The first Exercise Date under the Plan shall be [November 1, 2004].

(o) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq National Market or The Nasdaq SmallCap Market of The Nasdaq Stock Market, its Fair Market Value shall be the closing sales price for the Common Stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the date of determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable, or;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value shall be the mean of the closing bid and asked prices for the Common Stock on the date of determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable, or;

(iii) In the absence of an established market for the Common Stock, its Fair Market Value shall be determined in good faith by the Administrator, or;

(iv) For purposes of the Enrollment Date of the first Offering Period under the Plan, the Fair Market Value shall be the initial price to the public as set forth in the final prospectus deemed to be included within the registration statement on Form S-1 filed with the Securities and Exchange Commission for the initial public offering of the Common Stock (the "Registration Statement").

(p) "Offering Periods" means the periods of approximately twenty-four (24) months during which an option granted pursuant to the Plan may be exercised, commencing on the first Trading Day on or after [May 1] and [November 1] of each year and terminating on the first Trading Day on or after

the [May 1] and [November 1] Offering Period commencement date approximately twelve months later; provided, however, that the first Offering Period under the Plan shall commence with the first Trading Day on or after the date on which the Securities and Exchange Commission declares the Company's Registration Statement effective and ending on the first Trading Day on or after the earlier of (i) [May 1, 2006] or (ii) twenty-seven (27) months from the beginning of the first Offering Period; and provided, further, that the second Offering Period under the Plan shall commence on [May 1, 2004]. The duration and timing of Offering Periods may be changed pursuant to Section 4 of this Plan.

(q) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(r) "Plan" means this 2004 Employee Stock Purchase Plan.

(s) "Purchase Period" means the approximately six (6) month period commencing on one Exercise Date and ending with the next Exercise Date, except that the first Purchase Period of any Offering Period shall commence on the Enrollment Date and end with the next Exercise Date.

(t) "Purchase Price" means an amount equal to eighty-five percent (85%) of the Fair Market Value of a share of Common Stock on the Enrollment Date or on the Exercise Date, whichever is lower; provided however, that the Purchase Price may be adjusted by the Administrator pursuant to Section 20.

(u) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code.

(v) "Trading Day" means a day on which the U.S. national stock exchanges and the Nasdaq System are open for trading.

3. Eligibility.

(a) First Offering Period. Any individual who is an Employee immediately prior to the first Offering Period under the Plan shall be automatically enrolled in the first Offering Period.

(b) Subsequent Offering Periods. Any individual who is an Employee as of the Enrollment Date of any future Offering Period shall be eligible to participate in such Offering Period, subject to the requirements of Section 5.

(c) Limitations. Any provisions of the Plan to the contrary notwithstanding, no Employee shall be granted an option under the Plan (i) to the extent that, immediately after the grant, such Employee (or any other person whose stock would be attributed to such Employee pursuant to Section 424(d) of the Code) would own capital stock of the Company or any Parent or Subsidiary of the Company and/or hold outstanding options to purchase such stock possessing five percent (5%) or more of the total combined voting power or value of all classes of the capital stock of the Company or of any Parent or Subsidiary of the Company, or (ii) to the extent that his or her rights to purchase stock under all employee stock purchase plans (as defined in Section 423 of the Code) of the Company or any Parent or Subsidiary of the Company accrues at a rate which exceeds twenty-five thousand dollars ($25,000) worth of stock (determined at the Fair Market Value of the stock at the time such option is granted) for each calendar year in which such option is outstanding at any time.

4. Offering Periods. The Plan shall be implemented by consecutive, overlapping Offering Periods with a new Offering Period commencing on the first Trading Day on or after [May 1] and [November 1] of each year, or on such other date as the Administrator shall determine, and continuing thereafter until terminated in accordance with Section 20; provided, however, that the first Offering Period under the Plan shall commence with the first Trading Day on or after the date on which the Securities and Exchange Commission declares the Company's Registration Statement effective and ending on the first Trading Day

on or after the earlier of (i) [May 1, 2006] or (ii) twenty-seven (27) months from the beginning of the first Offering Period; and provided, further, that the second Offering Period under the Plan shall commence on [May 1, 2004]. The Administrator shall have the power to change the duration of Offering Periods (including the commencement dates thereof) with respect to future offerings without stockholder approval if such change is announced prior to the scheduled beginning of the first Offering Period to be affected thereafter.

5. Participation.

(a) First Offering Period. An Employee who has become a participant in the first Offering Period under the Plan pursuant to Section 3(a) shall be entitled to continue his or her participation in such Offering Period only if he or she submits to the Company's payroll office (or its designee) a properly completed subscription agreement authorizing payroll deductions in the form provided by the Administrator for such purpose (i) no earlier than the effective date of the filing of the Company's Registration Statement on Form S-8 with respect to the shares of Common Stock issuable under the Plan (the "Effective Date") and (ii) no later than five (5) business days from the Effective Date or such other period of time as the Administrator may determine (the "Enrollment Window"). A participant's failure to submit the subscription agreement during the Enrollment

Window pursuant to this Section 5(a) shall result in the automatic termination of his or her participation in the first Offering Period under the Plan.

(b) Subsequent Offering Periods. An Employee who is eligible to participate in the Plan pursuant to Section 3(b) may become a participant by (i) submitting to the Company's payroll office (or its designee), on or before a date prescribed by the Administrator prior to an applicable Enrollment Date, a properly completed subscription agreement authorizing payroll deductions in the form provided by the Administrator for such purpose, or (ii) following an electronic or other enrollment procedure prescribed by the Administrator.

6. Payroll Deductions.

(a) At the time a participant enrolls in the Plan pursuant to Section 5, he or she shall elect to have payroll deductions made on each payday during the Offering Period in an amount not exceeding [15%] of the Compensation which he or she receives on each such payday.

(b) Payroll deductions authorized by a participant shall commence on the first payday following the Enrollment Date and shall end on the last payday in the Offering Period to which such authorization is applicable, unless sooner terminated by the participant as provided in Section 10; provided, however, that for the first Offering Period under the Plan, payroll deductions shall commence on the first payday on or following the end of the Enrollment Window.

(c) All payroll deductions made for a participant shall be credited to his or her account under the Plan and shall be withheld in whole percentages only. A participant may not make any additional payments into such account.

(d) A participant may discontinue his or her participation in the Plan as provided in Section 10, or may change the rate of his or her payroll deductions during the Offering Period by (i) properly completing and submitting to the Company's payroll office (or its designee), on or before a date prescribed by the Administrator prior to an applicable Exercise Date, a new subscription agreement authorizing the change in payroll deduction rate in the form provided by the Administrator for such purpose, or (ii) following an electronic or other procedure prescribed by the Administrator; provided, however, that a participant may only make one payroll deduction change during

each Purchase Period. If a participant has not followed such procedures to change the rate of payroll deductions, the rate of his or her payroll deductions shall continue at the originally elected rate throughout the Offering Period and future Offering Periods (unless terminated as provided in Section 10). The Administrator may, in its sole discretion, limit the nature and/or number of payroll deduction rate changes that may be made by participants during any Offering Period. Any change in payroll deduction rate made pursuant to this Section 6(d) shall be effective as of the first full payroll period following five (5) business days after the date on which the change is made by the participant (unless the Administrator, in its sole discretion, elects to process a given change in payroll deduction rate more quickly).

(e) Notwithstanding the foregoing, to the extent necessary to comply with Section 423(b)(8) of the Code and Section 3(c), a participant's payroll deductions may be decreased to zero percent (0%) at any time during a Purchase Period. Payroll deductions shall recommence at the rate originally elected by the participant effective as of the beginning of the first Purchase Period

which is scheduled to end in the following calendar year, unless terminated by the participant as provided in Section 10.

(f) At the time the option is exercised, in whole or in part, or at the time some or all of the Company's Common Stock issued under the Plan is disposed of, the participant must make adequate provision for the Company's federal, state, or other tax withholding obligations, if any, which arise upon the exercise of the option or the disposition of the Common Stock. At any time, the Company may, but shall not be obligated to, withhold from the participant's compensation the amount necessary for the Company to meet applicable withholding obligations, including any withholding required to make available to the Company any tax deductions or benefits attributable to the sale or early disposition of Common Stock by the Employee.

7. Grant of Option. On the Enrollment Date of each Offering Period, each Employee participating in such Offering Period shall be granted an option to purchase on each Exercise Date during such Offering Period (at the applicable Purchase Price) up to a number of shares of Common Stock determined by dividing such participant's payroll deductions accumulated prior to such Exercise Date and retained in the participant's account as of the Exercise Date by the applicable Purchase Price; provided that in no event shall a participant be permitted to purchase during each Purchase Period more than [2,500] shares of Common Stock (subject to any adjustment pursuant to Section 19), and provided further that such purchase shall be subject to the limitations set forth in Sections 3(c) and 13. The Employee may accept the grant of such option (i) with respect to the first Offering Period under the Plan, by submitting a properly completed subscription agreement in accordance with the requirements of Section 5(a) on or before the last day of the Enrollment Window, and (ii) with respect to any future Offering Period under the Plan, by electing to participate in the Plan in accordance with the requirements of Section 5(b). The Administrator may, for future Offering Periods, increase or decrease, in its absolute discretion, the maximum number of shares of Common Stock that a participant may purchase during each Purchase Period of such Offering Period. Exercise of the option shall occur as provided in Section 8, unless the participant has withdrawn pursuant to Section 10. The option shall expire on the last day of the Offering Period.

8. Exercise of Option.

(a) Unless a participant withdraws from the Plan as provided in Section 10, his or her option for the purchase of shares of Common Stock shall be exercised automatically on the Exercise Date, and the maximum number of full shares subject to option shall be purchased for such participant at the applicable Purchase Price with the accumulated payroll deductions in his or her

account. No fractional shares of Common Stock shall be purchased; any payroll deductions accumulated in a participant's account which are not sufficient to purchase a full share shall be retained in the participant's account for the subsequent Purchase Period or Offering Period, subject to earlier withdrawal by the participant as provided in Section 10. Any other monies left over in a participant's account after the Exercise Date shall be returned to the participant. During a participant's lifetime, a participant's option to purchase shares hereunder is exercisable only by him or her.

(b) Notwithstanding any contrary Plan provision, if the Administrator determines that, on a given Exercise Date, the number of shares of Common Stock with respect to which options are to be exercised may exceed (i) the number of shares of Common Stock that were available for

sale under the Plan on the Enrollment Date of the applicable Offering Period, or (ii) the number of shares of Common Stock available for sale under the Plan on such Exercise Date, the Administrator may in its sole discretion (x) provide that the Company shall make a pro rata allocation of the shares of Common Stock available for purchase on such Enrollment Date or Exercise Date, as applicable, in as uniform a manner as shall be practicable and as it shall determine in its sole discretion to be equitable among all participants exercising options to purchase Common Stock on such Exercise Date, and continue all Offering Periods then in effect, or (y) provide that the Company shall make a pro rata allocation of the shares of Common Stock available for purchase on such Enrollment Date or Exercise Date, as applicable, in as uniform a manner as shall be practicable and as it shall determine in its sole discretion to be equitable among all participants exercising options to purchase Common Stock on such Exercise Date, and terminate any or all Offering Periods then in effect pursuant to Section 20. The Company may make pro rata allocation of the shares of Common Stock available on the Enrollment Date of any applicable Offering Period pursuant to the preceding sentence, notwithstanding any authorization of additional shares of Common Stock for issuance under the Plan by the Company's shareholders subsequent to such Enrollment Date.

9. Delivery. As soon as administratively practicable after each Exercise Date on which a purchase of shares of Common Stock occurs, the Company shall arrange the delivery to each participant, as appropriate, the shares purchased upon exercise of his or her option in a form determined by the Administrator (in its sole discretion) and pursuant to rules established by the Administrator. No participant shall have any voting, dividend, or other shareholder rights with respect to shares of Common Stock subject to any option granted under the Plan until such shares have been purchased and delivered to the participant as provided in this Section 9.

10. Withdrawal.

(a) Under procedures established by the Administrator, a participant may withdraw all but not less than all the payroll deductions credited to his or her account and not yet used to exercise his or her option under the Plan at any time by (i) submitting to the Company's payroll office (or its designee) a written notice of withdrawal in the form prescribed by the Administrator for such purpose, or (ii) following an electronic or other withdrawal procedure prescribed by the Administrator. All of the participant's payroll deductions credited to his or her account shall be paid to such participant as promptly as practicable after the effective date of his or her withdrawal and such participant's option for the Offering Period shall be automatically terminated, and no further payroll deductions for the purchase of shares shall be made for such Offering Period. If a participant withdraws from an Offering Period, payroll deductions shall not resume at the beginning of the succeeding Offering Period unless the participant re-enrolls in the Plan in accordance with the provisions of Section 5.

(b) A participant's withdrawal from an Offering Period shall not

have any effect upon his or her eligibility to participate in any similar plan which may hereafter be adopted by the Company or in succeeding Offering Periods which commence after the termination of the Offering Period from which the participant withdraws.

11. Termination of Employment. Upon a participant's ceasing to be an Employee, for any reason, he or she shall be deemed to have elected to withdraw from the Plan and the payroll deductions credited to such participant's account during the Offering Period but not yet used to

purchase shares of Common Stock under the Plan shall be returned to such participant or, in the case of his or her death, to the person or persons entitled thereto under Section 15, and such participant's option shall be automatically terminated. The preceding sentence notwithstanding, a participant who receives payment in lieu of notice of termination of employment shall be treated as continuing to be an Employee for the participant's customary number of hours per week of employment during the period in which the participant is subject to such payment in lieu of notice.

12. Interest. No interest shall accrue on the payroll deductions of a participant in the Plan.

13. Stock.

(a) Subject to adjustment upon changes in capitalization of the Company as provided in Section 19, the maximum number of shares of Common Stock which shall be made available for sale under the Plan shall be 1,000,000 shares of Common Stock.

(b) Shares of Common Stock to be delivered to a participant under the Plan shall be registered in the name of the participant or in the name of the participant and his or her spouse.

14. Administration. The Board or a committee of members of the Board who shall be appointed from time to time by, and shall serve at the pleasure of, the Board, shall administer the Plan. The Administrator shall have full and exclusive discretionary authority to construe, interpret and apply the terms of the Plan, to determine eligibility, to adjudicate all disputed claims filed under the Plan and to establish such procedures that it deems necessary for administration of the Plan (including, without limitation, to adopt such procedures and sub-plans as are necessary or appropriate to permit the participation in the Plan by employees who are foreign nationals or employed outside the United States). The Administrator, in its sole discretion and on such terms and conditions as it may provide, may delegate to one or more individuals all or any part of its authority and powers under the Plan. Every finding, decision and determination made by the Administrator (or its designee) shall, to the full extent permitted by law, be final and binding upon all parties.

15. Designation of Beneficiary.

(a) A participant may designate a beneficiary who is to receive any shares of Common Stock and cash, if any, from the participant's account under the Plan in the event of such participant's death subsequent to an Exercise Date on which the option is exercised but prior to delivery to such participant of such shares and cash. In addition, a participant may designate a beneficiary who is to receive any cash from the participant's account under the Plan in the event of such participant's death prior to exercise of the option. If a participant is married and the designated beneficiary is not the spouse, spousal consent shall be required for such designation to be effective.

(b) Such designation of beneficiary may be changed by the

participant at any time. In the event of the death of a participant and in the absence of a beneficiary validly designated under the Plan who is living at the time of such participant's death, the Company shall deliver such shares and/or cash to the executor or administrator of the estate of the participant, or if no such executor or administrator has been appointed (to the knowledge of the Company), the Company, in its discretion, may deliver such shares and/or cash to the spouse or to any one or more dependents or

relatives of the participant, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

(c) All beneficiary designations under this Section 15 shall be made in such form and manner as the Administrator may prescribe from time to time.

16. Transferability. Neither payroll deductions credited to a participant's account nor any rights with regard to the exercise of an option or to receive shares of Common Stock under the Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution or as provided in Section 15) by the participant. Any such attempt at assignment, transfer, pledge or other disposition shall be without effect, except that the Company may treat such act as an election to withdraw from an Offering Period in accordance with Section 10.

17. Use of Funds. All payroll deductions received or held by the Company under the Plan may be used by the Company for any corporate purpose, and the Company shall not be obligated to segregate such payroll deductions. Until shares of Common Stock are issued under the Plan (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), a participant shall only have the rights of an unsecured creditor with respect to such shares.

18. Reports. Individual accounts shall be maintained for each participant in the Plan. Statements of account shall be given to participating Employees at least annually, which statements shall set forth the amounts of payroll deductions, the Purchase Price, the number of shares of Common Stock purchased and the remaining cash balance, if any.

19. Adjustments, Dissolution, Liquidation or Change of Control.

(a) Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Common Stock, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Common Stock or other securities of the Company, or other change in the corporate structure of the Company affecting the Common Stock such that an adjustment is determined by the Administrator (in its sole discretion) to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan, then the Administrator shall, in such manner as it may deem equitable, adjust the number and class of Common Stock which may be delivered under the Plan, the Purchase Price per share and the number of shares of Common Stock covered by each option under the Plan which has not yet been exercised, and the numerical limits of Sections 7 and 13.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Offering Period then in progress shall be shortened by setting a new Exercise Date (the "New Exercise Date"), and shall terminate immediately prior to the consummation of such proposed dissolution or liquidation, unless provided otherwise by the Board. The New Exercise Date shall be before the date of the Company's proposed dissolution or liquidation. The Board shall notify each participant in writing, at least ten (10) business days prior to the New Exercise Date, that the Exercise Date for

the participant's option has been changed to the New Exercise Date and that the participant's option shall be exercised automatically on the New

Exercise Date, unless prior to such date the participant has withdrawn from the Offering Period as provided in Section 10.

(c) Change of Control. In the event of a Change of Control, each outstanding option shall be assumed or an equivalent option substituted by the successor corporation or a Parent or Subsidiary of the successor corporation. In the event that the successor corporation refuses to assume or substitute for the option, any Purchase Periods then in progress shall be shortened by setting a new Exercise Date (the "New Exercise Date") and any Offering Periods then in progress shall end on the New Exercise Date. The New Exercise Date shall be before the date of the Company's proposed Change of Control. The Board shall notify each participant in writing, at least ten (10) business days prior to the New Exercise Date, that the Exercise Date for the participant's option has been changed to the New Exercise Date and that the participant's option shall be exercised automatically on the New Exercise Date, unless prior to such date the participant has withdrawn from the Offering Period as provided in Section 10.

20. Amendment or Termination.

(a) The Administrator may at any time and for any reason terminate or amend the Plan. Except as provided in Section 19, no such termination can affect options previously granted under the Plan, provided that an Offering Period may be terminated by the Administrator on any Exercise Date if the Administrator determines that the termination or suspension of the Plan is in the best interests of the Company and its stockholders. Except as provided in Section 19 and this Section 20, no amendment may make any change in any option theretofore granted which adversely affects the rights of any participant. To the extent necessary to comply with Section 423 of the Code (or any successor rule or provision or any other applicable law, regulation or stock exchange rule), the Company shall obtain stockholder approval in such a manner and to such a degree as required.

(b) Without stockholder consent and without regard to whether any participant rights may be considered to have been "adversely affected," the Administrator shall be entitled to change the Offering Periods, limit the frequency and/or number of changes in the amount withheld during an Offering Period, establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars, permit payroll withholding in excess of the amount designated by a participant in order to adjust for delays or mistakes in the Company's processing of properly completed withholding elections, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each participant properly correspond with amounts withheld from the participant's Compensation, and establish such other limitations or procedures as the Administrator determines in its sole discretion advisable which are consistent with the Plan.

(c) In the event the Administrator determines that the ongoing operation of the Plan may result in unfavorable financial accounting consequences, the Board may, in its discretion and, to the extent necessary or desirable, modify or amend the Plan to reduce or eliminate such accounting consequence including, but not limited to:

(i) altering the Purchase Price for any Offering Period including an Offering Period underway at the time of the change in Purchase Price;

(ii) shortening any Offering Period so that Offering Period ends on a new Exercise Date, including an Offering Period underway at the time of the Board action; and

(iii) allocating shares.

Such modifications or amendments shall not require stockholder approval or the consent of any Plan participants.

21. Notices. All notices or other communications by a participant to the Company under or in connection with the Plan shall be deemed to have been duly given when received in the form specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

22. Conditions Upon Issuance of Shares. Shares of Common Stock shall not be issued with respect to an option under the Plan unless the exercise of such option and the issuance and delivery of such shares pursuant thereto shall comply with all applicable provisions of law, domestic or foreign, including, without limitation, the Securities Act of 1933, as amended, including the rules and regulations promulgated thereunder, the Exchange Act and the requirements of any stock exchange upon which the shares may then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance.

As a condition to the exercise of an option, the Company may require the person exercising such option to represent and warrant at the time of any such exercise that the shares are being purchased only for investment and without any present intention to sell or distribute such shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned applicable provisions of law.

23. Term of Plan. The Plan shall become effective upon the earlier to occur of its adoption by the Board or its approval by the stockholders of the Company. It shall continue in effect until terminated under Section 20.

24. Automatic Transfer to Low Price Offering Period. To the extent permitted by any applicable laws, regulations, or stock exchange rules if the Fair Market Value of the Common Stock on any Exercise Date in an Offering Period is lower than the Fair Market Value of the Common Stock on the Enrollment Date of such Offering Period, then all participants in such Offering Period shall be automatically withdrawn from such Offering Period immediately after the exercise of their option on such Exercise Date and automatically re-enrolled in the immediately following Offering Period.

SAMPLE SUBSCRIPTION AGREEMENT

CYTOKINETICS, INCORPORATED

2004 EMPLOYEE STOCK PURCHASE PLAN

SUBSCRIPTION AGREEMENT

_____ Original Application Offering Date:_____

_____ Change in Payroll Deduction Rate

_____ Change of Beneficiary(ies)

1. _____ hereby elects to participate in the Cytokinetics, Incorporated 2004 Employee Stock Purchase Plan (the "Plan") and subscribes

to purchase shares of the Company's Common Stock in accordance with this Subscription Agreement and the Plan.

2. I hereby authorize payroll deductions from each paycheck in the amount of ____% of my Compensation on each payday (from [0 to 15%]) during the Offering Period in accordance with the Plan. (Please note that no fractional percentages are permitted.)

3. I understand that said payroll deductions shall be accumulated for the purchase of shares of Common Stock at the applicable Purchase Price determined in accordance with the Plan. I understand that if I do not withdraw from an Offering Period, any accumulated payroll deductions will be used to automatically exercise my option.

4. I have received a copy of the complete Plan. I understand that my participation in the Plan is in all respects subject to the terms of the Plan. I understand that my ability to exercise the option under this Subscription Agreement is subject to shareholder approval of the Plan.

5. Shares of Common Stock purchased for me under the Plan should be issued in the name(s) of Employee or Employee and Spouse only.

6. I understand that if I dispose of any shares received by me pursuant to the Plan within 2 years after the Offering Date (the first day of the Offering Period during which I purchased such shares) or one year after the Exercise Date, I will be treated for federal income tax purposes as having received ordinary income at the time of such disposition in an amount equal to the excess of the fair market value of the shares at the time such shares were purchased by me over the price which I paid for the shares. I hereby agree to notify the Company in writing within 30 days after the date of any disposition of my shares and I will make adequate provision for Federal, state or other tax withholding obligations, if any, which arise upon the disposition of the Common Stock. The Company may, but will not be obligated to, withhold from my compensation the amount necessary to meet any applicable withholding obligation including any withholding necessary to make available to the Company any tax deductions or

benefits attributable to sale or early disposition of Common Stock by me. If I dispose of such shares at any time after the expiration of the 2-year and 1-year holding periods, I understand that I will be treated for federal income tax purposes as having received income only at the time of such disposition, and that such income will be taxed as ordinary income only to the extent of an amount equal to the lesser of (1) the excess of the fair market value of the shares at the time of such disposition over the purchase price which I paid for the shares, or (2) 15% of the fair market value of the shares on the first day of the Offering Period. The remainder of the gain, if any, recognized on such disposition will be taxed as capital gain.

7. I hereby agree to be bound by the terms of the Plan. The effectiveness of this Subscription Agreement is dependent upon my eligibility to participate in the Plan.

8. In the event of my death, I hereby designate the following as my beneficiary(ies) to receive all payments and/or shares due me under the Plan:

NAME: (Please print)_____
(First) (Middle) (Last)

_____ _____
Relationship

_____ _____
Percentage Benefit (Address)

NAME: (please print)_____
(First) (Middle) (Last)

_____ _____
Relationship

_____ _____
Percentage of Benefit (Address)

Employee's Social
Security Number: _____

Employee's Address: _____

_____

_____

I UNDERSTAND THAT THIS SUBSCRIPTION AGREEMENT SHALL REMAIN IN EFFECT THROUGHOUT SUCCESSIVE OFFERING PERIODS UNLESS TERMINATED BY ME.

Dated:_____ _____
Signature of Employee

_____
Spouse's Signature
(If beneficiary other than spouse)

SAMPLE WITHDRAWAL NOTICE

CYTOKINETICS, INCORPORATED

2004 EMPLOYEE STOCK PURCHASE PLAN

NOTICE OF WITHDRAWAL

The undersigned participant in the Offering Period of the Cytokinetics, Incorporated 2004 Employee Stock Purchase Plan which began on _____, _____ (the "Offering Date") hereby notifies the Company that he or she hereby withdraws from the Offering Period. He or she hereby directs the Company to pay to the undersigned as promptly as practicable all the payroll deductions credited to his or her account with respect to such Offering Period. The undersigned understands and agrees that his or her option for such Offering Period will be automatically terminated. The undersigned understands further that no further payroll deductions will be made for the purchase of shares in the current Offering Period and the undersigned shall be eligible to participate in succeeding Offering Periods only by delivering to the Company a new Subscription Agreement.

Name and Address of Participant:

Signature:

Date:

Exhibit 10.5

BUILD-TO-SUIT LEASE

Landlord: Britannia Poinic Grand Limited Partnership

Tenant: MetaXen, LLC

Date: May 27, 1997

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EXHIBITS

BUILD-TO-SUIT LEASE

THIS BUILD-TO-SUIT LEASE ("Lease") is made and entered into is of the 27th day of May 1997 by and between BRITANNIA POINTS GRAND LIMITED PARTNERSHIP, a Delaware limited partnership ("Landlord"), and METAXEN, LLC, a Delaware limited liability company ("Tenant").

THE PARTIES AGREE AS FOLLOWS:

1. PREMISES

1.1 Lease of Premises.

(a) Landlord leases to Tenant and Tenant hires and leases from Landlord, on the terms, covenants and conditions hereinafter set forth, the premises (the "Premises") designated in Exhibit B attached hereto and incorporated herein by this reference, consisting of the entire second floor (approximately 23.680 square feet) and a portion of the first floor (preliminarily estimated, for working purposes to consist of at least 4,000 square feet, for an aggregate estimated area of approximately 27,680 square feet) of a two-story building designated as Building H(the "Building") to be constructed by Landlord pursuant to Article 5 hereof and Exhibit C attached hereto in the Britannia Pointe Grand Business Park (the "Center") in the City of South San Francisco, County of San Mateo, Slate of California, located on East Grand Avenue on the real property described in Exhibit A attached hereto and

incorporated herein by this reference (the "Property"). The parties contemplate that the plans for the first floor portion of the Premises will include an exclusive entrance, a reception area, loading dock access, an and for vibration-sensitive facilities, and both stair and elevator access to the second floor, with the size of the first floor space and the details of such facilities to be developed pursuant to the design process described in Article 5 hereof and Exhibit C attached hereto. The Building and the other improvements to be constructed pursuant to Article 5 hereof and Exhibit C attached hereto are sometimes referred to collectively herein as the "Improvements. The parking areas, driveways, sidewalks, landscaped areas and other portions of the Center that lie outside the exterior walls of the buildings now existing or to be constructed in the Center, as depicted oil the site plan attached hereto as Exhibit B. are sometimes referred to herein as the "Common Areas."

(b) As an appurtenance to Tenant's leasing of the Premises pursuant to Section 1.1 (a). Landlord hereby grants to Tenant, for the benefit of Tenant and its employees, agents, contractors, suppliers, shippers, customers and invitees, during the term of this Lease, the non-exclusive right to use, in common with others entitled to such use, (i) those portions of the Common Areas improved from time to lime for use as parking areas, driveways, sidewalks, landscaped areas, or for other common purposes, and (ii) all access easements and similar rights and privileges relating to or appurtenant to the Property and created or existing from time to time under any access easement agreements, declarations of covenants, conditions and restrictions, or other written agreements now or hereafter of record with respect to the Property, subject however to any limitations applicable to such rights and privilege, under applicable law and/or under the written agreements creating such rights and privileges Landlord represents that the Property shall include parking spaces available for use (on a non-exclusive basis) by tenents of the Building and their employees, agents and invitees at. the rate of 3.5 spaces per 1,000 square feet, and that Tenant shall be entitled to have five (5) parking spaces marked as being reserved for exclusive use by Tenant, at a location to be reasonably designated by Tenant.

(c) Subject to all of the terms and conditions of this paragraph (c). Tenant may by written notice to Landlord, elect to expand the Premises to include all or any portion of the Building not included within the initial Premises as described in Section l.l(a) (the "Option Space"). This option may be exercised by Tenant at any time during the period from the date of this Lease to the date which is four (4) months prior to the Commencement Date (the "Option Period"): provided, however, that for purposes of this paragraph (c), me Option Period shall be conclusively deemed to expire on the date specified in a written notice from Landlord to Tenant, which notice shall (i) specify the anticipated Commencement Date under this Lease (based on Landlord's best reasonable, good faith estimate, (ii) specify the date on which the Option Period will expire (which date shall be no less than ten (10) business days after the date such notice is delivered to Tenant), and (iii) shall be given no earlier then four and one-half months prior to the

Commencement Date as estimated reasonably and in good faith by Landlord in such notice. If this option is duly and timely exercised by Tenant, then (I) Landlord and Tenant shall proceed diligently to develop and agree upon a space plan and detailed plans and specifications for the Option Space, (II) Landlord shall proceed diligently to construct improvements to the Option Space in accordance with such plans and specifications, at Landlord's sole cost and expense (subject to the provisions of Section 3.1(c) hereof), (III) the Option Space shall be added to the Premises and rent and other charges shall commence with respect thereto upon the later to occur of (A) substantial completion of such improvements or (B) the date on which rent and such other charges commence with respect to the Premises, (IV) rent payable hereunder and Tenant's Operating Cost Share shall be adjusted to reflect the addition of the Option Space to the Premises, using the same rates and formulas pet square foot as are applicable to the original Premises hereunder, and (V) Tenant shall occupy the Option Space for the remaining term of this Lease upon and subject to all of the terms and provisions of this Lease, to the same extent and in the same manner as such terms and provisions are applicable to the original Premises hereunder.

1.2 Landlord's Reserved Rights. To the extent reasonably necessary to permit Landlord to exercise any rights of Landlord and discharge any obligations of Landlord under this Lease, Landlord shall have, in addition to the right of entry set forth in Section 14.1 hereof, the following rights: (i) to install, use, maintain, repair and replace pipes, ducts, conduits, wires and appurtenant meters and equipment for service to other parts of the Building above the ceiling. surfaces, below the floor surfaces, within the walls or leading through the Premises in locations which will not materially interfere with Tenant's use thereof, (ii) to relocate any pipes, ducts, conduits, wires and appurtenant meters and equipment included in the Premises which are so located or located elsewhere outside the Premises, (iii) to make changes, alterations or additions to the portions of the Building not occupied by Tenant and/or to the Common Areas, including, without limitation, changes in the location, size or shape of any portion of the Common Areas, and to relocate parking spaces on the Property (but not materially decrease the number of such parking spaces in areas of the Property generally adjacent to the Building); (iv) to close temporarily any of the Common Areas for maintenance or other reasonable purposes, provided that reasonable parking and reasonable access to the Building remain available; (v) to construct, alter or add to other buildings or improvements on the Property (including, but not limited to, construction of buildings in the areas designated as "New Building A," "New Building B" and "New Building C" on the site plan attached hereto as Exhibit B, and construction of related site improvements and common area improvements on the Property); (vi) to build adjoining to the Property; (vii) to use the Common Areas while engaged in making additional improvements, repairs or alterations to the Property or any portion thereof; (viii) to lease any part of the Property for the construction of improvements or buildings; and (ix) to do and perform such other acts with respect to the Common Areas and the Property as may be necessary or appropriate; provided, however, that notwithstanding anything to-the contrary in this Section 1.2, Landlord's exercise of its rights hereunder shall not cause any material diminution or impairment of Tenant's rights, nor any material increase of Tenant's obligations, under this Lease or with respect to the Improvements.

1.3 First Refusal Right.

(a) Following expiration of Tenant's right to add part or all of the Option Space to the Premises pursuant to Section l.l(c) hereof, if Tenant has not elected to exercise such right in whole or in part. Landlord shall not thereafter lease all or any part of the Option Space that has not already been added to the Premises at any time during the term of this Lease, except in compliance with this Section 1.3; provided, however, that the foregoing restriction shall not apply during any period in which Tenant is in material default, beyond say applicable cure periods, under this Lease (without limitation, any "event of default," as that term is defined in Section 16.1, will be considered a material default).

(b) If Landlord during the term of this Lease (after expiration of Tenant's rights under Section l.l(c) hereof) receives a bona fide written offer from a prospective tenant to lease all or any portion of the Option Space, and if Tenant is not then in default (beyond any applicable cure periods) under this Lease, Landlord shall first give written notice of such offer to Tenant, attaching a copy of the written offer and specifying (to the extent not set forth in such offer) the material terms on which Landlord proposes to lease the Option Space or portion thereof (the "Offered Space"), and shall offer to Tenant the opportunity to lease the Offered Space on the terms specified in Landlord's notice and in the written third-party offer. Tenant shall have

five (5) business days after the date of giving of such notice by Landlord in which to accept such offer by written notice to Landlord. Upon such acceptance by Tenant, the Offered Space shall be leased to Tenant oh the terms set forth in Landlord's notice and in the written third-party offer, and on the additional terms and provisions set forth herein (except to the extent inconsistent with

the terms set forth in Landlord's said notice and in said written offer), and the parties shall promptly execute an amendment to (this Lease adding the Offered Space to the Premises and making any appropriate amendments to provisions of this Lease to reflect different rent and other obligations applicable to the Offered Space under the terms of Landlord's said notice and of said written offer. If Tenant does not accept Landlord's offer within the allotted time. Landlord shall thereafter have the right to lease the Offered Space to the third parry which submitted the bona fide written offer at any time within one hundred eighty (180) days after Tenant's failure to accept Landlord's offer, at a minimum rental and on other tarns and conditions not more favorable to the lessee than the minimum rental and other-terms offered to Tenant in Landlord's said notice. If Tenant does not accept Landlord's offer and Landlord does not lease the Offered Space to such third parry within one hundred eighty (180) days, this First Right of Refusal shall reattach to that space. For purposes of this Section 1.3(b), a "bona fide written offer" shall mean a terms sheet, letter of intent or other written statement of proposed lease terms that has been signed by the prospective lessee or by its authorized agent, even if such terms sheet letter or statement is non-binding or is subject to preparation of full documents, completion of due diligence or inspections, or other customary and commercially reasonable contingencies.

2. TERM

2.1 Term. The term of this Lease shall commence on the earlier to occur of (i) the date which is five (5) days after the date Landlord delivers to Tenant written notice that Landlord's work pursuant to Article 5 and Exhibit C on the Building and on the Premises is substantially complete, such work is in fact substantially complete and the City of South San' Francisco has issued a certificate of occupancy (or reasonable equivalent thereof) for the Premises, or (ii) the date Tenant takes occupancy of the Premises (except as otherwise provided in Section 2.2). the earlier of such dates being herein called the "Commencement Date" and shall end on the day immediately preceding the date fifteen (15) years thereafter, unless sooner terminated or extended as hereinafter provided.

2.2 Early Possession. If Landlord permits Tenant to occupy, use, take possession of or have access to the Premises or any portion thereof prior to the Commencement Date determined under Section 2.1, such occupancy, use possession or access shall be subject to and upon all of the terms and conditions of this Lease, including the obligation to pay rent and other charges unless Landlord and Tenant agree otherwise; provided however, that such early possession shall not advance or otherwise affect the Commencement Date or termination date determined under Section 2.1; provided further, that Tenant and the contractor selected pursuant to Exhibit C attached hereto for construction of the Tenant Improvements shall be entitled to have early access to the Premises, promptly after completion of the roof metal decking for the Building and thereafter at all appropriate times throughout the course of construction of Landlord's work pursuant to Section 5.1 and Exhibit C, subject to the approval of Landlord and the general contractor (which approval shall not be unreasonably withheld), for the purposes of hanging electrical, mechanical and plumbing services from the overhead structure and installing fixtures, furniture, laboratory equipment, computer equipment, telephone, low voltage data wiring and other personal property, and other similar work preparatory to the commencement of Tenant's business on the Premises, and Tenant shall not be required to pay minimum rental or Operating Expenses by reason of such early access until the Commencement Date otherwise occurs; and provided further, that Tenant shall not interfere with or delay Landlord's contractors by such early access or possession and shall indemnify, defend and hold harmless Landlord and its agents and employees from and against any and all claims, demands, liabilities, actions, tosses, costs and expenses, including (but not limited to) reasonable attorneys' fees, arising out of or in connection with Tenant's early entry upon the Premises hereunder.

2.3 Delay In Possession. Landlord agrees to use its best reasonable efforts to complete the work described in Section 5.1 and Exhibit C promptly, diligently and within the respective time periods set forth in the estimated construction schedule attached hereto as Exhibit D and incorporated herein by this reference, as such schedule may be modified from time to time by

mutual agreement of Landlord and Tenant, and subject to the effects of any delays caused by or

attributable to Tenant or any other circumstances beyond Landlord's reasonable control (excluding any financial inability); provided ,however, that except to the extent caused by a material default by Landlord of its obligations set forth in this Lease (including, but not limited to, its obligations set forth in this Section 2.3 and in Section 5.1 and Exhibit C). Landlord shall not be liable for any damages caused by any delay in the completion of such work nor shall any such delay affect the validity of this Lease or the obligations of Tenant hereunder. Notwithstanding any other provisions of this Lease, however, if Landlord's construction of the Building Shell pursuant to Article 5 and Exhibit C is not substantially complete by the later of (x) September 1, 1998 or (y) thirteen (13) months after Landlord and Tenant have mutually approved detailed plans and specifications for the interior tenant improvements within the Premises, then Tenant shall be entitled to terminate this Lease by written notice to Landlord at any time prior to substantial completion of Landlord's construction of the Building Shell under Article 5 and Exhibit C; provided, however, that the deadline described in this sentence for construction of the Building Shell shall be extended, day for day, for a period of time equal to the length of any actual delay in substantial completion of Landlord's construction of the Building Shell that is caused by or attributable to (I) acts or omissions of Tenant or its agents or employees or (II) any fire, earthquake or other casualty, strike, shortage of labor or materials, or other circumstances beyond Landlord's reasonable control (excluding any financial inability); and provided, further, that any extensions pursuant to the foregoing clause (II) shall not exceed nine (9) months in the aggregate.

2.4 Acknowledgment Of Lease Commencement. Upon commencement of the term of this Lease, Landlord and Tenant shall execute a written acknowledgment of the Commencement Date, date of termination and related matters, substantially in the form attached hereto as Exhibit E (with appropriate insertions), which acknowledgment shall be deemed to be incorporated herein by this reference. Notwithstanding the foregoing requirement, the failure of one or both parties to execute such a written acknowledgment shall not affect the determination of the Commencement Date, date of termination and related matters in accordance with the provisions of this Lease.

2.5 Holding Over. If Tenant holds possession of the Premises or any portion thereof after the term of this Lease with Landlord's written consent, then except as otherwise specified in such consent. Tenant shall become a tenant from month to month at one hundred fifty percent (150%) of the rental and otherwise upon the terms herein specified for the period immediately prior to such holding over and shall continue in such status until the tenancy is terminated by either party upon not less than thirty (30) days prior written notice. If Tenant holds possession of the Premises or any portion thereof after the term of this Lease without Landlord's written consent, then Landlord in its sole discretion may elect (by written notice to Tenant) to have Tenant become a tenant either from month to month or at will, at one hundred fifty percent (150%) of the rental (prorated on a daily basis for an at-will tenancy, if applicable) and otherwise upon the terms herein specified for the period immediately prior to such holding over, or may elect to pursue any and all legal remedies available to Landlord under applicable law with respect to such unconsented holding over by Tenant. Tenant shall indemnify and hold Landlord harmless from any loss, damage, claim, liability, cost or expense (including reasonable attorneys' fees) resulting from any delay by Tenant in surrendering the Premises (except with Landlord's prior written consent), including but not limited to any claims made by a succeeding tenant by reason of such delay. Acceptance of rent by Landlord following expiration or termination of this Lease shall not constitute a renewal of this Lease.

2.6 Option to Extend Term. Tenant shall have the option to extend the term of this Lease, at the minimum rental set forth in Section 3.1 (c) and (d) and otherwise upon all the terms and provisions set forth herein with respect to the initial term of this Lease, for up to two (2) additional periods

of five (5) years each, commencing upon expiration of the initial term hereof. Exercise of such option with respect to the first such extended term shall be by written notice to Landlord at least twelve (12) months prior to the expiration of the initial term hereof; exercise of such option with respect to the second extended term, if the first extension option has been duly exercised, shall be by like written notice to Landlord at least twelve (12) months prior to the expiration of the first extended term hereof. If Tenant is in material default hereunder, beyond any applicable cure periods, on the date of such notice or on the date any extended term is to commence (without limitation, any "event of default," as that term is defined in Section 16.1 will be considered a material default), then the exercise of the option shall be of no force or effect, the extended term shall not commence and this Lease shall expire at the end of the then current term hereof (or at such earlier time as Landlord may elect pursuant to the

default provisions of this Lease). If Tenant properly exercises one or more extension options under this Section, then all references in this Lease (other than in this Section 2.6) to the "term" of this Lease shall be construed to include the extension term(s) thus elected by Tenant. Except as expressly set forth in this Section 2.6, Tenant shall have no right to extend the term of this Lease beyond its prescribed term.

3. RENTAL

3.1 Minimum Rental.

(a) Tenant shall pay to Landlord as minimum rental for the Building, in advance, without deduction, offset, notice or demand, on or before the Commencement Date and on or before the first day of each subsequent calendar month of the term of this Lease, the following amounts per month:

Months	Monthly Minimum Rental
1 - 12	$ 68,370 ($2.47 per square foot)
13 - 24	70,030 ($2.53 per square foot)
25 - 36	71,691 ($2.59 per square foot)
37 - 48	73,352 ($2.65 per square foot)
49 - 60	75,013 ($2.71 per square foot)
61 - 72	76,950 ($2.78 per square foot)
73 - 84	78,888 ($2.85 per square foot)
85 - 96	70,584 ($2.55 per square foot)
97 - 108	72,798 ($2.63 per square foot)
109 - 120	74,736 ($2.70 per square foot)
121 - 132	66,986 ($2.42 pet square foot)
133 - 144	69,200 ($2.50 per square foot)
145 - 156	71,691 ($2.59 per square foot)
157 - 168	74,182 ($2.68 per square foot)
169 - 180	67,816 ($2.45 per square foot)

If the obligation to pay minimum rental hereunder commences on other than the first day of a calendar month or if the term of this Lease terminates on other than the last day of a calendar month, the minimum rental for such first or last month of the term of this Lease, as the case may be, shall be prorated based on the number of days the term of this Lease is in effect during such month. If an increase in minimum rental becomes effective on a day other than the first day of a calendar month, the minimum rental for that month shall be the sum of the two applicable rates, each prorated for the portion of the month during which such rate is in effect.

(b) The minimum rental amounts specified in this Section 3.1 are based upon an estimated area of 27,680 square feet for the Premises. If

the actual area of the Premises, when completed, differs from such estimated area (because of Tenant's election to take some or all of the Option Space or for any other reason), then the minimum rentals specified in Section 3.1(a) shall be adjusted for each rental period in strict proportion to the ratio between the actual area of the Premises during the applicable period (which area shall be determined on the basis of measurement from the centerline of interior demising walls (if any), from the exterior faces of the exterior walls of the Building and, in the case of overhangs, from the dripline thereof, but excluding the exterior recessed areas of the second floor) and the assumed area of 27,680 square feet. Measurements of building area under this paragraph shall be made initially by Landlord's architect, subject to review and approval by Tenant's architect.

(c) If Tenant properly exercises its right to extend the term of this Lease pursuant to Section 2.6 hereof, the minimum rental during the first extended term shall be equal to eighty-five percent (85%) of the fair market rental value of the Premises in their then existing condition and state of improvements (including all laboratory improvements, fixtures, equipment and other installations that are affixed to and are part of the Building, but specifically excluding from consideration any such improvements, fixtures and equipment which Tenant is entitled to remove from the Premises, "under the provisions of this Lease, upon expiration of this Lease),

including any cost-of-living adjustments or other rental increase provisions then customary in the market for comparable office and research and development space in South San Francisco, determined as of the commencement of such extended term in accordance with this paragraph. Upon Landlord's receipt of a proper notice of Tenant's exercise of its option to extend the term of this Lease, the parties shall have sixty (60) days in which to agree on the fair market rental (including any applicable rental increase provisions) for the Premises at the commencement of the first extended term for the uses permitted hereunder. If the parties agree on such fair market rental and rental increase provisions (if any), they shall execute an amendment to this Lease stating the amount of the applicable minimum monthly rental and any applicable rental increase provisions. If the parties are unable to agree on such rental (including any applicable rental increase provisions) within such sixty (60) day period, then within fifteen (15) days after the expiration of such period each party, at its cost and by giving notice to the other party, shall appoint a real estate appraiser with at least five (5) years experience appraising similar commercial properties in northeastern San Mateo County to appraise and set the fair market rental and any applicable rental increase provisions for the Premises at the commencement of the first extended term. If either party fails to appoint an appraiser within the allotted time, the single appraiser appointed by the other party shall be the sole appraiser. If an appraiser is appointed by each party and the two appraisers so appointed are unable to agree upon a fair market rental (and any appropriate rental increase provisions) within thirty (30) days after the appointment of the second, they shall appoint a third qualified appraiser within ten (10) days after expiration of such 30-day period; if they are unable to agree upon a third appraiser, either party may, upon not less than five (5) days notice to the other party, apply to the Presiding Judge of the San Mateo County Superior Court for the appointment of a third qualified appraiser. Each party shall bear its own legal fees in connection with appointment of the third appraiser and shall bear one-half of any other costs of appointment of the third appraiser and of such third appraiser's fee. The third appraiser, however selected, shall be a person who has not previously acted for either party in any capacity. Within thirty (30) days after the appointment of the third appraiser, a majority of the three appraisers shall set the fair market rental and any applicable rental increase provisions for the first extended term and shall so notify the parties. If a majority are unable to agree within the allotted time, (i) the three appraised fair market rentals shall be added together and divided by three and the resulting quotient shall be the fair market rental for the first extended term, and (ii) the applicable rental increase provision shall be equal to the mathematical average (or the nearest reasonable approximation thereto) of the two rental increase provisions that are most closely comparable, which determinations shall be binding on the parties and shall be enforceable in

any further proceedings relating to this Lease. For purposes of this Section 3.1(c), the "fair market rental" of the Premises shall be determined with reference to the then prevailing market rental rates for properties in South San Francisco with shell, office, laboratory and research and development improvements and site (common area) improvements comparable to those then existing in the Premises and on the Property; provided, however, that no equipment or laboratory improvements to the Premises constructed or installed by Tenant at its own expense and which Tenant has a right to remove upon expiration of this Lease shall be taken into account in determining such fait market rental, but all other improvements to the Premises and Property (including, but not limited to, the Improvements constructed by Landlord pursuant to Section 5.1 and Exhibit C and any and all other laboratory improvements, fixtures, equipment and other installations that are affixed to and are part of the Building and are not removable by Tenant upon expiration of this Lease) shall be taken into account in such determination.

(d) If Tenant properly exercises its right to a second extended term of this Lease pursuant to Section 2.6 hereof, the minimum rental during such second extended term shall be determined in the same manner provided in the preceding paragraph for the first extended term, except that the determination shall be made as of the commencement of the second extended term.

3.2 Late Charge. If Tenant fails to pay when due rental or other amounts due Landlord hereunder, such unpaid amounts shall bear interest for the benefit of Landlord at a rate equal to the lesser often percent (10%) per annum or the maximum rate permitted by law, from the date due to the date of payment. In addition to such interest, Tenant shall pay to Landlord a late charge in an amount equal to five percent (5%) of any installment of minimum rental and any other amounts due Landlord if not paid in full on or before the fifth (5th) day after written notice from Landlord to Tenant that such rental or other amount is past due; provided, however, that if at any time a payment of rent or other amounts is more than five (5) days late and Landlord gives written notice of delinquency to Tenant prior to Tenant's actual delivery of such

payment, then for the next twelve (12) calendar months after such written notice was given, Tenant shall be liable for late charges on any further payment of rent or other amounts that is not paid on or before the fifth (5th) day after such rent or other amount is due, without any requirement of prior notice from Landlord to Tenant of such default or delinquency. Tenant acknowledges that late payment by Tenant to Landlord of rental or other amounts due hereunder will cause Landlord to incur costs not contemplated by this Lease, including, without limitation, processing and accounting charges and late charges which may be imposed on Landlord by the terms of any loan relating to the Property. Tenant further acknowledges that it is extremely difficult and impractical to fix the exact amount of such costs and that the late charge set forth in this Section 3.2 represents a fair and reasonable estimate thereof. Acceptance of any late charge by Landlord shall not constitute a waiver of Tenant's default with respect to overdue rental or other amounts, nor shall such acceptance prevent Landlord from exercising any other rights and remedies available to it. Acceptance of rent or other payments by Landlord shall not constitute a waiver of late charges or interest accrued with respect to such rent or other payments or any prior installments thereof, nor of any other defaults by Tenant, whether monetary or non-monetary in nature, remaining uncured at the time of such acceptance of rent or other payments.

4. STOCK WARRANTS

4.1 Stock Warrants.

(a) Within thirty (30) days after the execution of this Lease and as a condition to Landlord's obligations hereunder, Tenant shall deliver to Landlord or Landlord's nominees (which may be any partners, shareholders or affiliates of Landlord or any affiliates of any such partners, shareholders or affiliates of Landlord) warrants registered in the name of Landlord or Landlord's nominees for the acquisition of an aggregate of one

hundred thousand (100,000) shares of Tenant's preferred stock or other comparable membership interests (however denominated), which warrants shall be in form and substance satisfactory to Landlord. The warrants shall have an exercise price which is two dollars ($2.00) per share higher than the price at which common shares of Xenova group plc are trading on the date of issuance of the warrants, shall be exercisable from the date of issuance until five (5) years thereafter, and shall be accompanied by reasonable and customary registration rights or other comparable liquidity benefits in favor of the warrantholders.

(b) The warrants for 100,000 shares described in Section 4.1 (a) are to be issued in connection with Tenant's leasing of the second floor of the Building. Once the area of the additional space to be taken by Tenant on the first floor of the Building has been determined, and thereafter if Tenant exercises its option under Section 1.1(c) to expand the Premises to include all or any portion of the Option Space, then within thirty (30) days after the size of each such additional first floor portion of the Premises is determined, as a condition to Landlord's obligations hereunder, Tenant shall deliver to Landlord or Landlord's nominees (which may be any partners, shareholders or affiliates of Landlord or any affiliates of any such partners, shareholders or affiliates of Landlord) additional warrants registered in the name of Landlord or Landlord's nominees for the acquisition of an aggregate number of additional shares of Tenant's preferred stock or other comparable membership interests (however denominated) which bears the same ratio to 100,000 shares as the square footage of the first floor space taken by Tenant bears to the area of the second floor of the Building as measured under Section 3.1(b). Such warrants shall be in the same form and shall have the same terms, exercise price and registration rights as the warrants issued initially pursuant to Section 4.1(a).

5. CONSTRUCTION

5.1 Construction of Improvements. Landlord shall, at Landlord's cost and expense (except as otherwise provided herein and in Exhibit C), construct the Improvements in accordance with the terms and conditions of Exhibit C attached hereto and incorporated herein by this reference and in accordance with the plans and specifications attached thereto or listed or described therein, subject to any changes implemented in such plans and specifications in accordance with the procedures set forth in said Exhibit C. Landlord and Tenant shall both use their respective best reasonable efforts to perform in a timely manner their respective obligations

under, and to facilitate the completion of construction of the Improvements in accordance with, the estimated construction schedule attached hereto as Exhibit D, as the same may be modified or revised from time to time by mutual agreement of Landlord and Tenant, subject to the effects of any delays caused by or attributable to the other party or any other circumstances beyond the performing party's reasonable control (excluding any financial inability), and subject to the provisions of Section 2.3 above.

5.2 Condition of Property. Landlord shall deliver the Premises to Tenant clean and free of debris on the Commencement Date, and Landlord warrants to Tenant that (i) the Improvements shall be free from material structural defects, (ii) the roof and the electrical, mechanical, plumbing, lighting and HVAC systems and the loading doors, if any, on or in the Premises shall be in good operating condition on the Commencement Date, and (iii) the Improvements shall be constructed in compliance in all material respects with the plans and specifications attached to or listed or described in Exhibit C, subject to any changes implemented in such plus and specifications in accordance with the procedures set forth in Exhibit C. If it is determined that this warranty has been violated in any respect, then it shall be the obligation of Landlord, after receipt of written notice from Tenant setting forth with specificity the nature of the violation, to promptly, at Landlord's sole cost, correct the condition(s) constituting such violation. Tenant's failure to give such written notice to Landlord within one (1) year after the Commencement Date shall give rise to a conclusive presumption that Landlord has complied with all Landlord's

obligations hereunder, except with respect to latent defects. TENANT ACKNOWLEDGES THAT THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE PHYSICAL CONDITION OF THE IMPROVEMENTS TO BE CONSTRUCTED BY LANDLORD AND THAT LANDLORD MAKES NO OTHER WARRANTIES EXCEPT AS EXPRESSLY SET FORTH IN THIS LEASE.

5.3 Compliance with Law. Landlord warrants to Tenant that the Improvements (when constructed), as they exist on the Commencement Date, but without regard to the use for which Tenant will occupy the Premises, shall not violate any covenants or restrictions of record or any applicable building code, regulation or ordinance in effect on the Commencement Date, including (but not limited to) the Americans with Disabilities Act. If it is determined that this warranty has been violated, then it shall be the obligation of Landlord, after written notice from Tenant, to correct the condition(s) constituting such violation promptly, at Landlord's sole cost and expense. Tenant acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty as to the present or future suitability of the Premises for the conduct of Tenant's business or proposed business thereon.

6. TAXES

6.1 Personal Property. Tenant shall be responsible for and shall pay prior to delinquency all taxes and assessments levied against or by reason of (a) any and all alterations, additions and items installed or placed on the Premises and taxed as personal property rather than as real property, and/or (b) all personal property, trade fixtures and other property placed by Tenant on or about the Property. Upon request by Landlord, Tenant shall furnish Landlord with satisfactory evidence of Tenant's payment thereof. If at any time during the term of this Lease any of said alterations, additions or personal property, whether or not belonging to Tenant, shall be taxed or assessed as part of the Property, then Landlord shall make a reasonable allocation of the larger statement between personal property described in the first sentence of this Section 6.1 and other personal property covered by the applicable statement and the portion of such tax or assessment reasonably allocable to personal property described in the first sentence of this Section 6.1 shall be paid by Tenant to Landlord within ten (10) days following presentation by Landlord of copies of the lax bills in which such taxes and assessments are included (together with a description of the basis for Landlord's allocation of such taxes and assessments) and shall for the purposes of this Lease, be deemed to be personal property taxes or assessments under this Section 6.1.

6.2 Real Property. It is the intention and expectation of the parties that real property taxes and assessments on the Premises, the Building and the Property will be assessed to Landlord on an aggregate basis. To the extent the real property taxes and assessments on the Premises are assessed separately from the remainder of the Property. Tenant shall be responsible for and shall

pay prior lo delinquency all such taxes and assessments levied against the Premises. To the extent any real property taxes and assessments on the Property (including, but not limited to, the Improvements) are assessed directly to Tenant, Tenant shall be responsible for and shall pay prior to delinquency all such taxes and assessments levied against the Property. Upon request by Landlord, Tenant shall furnish Landlord with satisfactory evidence of Tenant's timely payment of any taxes and assessments that are Tenant's responsibility under the preceding two sentences. In the event any such taxes and assessments on the Premises or Property are paid directly by Tenant pursuant to this Section 6.2, an appropriate adjustment shall be made in the determination of Operating Expenses to ensure that Tenant does not bear, in the aggregate, a disproportionate share of the overall real property taxes and assessments on the Center. To the extent the Property and/or Improvements are taxed or assessed to Landlord following the Commencement Date, such real property taxes and assessments shall constitute Operating Expenses (as that term is defined in Section 7.2 of this Lease) and shall be paid in accordance with the provisions of Article 7 of this Lease.

6.3 Challenges. Tenant at its cost may seek a reduction in the assessed value of the Building, provided that (a) Landlord shall not be required to join in any proceeding or contest brought by Tenant unless the provisions of the applicable laws require that the proceeding contesting the assessed value of the Building be brought in Landlord's name, in which event Landlord shall join in the proceeding but shall not be required to bear any costs in connection with such proceeding, and (b) Tenant shall hold Landlord and the Property harmless from and against any liens, penalties and other adverse consequences arising out of or in connection with the pendency of such proceeding.

7. OPERATING EXPENSES

7.1 Payment Of Operating Expenses.

(a) Tenant shall pay to Landlord, at the time and in the manner hereinafter set forth, as additional rental, an amount equal to twelve and thirty-four hundredths percent (12.34%) ("Tenant's Operating Cost Share") of the Operating Expenses defined in Section 7.2. Notwithstanding any other provisions of this Section 7.1, however, Tenant's Operating Cost Share of the costs of repairing and maintaining the non-structural portions of the roof of the Building during any period when the Premises constitute less than the entire Building (as contemplated in Section 10.1 (a) hereof) shall be equal to the ratio, expressed as a percentage amount, between the area of the Premises as they exist from time to time and the area of the Building, each measured in accordance with Section 3.1(b) hereof.

(b) Tenant's Operating Cost Share as specified in paragraph (a) of this Section (other than for costs of repair and maintenance of non-structural portions of the roof, to the extent a separate Tenant's Operating Cost Share is specified for such costs under paragraph (a) of this Section) is based upon an estimated area of 27,680 square feet for the Premises and upon an aggregate area of 224253 square feet for the buildings owned by Landlord on the Property (Buildings D, E, F, G and H). If the actual area of the Premises (when completed) or of the buildings owned from time to time by Landlord on the Property, as determined in good faith by Landlord's architect on a basis consistent with that used in measuring other leased premises within the Center, differs from the assumed numbers set forth above, then Tenant's Operating Cost Share shall be adjusted to reflect the actual areas so determined.

(c) If Landlord constructs additional buildings on the Property or on any other adjacent property owned by Landlord and operated, for common area purposes, on an integrated basis with the Property from time to time, Tenant's Operating Cost Share shall, at Landlord's election, be adjusted to be equal to the percentage determined by dividing the gross square footage of the Premises as they then exist by the gross square footage of all buildings located on the Property (or on any applicable adjacent property owned by Landlord as described above). In determining said percentage, a building shall be taken into account from and after the date on which a tenant first enters into possession of the building or a portion thereof, and the good faith determination of the gross square footage of any such building by Landlord's architects shall be final and binding upon the parties.

7.2 Definition Of Operating Expenses.

(a) Subject to the exclusions and provisions hereinafter contained, the term "Operating Expenses" shall mean the total costs and expenses incurred by or allocable to Landlord for management, operation and maintenance of the Improvements and the Property, including, without limitation, costs and expenses of (i) insurance, property management, landscaping and operations, repairs and maintenance of buildings and Common Areas, including, without limitation, the repair and maintenance of the non-structural portions of the roof of the Building during any period when the Premises constitute less than the entire Building (but excluding costs of repair and maintenance of non-structural portions of the roofs of other buildings in the Center); (ii) all

utilities and services; (iii) real and personal property taxes and assessments or substitutes therefor levied or assessed against the Property or any part thereof, including (but not limited to) any possessory interest, use, business, license of other taxes or fees, any taxes imposed directly on rents or services, any assessments or charges for police or fire protection, housing, transit, open space, street or sidewalk construction or maintenance or other similar services from time to time by any governmental or quasi-governmental entity, and any other new taxes on landlords in addition to taxes now in effect; (iv) supplies, equipment, utilities, and tools used exclusively in management, operation and maintenance of the Property; (v) capital improvements to the Property or the Improvements, amortized over a reasonable period, (aa) which reduce or will cause future reduction of other items of Operating Expenses for which Tenant is otherwise required to contribute or (bb) which are required by law, ordinance, regulation or order of any governmental authority or (cc) of which Tenant has use or which benefit Tenant; and (vi) any other costs (including, but not limited to, any parking or utilities fees or surcharges) allocable to or paid by Landlord, as owner of the Property or Improvements, pursuant to any applicable laws, ordinances, regulations or orders of any governmental or quasi-governmental authority or pursuant to the terms of any declarations of covenants, conditions and restrictions now or hereafter affecting the Property or over which Tenant has non-exclusive usage rights as contemplated in Section 1.1 (b) hereof. Operating Expenses shall not include any costs attributable to the work for which Landlord is required to pay under Article 5 or Exhibit C; nor any costs attributable to increasing the size of or otherwise expanding the Building or the cost of constructing any additional buildings on the Property from time to time. The distinction between items of ordinary operating maintenance and repair and items of a capital nature shall be made in accordance with generally accepted accounting principles applied on a consistent basis, or in accordance with tax accounting principles, as determined in good faith by Landlord's accountants.

(b) Landlord agrees that since one of the purposes of Operating Expenses is to allow Landlord to require Tenant to pay for the costs attributable to the Common Areas, (i) Landlord will not collect or be entitled to collect Operating Expenses from all of its tenants in an amount which is in excess of 100% of the Operating Expenses actually paid by Landlord in connection with the operation of the Building and (ii) Landlord shall make no profit from Landlord's collections of Operating Expenses, including utilities provided to the Premises, if any. All assessments which are not specifically charged to Tenant which can be paid by Landlord in installments, shall be paid by Landlord in the maximum number of installments permitted by law and shall not be included as Operating Expenses except in the year in which the assessment or premium installment is actually paid.

(c) Each time Landlord provides Tenant with an actual and/or estimated statement of Operating Expenses, such statement shall be itemized on a line-item basis showing the expenses for the applicable year and the immediately preceding year.

(d) Notwithstanding anything to the contrary in the definition of "Operating Expenses" in Section 7.2(a), Operating Expenses shall not include any of the following:

(i) any ground lease rentals;

(ii) expenditures required by Landlord's failure to comply with laws enacted on or before the date any Building's certificate of occupancy (or equivalent) is validly issued;

(iii) costs incurred by Landlord for the repair of damage to, or maintenance of any building or other improvement to the extent that Landlord is entitled to be

reimbursed by insurance proceeds, nor the costs of maintaining and repairing the structural components of any building (or other improvement) consisting of

beams, columns, foundations, footings, structural slabs and structural parts of the roof, except as to my structural changes made or components installed specifically for Tenant;

(iv) costs, including permit license and inspection costs, incurred with respect to the installation of tenant improvements for any tenant or occupant in the Center or incurred in renovating or otherwise improving, decorating, painting or redecorating vacant space for any tenant or occupant in the Center;

(v) depreciation, amortization and interest payments with respect to any building or other improvement or Common Area or any equipment or machinery, except as provided herein and except on materials, tools, supplies and vendor-type equipment purchased by Landlord to enable Landlord to supply services Landlord might otherwise contract for with a third party, all as determined in accordance with generally accepted accounting principles, consistently applied, and when depreciation or amortization is permitted or required, the item shall be amortized over its reasonably anticipated useful life;

(vi) marketing costs, including leasing commissions and attorneys fees and other costs and expenses incurred in connection with negotiation and preparation of letters, deal memos, assignments, space planning costs and other costs and expenses incurred in connection with lease, sublease and/or assignment negotiations and transactions with present or prospective tenants or other occupants of the Center;

(vii) costs incurred by Landlord for alterations which are considered capital repairs, improvements, replacements and equipment under generally accepted accounting principles, consistently applied, or otherwise ("Capital Items"); except for (x) those Capital Items acquired to reduce Operating Expenses, amortized at an annual rate reasonably calculated to equal the amount of Operating Expenses saved in each calendar year throughout the Term as determined at the time Landlord elected to proceed with the capital improvement or acquisition of the capital equipment lo reduce Operating Expenses, together with interest at the actual interest rate incurred by Landlord, and (y) costs of capital tools to the extent the amortized or allocable portion of such costs included in Operating Expenses is not in excess of Ten Thousand Dollars ($10.000.00) in any twelve (12) month period;

(viii) interest, principal points and fees on debts or amortization on any mortgage or mortgages or any other debt instrument encumbering all or any portion of the Property;

(ix) advertising and promotional expenditures, and-costs of signs in or about the Center identifying the owner of the Center or any tenant thereof;

(x) tax penalties incurred as a result of Landlord's inability to make tax payments when due except as a result of Tenant's failure to pay the same when due, and costs, expenses and penalties incurred by Landlord as a result of Landlord's violation of any laws, rules or regulations, including, without limitation, those governing the use, storage, removal or cleanup of any toxic or hazardous materials;

(xi) costs incurred by Landlord for the repair of damage to any improvements in the Building resulting from the negligence or willful misconduct of Landlord or its agents, employees, invites or contractors, other than costs of routine maintenance and repair and costs to repair ordinary wear and tear;

(xii) costs incurred by Landlord in connection with negotiating the financing, mortgaging, hypothecating, syndicating, sale or acquisition of all or any portion of the Center;

(xiii) costs, except for costs of routine maintenance and repair and costs to repair ordinary wear and tear, incurred in furnishing items or services exclusively to Tenant or any other specific tenant,

or in repairing damage to the Building caused by Tenant or any other tenant or its or their agents, employees, invitees or contractors, to the extent Landlord is entitled 10 reimbursement therefor;

(xiv) to the extent the managing agent of the Center is an affiliate of Landlord, that portion of any management fees paid to such affiliate that exceeds the management fees customarily charged for the management of comparable building located in the geographical area where the center is located;

(xv) the cost of repair or replacement of any item covered by a warranty in favour of Landlord, to the extent the benefit of such warranty is received by Landlord;

(xvi) cost incurred by Landlord in correcting latent or patent defects in the improvements in the building;

(xvii) attorney' fees and other costs and expenses incurred due to the violation by Landlord or any tenant of any lease of premises in the Center or under any ground lease;

(xviii) costs of remediation of hazardous substances, materials or wastes introduced, used, stored or disposed of by Landlord or any tenant other than Tenant in, on or about the Center; and costs of remediation of hazardous substances, materials or wastes introduced, used stored or disposed of by unknown persons or persons other than Landlord, Tenant or any tenant other than Tenant in, on or about the Center;

(xix) Landlord's general and administrative overhead expenses, to the extent not properly allocate to the Center;

(xx) the cost of any development fees and any one-time utility connection or "tap-in" fees for the Building;

(xxi) electric power costs which any tenant directly contracts with the local public utility company;

(xxii) costs incurred in connection with upgrading the Building to comply with handicap, life, fire and safety codes in effect prior to or subsequent to the commencement Date and costs incurred in connection with the Americans With Disabilities Act and all other laws, codes, ordinances and regulations;

(xxiii) any other expenses which, in accordance with generally accepted consistently applied, would not normally be treated as operating expenses by landlords of comparable buildings;

(xxiv) costs arising from Landlord's charitable or political contributions;

(xxv) costs for sculpture, paintings or other objects of art; and

(xxvi) costs (including in connection therewith all attorneys' fees and costs of settlement, judgments and payments in lieu thereof) arising from claims, disputes or potential disputes in connection with potential or actual claims, litigation or arbitrations with Tenant or other tenants pertaining to Landlord and/or the Center, except to the extent Landlord in such proceedings is asserting or defending rights or interests of general benefit to the tenants and occupants of the Center as a group or class.

7.3 Determination Of Operating Expenses. On or before the Commencement Date and during the last month of each calendar year of the term of this Lease ("Lease Year"), or as soon thereafter as practical, Landlord shall, provide Tenant notice of Landlord's estimate of the Operating Expenses

for the ensuing Lease Year or applicable portion thereof. On or before the first day of each month during the ensuing Lease Year or applicable portion thereof, beginning on the Commencement Date. Tenant shall pay to Landlord Tenant's Operating Cost Share of the portion of such estimated Operating Expenses allocable (on a prorata basis) to such month; provided, however, that if such notice is not given in the last month; of a Lease Year. Tenant shall continue to pay on the basis of the prior year's estimate, if any, until the month after such notice is given. If at any time or times it appears to Landlord that the actual Operating Expenses will vary from Landlord's estimate by more than five, percent (5%). Landlord may, by notice to

Tenant, revise its estimate for such year and subsequent payments by Tenant for such year shall be based upon such revised estimate.

7.4 Final Accounting For Lease Year.

(a) Within ninety (90) days after the close of each Lease Year, or as soon after such 90-day period as practicable. Landlord shall deliver to Tenant a statement of Tenant's Operating Cost Share of the Operating Expenses for such Lease Year prepared by Landlord from Landlord's books and records, which statement shall be final and binding on Landlord and Tenant (except as provided in Section 7.4(b)). If on the basis of such statement Tenant owes an amount that is more or less than the estimated payments for such Lease Year previously made by Tenant, Tenant or Landlord, as the case may be, shall pay the deficiency to the other party within thirty (30) days after delivery of the statement. Failure or inability of Landlord to deliver the annual statement within such ninety (90) day period shall not impair or constitute a waiver of Tenant's obligation to pay Operating Expenses, or cause Landlord to incur any liability for damages.

(b) Within six (6) months after receipt of Landlord's annual statement of actual Operating Expenses as contemplated in Section 7.4(a), Tenant shall be entitled, upon reasonable written notice to Landlord and during normal business hours at Landlord's office or such other places as Landlord shall designate, to inspect and examine those books and records of Landlord relating to the determination of Operating Expenses for the immediately preceding Lease Year covered by such annual statement. If, after inspection and examination of such books and records. Tenant disputes the amount of Operating Expenses charged by Landlord and the parties are not able to resolve such dispute by good faith negotiations within thirty (30) days after Tenant notifies Landlord in writing of the disputed items (which notice shall be in reasonable detail and be accompanied by reasonable supporting information with respect to the disputed items), then Tenant may, by written notice to Landlord, request an independent audit of such books and records. The independent audit of the books and records shall be conducted by a certified public accountant acceptable to both Landlord and Tenant or, if the parties are unable to agree, by a "Big Six" accounting firm designated by Landlord and not then employed by Landlord or Tenant. The audit shall be limited to the determination of the amount of Operating Expenses and of Tenant's share thereof for the subject Lease Year, and shall 'be based on generally accepted accounting principles and tax accounting principles consistently applied. If it is determined, by mutual agreement of Landlord and Tenant or by independent audit, that the amount paid by Tenant for Operating Expenses for the subject Lease Year was incorrect, then the appropriate party shall pay to the other party the deficiency or overpayment, as applicable, within thirty (30) days after die final determination of such deficiency or overpayment. All costs and expenses of the audit shall be paid by Tenant unless the audit shows that Landlord overstated Operating Expenses for the subject Lease Year by more than five percent (5%), in which case Landlord shall pay all costs and expenses of the audit Each party agrees to maintain the confidentiality of the findings of any audit in accordance with the provisions of this Section 7.4.

7.5 Proration. If the Commencement Date falls on a day other than the first day of a Lease Year or if this Lease terminates on a day other than the last day of a Lease Year, the amount of Operating Expenses payable by Tenant

with respect to such first or last partial Lease Year shall be prorated on the basis which the number of days during such Lease Year in which this Lease is in effect bears to 365. The termination of this Lease shall not affect the obligations of Landlord and Tenant pursuant to Section 7.4 to be performed after such termination.

8. UTILITIES

8.1 Payment. Commencing with the Commencement Date and thereafter throughout the term of this Lease. Tenant shall pay, before delinquency, all charges for water, gas, beat, light, electricity, power, sewer, telephone, alarm system, janitorial and other services or utilities supplied to or consumed in or upon the Property (other than any separately metered costs for water, electricity or other services or utilities furnished with respect to the Common Areas, which costs shall be paid by Landlord and shall constitute Operating Expenses under Section 7.2 hereof), including any taxes on such services and utilities. It is the intention of the parties that all such services shall be separately metered to the Premises. In the event that any of such services supplied to the Premises are not separately metered, then the amount thereof shall be an item of Operating Expenses and shall be paid as provided in Article 7.

8.2 Interruption. There shall be no abatement of rent or other charges required to be paid here under and Landlord shall not be liable in damages or otherwise for interruption or failure of any service or utility furnished to or used in the Premises because of accident, making of repairs, alterations or improvements, severe weather, difficulty or inability in obtaining servies or supplies, labor difficulties or any other cause. Notwithstanding the foregoing provisions of this Section 8.2, however, in the event of any interruption or failure of any service or utility to the Premises that (i) is caused in whole or in material part by the active negligence or willful misconduct of Landlord or its agents or employees and (ii) continues for more than twenty-four (24) hours and (iii) materially impairs Tenant's ability to use the Premises for their intended purposes hereunder, then, following such twenty-four (24) hour period. Tenant's rental obligations under this Lease shall be abated in proportion to the degree of impairment of Tenant's use of the Premises, and such abatement shall continue until Tenant's use of the Premises is no longer materially impaired thereby.

9. ALTERATIONS; SIGNS

9.1 Right To Make Alterations. Tenant shall make no alterations, additions or improvements to the Premises, other than interior non-structural alterations costing less than One Hundred Thousand Dollars ($100,000.00) individually or in the aggregate during any twelve (12) month period, without the prior written consent of Landlord, which consent shall not be unreasonably withheld. All such alterations, additions and improvements shall be completed with due diligence in a first-class workmanlike manner, in compliance with plans and specifications approved in writing by Landlord and in compliance with all applicable laws, ordinances, rules to maintain public liability and property damage insurance, and other customary insurance, with such terms and in such amounts as Landlord may reasonably require, naming as additional insureds Landlord and any of its partners, shareholders and property managers designated by Landlord for this purpose, and shall furnish Landlord with certificates of insurance or other evidence that such coverage is in effect. In addition, Tenant shall engage only union contractors for any alterations, additions or improvements to the Premises (including, but not limited to, any construction or installation of furnishings, fixtures or equipment), and shall require all such contractors engaged by Tenant to use only union labor on or in connection with such work. Notwithstanding any other provisions of this Section 9.1, under no circumstances shall Tenant make any structural alterations or improvements, or any substantial changes ot the roof or substantial equipment installations on the roof, or any substantial changes or alterations to the building systems, without Landlord's prior written consent (which consent shall not be unreasonably withheld). If Tenant so requests in seeking Landlord's consent to

any alterations, additions or improvements, Landlord shall specify in granting such consent whether Landlord intends to require that Tenant remove such alterations, additions or improvements (or any specified portions thereof) upon expiration or termination of this Lease. Landlord shall receive no fee for supervision, profit, overhead or general conditions in connection with any alterations, additions or improvements constructed or installed by Tenant under this Lease.

9.2 Title To Alterations. All alterations, additions and improvements installed in, on or about the Premises shall become part of the Building and shall become the property of Landlord, unless Landlord elects to require Tenant to remove the same upon the termination or expiration of this Lease; provided, however, that the foregoing shall not apply (i) to Tenant's movable furniture and equipment and trade fixtures not affixed to the Property, or (ii) to any improvements installed by Tenant at its own expense (and not installed by Landlord persuant to Section 5.1 or Exhibit C nor financed by Landlord persuant to any applicable provision of this Lease) which are readily movable, are not integral part of the Building's structure or interior architectural improvements, and are not an integral part of the Building's HVAC, plumbing or electrical systems or other standard operating systems. All of such items described in clause (i) or (ii) of the preceding sentence may (and, at Landlord's election, shall) be removed by Tenant upon the termination of this Lease. Tenant shall promptly repair any damage caused by its removal of any such improvements. Notwithstanding any other provisions of this Section 9.2 if Tenant requests Landlord's written consent to any alterations, additions or improvements under Section 9.1 hereof and in requesting such consent asks that Landlord specify whether Landlord will require removal of such alterations, additions or improvements upon such termination or expiration of this Lease, then Landlord shall not be entitled to require such removal unless Landlord specified its intention to do so at the time of granting of Landlord's consent to the requested

alterations, additions or improvements. In addition, if Tenant so requests, Landlord agrees to enter into a letter agreement listing, by mutual agreement of Landlord and Tenant under the standards set forth in this Section 9.2, specific alterations, additions and improvements that will or will not be removable by Tenant at the expiration of the term of this Lease.

9.3 Tenant Fixtures. Notwithstanding the provisions of Sections 9.1 and 9.2, Tenant may install, remove and reinstall trade fixtures without Landlord's prior written consent, except that installation and removal of any fixtures which are affixed to the Premises or which affect the exterior or structural portions of the Building or the building systems shall require Landlord's written approval. The foregoing shall apply to Tenant's signs, logos and insignia, all of which Tenant shall have the right to place and remove and replace (a) only with Landlord's prior written consent as to location, size and composition, which consent shall not be unreasonably withheld, and (b) only in compliance with all restrictions and requirements of applicable law and of any covenants, conditions and restrictions or other written agreements now or hereafter' applicable to the Property. Tenant shall immediately repair any damage caused by installation and removal of fixtures under this Section 9.3.

9.4 No Liens. Tenant shall at all times keep the Premises free from all liens and claims of any contractors, subcontractors, materialmen, suppliers or any other parties employed either directly or indirectly by Tenant in construction work on the Premises. Tenant may contest any claim of lien, but only if, prior to such contest, Tenant either (i) posts security in the amount of the claim, plus estimated costs and interest, or (ii) records a bond of a responsible corporate surety in such amount as may be required to release the lien from the Premises, tenant shall indemnify, defend and hold Landlord harmless against any and all liability, loss, damage, cost and other expenses, including, without limitation, reasonable attorneys' fees, arising out of claims of any lien for work performed or materials or supplies furnished at the request of Tenant or persons claiming under Tenant.

9.5 Signs. Without limiting the generality of the provisions of Section 9.3 hereof, Tenant shall have the right to display its corporate name and logo on the Building only if (and for so long as) the Premises include the entire Building. During any period in which the Premises include only a portion of the Building, Tenant shall be entitled to have monument signage near Tenant's entrance to the Building, subject to Landlord's prior approval as to location, size and composition (which approval shall not be unreasonably withheld) and subject to all restrictions and requirements of applicable law and of any covenants, conditions and restrictions or other written agreements now or hereafter applicable to the Property. Landlord is hereby deemed to have approved, as to location, any signage the location of which is expressly designated on the site plan attached hereto as Exhibit B or on any Approved Plan listed in or developed pursuant to Exhibit C attached hereto.

10. MAINTENANCE AND REPAIRS

10.1 Landlord's Work. Landlord shall repair and maintain or cause to be repaired and maintained the Common Areas of the Property, those portions of the Building outside of the Premises, and the roof (both structural and non-structural portions during any period when the Premises constitute less than the entire Building, and structural roof portions only during any period when the Premises do constitute the entire building), exterior walls and other structural portions of the Building. The cost of all work performed by Landlord under this Section 10.1 shall be an Operating Expense hereunder, except to the extent such work (i) is required due to the negligence of Landlord or any other tenant of the Building, (ii) is a service to a specific tenant or tenants, other than Tenant, for which Landlord has received or has a right to receive full reimbursement, (iii) is capital expense not includible as an Operating Expense under Section 7.2 hereof, or (iii) is required due to the negligence or willful misconduct of Tenant or its agents, employees or invitees (in which event Tenant shall bear the full cost of such work pursuant to the indemnification provided in Section 12.6 hereof). Tenant knowingly and voluntarily waives the right to make repairs at Landlord's expense, or to offset the cost thereof against rent under any law. statute, regulation or ordinance now or hereafter in effect.

10.2 Tenant's Obligation For Maintenance.

(a) Good Order, Condition And Repair. By accepting possession of the Premises. Tenant acknowledges that the Premises are in good and sanitary order, condition and repair, subject only to any "punch list" procedures and any express warranties set forth in Article 5 and/or Exhibit C hereof. Except as provided in Section 10.1 hereof, Tenant at its sole cost and expense shall keep and maintain in good and sanitary order, condition and repair the Premises and every part thereof, wherever located, including but not limited to the roof (non-structural portions only, and only during any period when the Premises constitute the entire Building), signs, interior, ceiling, telephone and communications systems serving the Premises, the HVAC equipment and related mechanical systems serving the Premises (for which equipment and systems Tenant shall enter into a service contract with a person or entity designated or approved by Landlord), all doors, door checks, windows, plate glass, door

fronts, exposed plumbing and sewage and other utility facilities, fixtures, lighting, wall surfaces, floor surfaces and ceiling surfaces and all other interior repairs, foreseen and unforeseen, as required.

(b) Landlord's Remedy. If Tenant, after notice from Landlord, fails to make or perform promptly any repairs or maintenance which are the obligation of Tenant hereunder. Landlord shall have the right, but shall not be required, to enter the Premises and make the repairs or perform the maintenance necessary to restore the Premises to good and sanitary order, condition and repair. Immediately on demand from Landlord, the cost of such repairs shall be due and payable by Tenant to Landlord.

(c) Condition Upon Surrender. At the expiration or sooner termination of this Lease. Tenant shall surrender the Premises, including any additions, alterations and improvements thereto, broom clean, in good and sanitary order, condition and repair, ordinary wear and tear excepted. First, however, removing all goods and effects of Tenant and all and fixtures and items required to be removed or specified to be removed at Landlord's election pursuant to this Lease, and repairing any damage caused by such removal. Tenant shall not have the right to remove fixtures or equipment if Tenant is in default hereunder unless Landlord specifically waives this provision in writing. Tenant expressly waives any and all interest in any personal property and trade fixtures not removed from the Premises by Tenant at the expiration or termination of this Lease, agrees that any such personal property and trade fixtures may, at Landlord's election, be deemed to have been abandoned by Tenant, and authorizes Landlord (at its election and without prejudice to any other remedies under this Lease or under applicable law) to remove and either retain, store or dispose of such property at Tenant's cost and expense, and Tenant waives all claims against Landlord for any damages resulting from any such removal, storage, retention or disposal.

11. USE OF PREMISES

11.1 Permitted Use. Subject to Sections 11.3 and 11.4 hereof, Tenant shall use the Premises solely for a laboratory research and development facility, including (but not limited to) wet chemistry and biology labs, clean rooms, pilot scale, clinical scale and GMP scale manufacturing, storage and use of toxic and radioactive materials and laboratory animals, and other lawful purposes reasonably related to or incidental to such specified uses (subject in each case to receipt of all necessary approvals from the City of South San Francisco and other governmental agencies having jurisdiction over the Premises), and for no other purpose.

11.2. [Omitted].

11.3 No Nuisance. Tenant shall not use the Premises for or carry on or permit upon the Premises or any part thereof any offensive, noisy or dangerous trade, business, manufacture, occupation, odor or fumes, or any nuisance or anything against public policy, nor interfere with the rights or business of any other tenants or of Landlord in the Building or the Property, nor commit or allow to be committed any waste in, on or about the Premises, nor make any other unreasonable use of the Premises. Tenant shall not do or permit anything to be done in or about the Premises, nor bring nor keep anything therein, which will in any way cause the Premises to be uninsurable with respect to the insurance required by this Lease or with respect to standard fire and extended coverage insurance with vandalism, malicious mischief and riot endorsements.

11.4 Compliance With Laws. Tenant shall not use the Premises or permit the Premises to be used in whole or in part for any purpose or use that is in violation of any applicable laws, ordinances, regulation or rules of any governmental agency or public authority. Tenant shall keep the Premises equipped with all safety appliances required by law, ordinance of insurance on the Premises, or any order or regulation of any public authority because of Tenant's particular use of the Premises. Tenant shall procure all licenses and permits

required for Tenant's use of the Premises. Tenant shall use the Premises in strict accordance with all applicable ordinances, rules, laws and regulations and shall comply with all requirements of all governmental authorities now in force or which may hereafter be in force pertaining to the use of the Premises by Tenant, including, without limitation, regulations applicable to noise, water, soil and air pollution, and making such non structural alterations and additions thereto as may be required from time to time by such laws, ordinances, rules, regulations and requirements of governmental authorities or insurers of the Premises (collectively, "Requirements") because of Tenant's construction of improvements in or other particular use of the Premises. Any structural alterations or additions required from time to time by applicable Requirements because of Tenant's construction of improvements in or other particular use of the Premises shall, at Landlord's election, either (i) be made by Tenant, at Tenant's sole cost" and expense, in accordance with the procedures and standards set forth in Section 9.1 for alterations by Tenant, or (ii) be made by Landlord at Tenant's sole cost and expense, in which event Tenant shall pay to Landlord as additional rent, within ten (10) days after demand by Landlord, an amount equal to all costs incurred by Landlord in connection with such alterations or additions. The judgment of any court, or the admission by Tenant in any proceeding against Tenant, that Tenant has violated any law, statute, ordinance or governmental rule, regulation or requirement shall be conclusive of such violation as between Landlord and Tenant.

11.5 Liquidation Sales. Tenant shall not conduct or permit to be conducted any auction, bankruptcy sale, liquidation sale, or going out of business sale, in upon or about the Premises or the Property, whether said auction or sale be voluntary, involuntary or pursuant to any assignment for the benefit of creditors, or pursuant to any bankruptcy or other insolvency proceeding.

11.6 Environmental Matters.

(a) For purposes of this Section, "hazardous substance" shall mean the substances included within the definitions of the term "hazardous substance" under (i) the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. Sections 9601 et seq., and the regulations promulgated thereunder, as amended, (ii) the California Carpenter-Presley-Tanner Hazardous Substance Account Act, California Health & Safety Code Sections 25300 et seq., and regulations promulgated thereunder, as amended, (iii) the Hazardous Materials Release Response Plans and Inventory Act, California-Heath & Safety Code Sections 25500 et seq., and regulations promulgated thereunder, as amended, and (iv) petroleum; "hazardous waste" shall mean (i) any waste listed as or meeting the identified characteristics of a "hazardous waste" under the Resource Conservation and Recovery Act of 1976, 42 U.S.C. Sections 6901 et seq. 8 and regulations promulgated pursuant thereto, as amended (collectively, "RCRA"), (ii) any waste meeting the identified characteristics of "hazardous waste," "extremely hazardous waste" or "restricted hazardous waste" under the California Hazardous Waste Control Law, California Health & Safety Code Sections 25100 et seq., and regulations promulgated pursuant thereto, as amended (collectively, the "CHWCL"), and/or (iii) any waste meeting the identified characteristics of "medical waste" under California Health & Safety Code Sections 25015-25027.8, and regulations promulgated thereunder, as amended; and "hazardous waste facility* shall mean a hazardous waste facility as defined under the CHWCL.

(b) Without limiting the generality of Tenant's obligations set forth in Section 11.4 of this Lease:

(i) Tenant shall not cause or permit any hazardous substance or hazardous waste to be brought upon, kept, stored or used in or about the Property without the prior written consent of Landlord, which consent shall not be unreasonably withheld, except that Tenant, in connection with its permitted use of the Premises, as provided in Section 11.1, may keep, store and use materials that constitute hazardous substances which are customary for such permitted use, provided such hazardous substances are kept, stored and used in quantities which

are customary for such permitted use and are kept, stored and used in full compliance with clauses (ii) and (iii) immediately below.

(ii) Tenant shall comply with all applicable laws, rules, regulations, orders, permits, licenses and operating plans of any governmental authority with-respect to the receipt, use, handling, generation, transportation, storage, treatment and/or disposal of hazardous substances or wastes by Tenant or its agents or employees, and Tenant shall provide Landlord, within thirty (30) days after written request by Landlord, with copies of all permits, licenses, registrations and other similar documents that authorize Tenant to conduct any such activities in connection with its authorized use of the Premises from time to time.

(iii) Tenant shall not (A) operate on or about the Property any facility required to be permitted or licensed as a hazardous waste facility or for which interim status as such is required, nor (B) store any hazardous wastes on or about the Property for ninety (90) days or more, nor (C) conduct any other activities on or about the Property that could result in the Property being deemed to be a "hazardous waste facility" (including, but not limited to, any storage or treatment of hazardous substances or hazardous wastes which could have such a result).

(iv) Tenant shall comply with all applicable laws, rules, Regulations, orders and permits relating to underground storage tanks installed by Tenant or its agents or employees or at the request of Tenant, (including any installation, monitoring, maintenance, closure and/or removal of such tanks) as such tanks are defined in California Health & Safety Code Section 252281 (x). including, without limitation, complying with California Health & Safety Code Sections 25280-25299,07 and the regulations promulgated thereunder, as amended. Tenant shall furnish to Landlord copies of all registrations and permits issued to or held by Tenant from time to time for any and all underground storage tanks.

(v) If applicable, Tenant shall provide Landlord in writing the following information and/or documentation within thirty (30) days after written request by Landlord from time to time (provided, however, that in the case of the materials described in subparagraphs (B), (C) and (E) below. Tenant shall not be required to deliver copies of such materials to Landlord but shall maintain copies of such materials to such extent and for such periods as may be required by applicable law and shall permit Landlord or its representatives to inspect and copy such materials during normal business hours at any time and from time to time upon reasonable notice to Tenant):

(A) A list of all hazardous substances and/or wastes that Tenant receives, uses, handles, generates, transports, stores, treats or disposes of from time to time in connection with its operations on the Premises.

(B) All Material Safety Data Sheets ("MSDS's"), if any required to be completed with respect to operations of Tenant at the Premises from time to time in accordance with Title 26, California Code of Regulations Section 8-5194 or 42 U.S.C. Section 11021, or any amendments thereto, and any Hazardous Materials Inventory Sheets that detail the MSDS's.

(C) All hazardous waste manifests (as defined in Title 26, California Code of Regulations Section 22-66481), If any, that Tenant is required to complete from time to time in connection with its operations it the Premises.

(D) A copy of any Hazardous Materials Management Plan required from time to time with respect to Tenant's operations at the Premises, pursuant to California Health & Safety Code Sections 25500 et seq, and any regulations promulgated thereunder as amended.

(E) Any Contingency Plans and Emergency Procedures required of Tenant from time to time due to its operations in

accordance with Title 26, California Code of Regulations Sections 22-67140 et seq., and any amendments thereto, and any Training Programs and Records required under Title 26, California Code of Regulations, Section 22-67105, and any amendments thereto.

(F) Copies of any biennial reports to be furnished to the California Department of Health Services from time to time relating to hazardous substances or

wastes, pursuant to Title 26, California Code of Regulations, Section 22-66493, and any amendments thereto.

(G) Copies of all industrial wastewater discharge permits issued to or held by Tenant from time to time in connection with its operations on the Premises,

(H) Copies of any other lists or inventories of hazardous substances and/or wastes on or about the Property that Tenant is otherwise required lo prepare and file from time to time with any governmental or regulatory authority.

(vi) Tenant shall secure Landlord's prior written approval for any proposed receipt, storage, possession, use, transfer or disposal of "radioactive materials" or "radiation," as such materials are defined in Title 26, California Code of Regulations Section 17-30100, and/or any other materials possessing the characteristics of the materials so defined, which approval Landlord may withhold in its sole and absolute discretion; provided, that such approval shall not be required for any radioactive materials for which Tenant has secured prior written approval of the Nuclear Regulatory Commission and delivered to Landlord a copy of such approval. Tenant, in connection with any such authorized receipt, storage, possession, use, transfer or disposal of radioactive materials or radiation, shall:

(A) Comply with all federal, state and local laws, rules, regulations, orders, licenses and permits issued to or applicable to Tenant with respect to its business operations on the Premises;

(B) Maintain, to such extent and for such periods as may be required by applicable law and permit Landlord and its representatives to inspect during normal business hours at any time and from time to time upon reasonable notice to Tenant a list of all radioactive materials or radiation received, stored, possessed, used, transferred or disposed of by Tenant or in connection with the operation of Tenant's business on the Premises from time to time, to the extent not already disclosed through delivery of a copy of a Nuclear Regulatory Commission approval with respect thereto as contemplated above; and

(C) Maintain, to such extent and for such periods as may be required by applicable law, and permit Landlord or its representatives to inspect during normal business hours at any time and from time to time upon reasonable notice to Tenant, all licenses, registration materials, inspection reports, governmental orders and permits in connection with the receipt, storage, possession, use, transfer or disposal of radioactive materials or radiation by Tenant or in connection with the operation of Tenant's business on the Premises from time to time.

(vii) Tenant shall comply with any and all applicable laws, rules, regulations and orders of any governmental authority with respect to the release into the environment of any hazardous wastes or substances or radiation or radioactive materials by Tenant or its agents or employees. Tenant shall give Landlord immediate verbal notice of any unauthorized release of any such hazardous wastes or substances or radiation or radioactive materials into the environment, and shall follow such verbal notice with written notice lo Landlord of such release within twenty-four (24) hours of the time at which Tenant became aware of such release.

(viii) Tenant shall indemnify, defend and hold Landlord harmless from and against any and all claims, losses (including, but not limited to loss of rental income and loss due to business interruption), damages, liabilities, costs, legal fees and expenses of any sort arising out of or relating to (A) any failure by Tenant to comply with any provisions of this paragraph (b), or (B) any receipt, use handling, generation, transportation, storage, treatment, release and/or disposal of any hazardous substance or waste or any radioactive material or radiation on or about the Property in connection with Tenant's use or occupancy of the Premises or as a result of any intentional or negligent acts or omissions of Tenant or of any agent or employee of Tenant.

(ix) Tenant shall cooperate with Landlord in furnishing Landlord with complete information regarding Tenant's receipt, handling, use, storage, transportation, generation, treatment and/or disposal of any hazardous substances or wastes or radiation or radioactive

materials. Upon request, Tenant shall grant Landlord reasonable access at reasonable times to the Premises to inspect Tenant's receipt, handling, use, storage, transportation, generation, treatment and/or disposal of hazardous substances or wastes or radiation or radioactive materials, without being deemed guilty of any disturbance of Tenant's use or possession and without being liable to Tenant in any manner.

(x) Not-withstanding Landlord's rights of inspection and review under this paragraph (b). Landlord shall have no obligation or duty to so inspect or review, and no third party shall be entitled to rely on Landlord to conduct any sort of inspection or review by reason , of the provisions of this paragraph (b).

(xi) If Tenant receives, handles, uses, stores, transports, generates, treats and/or disposes of any hazardous substances or wastes or radiation or radioactive materials on or about the Property it any lime during the term of this Lease, then within thirty (30) days after the termination or expiration of this Lease, Tenant shall certify in writing to Landlord that Tenant has in all respects complied with this Section 11.6 and that Tenant has complied with any applicable federal, state, regional or local closure requirements. If Landlord nevertheless believes that there may be hazardous substances or wastes or radioactive materials on the Property, then. Landlord may obtain, at Landlord's expense (except as otherwise provided herein), within one (1) year after the termination or expiration of this Lease, an environmental study performed by a qualified expert consultant, evaluating the presence or absence of hazardous substances, hazardous wastes, radiation and/or radioactive materials on or about the Premises and surrounding portions of the Property. If such study reveals that any such substances, wastes or materials are present in quantities reasonably requiring remediation and such substances, wastes or materials are Tenant's responsibility under Section 11.4, under this Section 11.6 or under any other applicable provision of this Lease, (hen Tenant shall promptly reimburse Landlord for the cost of such study. Liability for any remedial actions required or recommended on the basis of such study shall be allocated in accordance with Sections 11.4, 11.6, 12.6 and other applicable provisions of this Lease.

(c) Landlord shall indemnify, defend and hold Tenant harmless from and against any and all claims, losses, damages, liabilities, costs, legal fees and expenses of any sort arising out of or relating to (i) the presence on the Property of any hazardous substances or wastes or radiation or radioactive materials present on the Property as of the Commencement Date (other than as a result of any intentional or negligent acts or omissions of Tenant or of any agent or employee of Tenant), and/or (ii) any unauthorized release into the environment (including, but not limited to, the Property) of any hazardous substances or wastes or radiation or radioactive materials to the extent such release results from the negligence of or willful misconduct or omission by Landlord or its agents or employees.

(d) The provisions of this Section 11.6 shall survive the termination of this Lease.

12. INSURANCE AND INDEMNITY

12.1 Insurance.

(a) Tenant shall procure and maintain in full force and effect at all times during the term of this Lease, at Tenant's cost and expense, commercial general liability insurance to protect against any liability to the public, or to any invitee of Tenant or Landlord, arising out of or related to the use of or resulting from any accident occurring in, upon or about the Premises, with limits of liability of not less than (i) Two Million Dollars ($2,000,000.00) for injury to or death of one person, (ii) Five Million Dollars ($5,000,000.00) for personal injury or death, per occurrence, and (iii) One Million Dollars ($1,000,000.00) for property damage, or a combined single limit of liability of not less than Five Million Dollars ($5,000,000.00). Such insurance shall name Landlord and its general partners and Managing Agent (Landlord's offsite property manager) as additional insureds thereunder. The amount of such insurance shall not be construed to limit any liability or obligation of Tenant under this Lease. To the extent Tenant's business includes the manufacture and/or distribution of commercial or consumer products. Tenant shall also procure and maintain in full force and effect at all times during the term of this Lease, at Tenant's cost and expense, product liability insurance on terms and in amounts

satisfactory to Landlord in its reasonable discretion, provided that the cost of such insurance is commercially reasonable.

(b) Landlord shall procure and maintain in full force and effect at all times during the term of this Lease, at Landlord's sole cost and expense (but reimbursable as an Operating Expense under Section 7.2 hereof), fire and "all risk" extended coverage property damage insurance for the Building on a full replacement cost basis. Such insurance may include earthquake coverage to the extent Landlord in its discretion elects to carry such coverage, and shall have such commercially reasonable deductibles and other terms as Landlord in its discretion determines to be appropriate. Landlord shall have no obligation to carry property damage insurance for any alterations, additions or improvements installed by Tenant on or about the Premises. "

12.2 Quality Of Policies And Certificates. All policies of insurance required hereunder shall be issued by responsible insurers and shall be written is primary policies not contributing with and not in excess of any coverage that Landlord may carry. Tenant shall deliver to Landlord copies of policies or certificates of insurance showing that said policies are in effect. The coverage provided by such policies shall include the clause or endorsement referred to in Section 12.4. If Tenant fails to acquire, maintain or renew any insurance requited to be maintained by it under this Article 12 or to pay the premium therefor, then Landlord, at its option and in addition to its other remedies, but without obligation so to do, may procure such insurance, and any sums expended by it to procure any such insurance shall be repaid upon demand, with interest as provided in Section 3.2 hereof. Tenant shall obtain written undertakings from each insurer under policies required to be maintained by it to notify all insureds thereunder at least thirty (30) days prior to cancellation, amendment or revision of coverage.

12.3 Workers' Compensation. Tenant shall maintain in full force and effect during the term of this Lease workers' compensation insurance in at least the minimum amounts required by law covering all of Tenant's employees working on the Premises.

12.4 Waiver Of Subrogation. To the extent permitted by law and without affecting the coverage provided by insurance required to be maintained hereunder. Landlord and Tenant each waive any right to recover against the other

with respect to (i) damage to property, (ii) damage to the Property or any part thereof, or (iii) claims arising by reason of any of the foregoing, but only to the extent that any of the foregoing damages and claims under clauses (i) and (ii) hereof are covered, and only to the extent of such coverage, by casualty insurance actually carried or required to be carried hereunder by either Landlord, or Tenant. This provision is intended to waive fully, and for the benefit of each party, any rights and claims which might give rise to a right of subrogation in any insurance carrier. Each party shall procure a clause or endorsement on any casualty insurance policy denying to the insurer rights of subrogation against the other party to the extent rights have been waived by the insured prior to the occurrence of injury or loss. Coverage provided by insurance maintained by Tenant shall not be limited, reduced or diminished by virtue of the subrogation waiver herein contained.

12.5 Increase In Premiums. Tenant shall do all acts and pay all expenses necessary to insure (i) that the Premises are not used for purposes that are prohibited by any applicable fire insurance and are not characteristic of the biotechnology uses described in Section 11.1, and (ii) that Tenant's use of the Premises complies with all requirements necessary to obtain any such insurance. If Tenant uses or permits the Premises to be used in a manner that is not characteristic of the biotechnology uses described in Section 11.1 and that increases the existing rate of any insurance on the Property carried by Landlord. Tenant shall pay the amount of the increase in premium caused thereby, and Landlord's costs of obtaining other replacement insurance policies, including any increase in premium, within ten (10) days after demand therefor by Landlord.

12.6 Indemnification.

(a) Tenant shall indemnify, defend and hold Landlord and its partners, shareholders, officers, directors, affiliates, agents, employees and contractors harmless from any and all liability for injury to or death of any person, or loss of or damage to the property of any person, and all actions, claims, demands, costs (including, without limitation, reasonable attorneys' fees), damages or expenses of any kind arising therefrom which may be brought or made against Landlord or which Landlord may pay or incur by reason of the use, occupancy and

enjoyment of the Premises by Tenant or any invitees, sublessees, licensees, assignees, employees, agents or contractors of Tenant or holding under Tenant from any cause whatsoever other than negligence or willful misconduct or omission by Landlord, its agents or employees. Landlord and its partners, shareholders, officers, directors, affiliates, agents, employees and contractors shall not be liable for, and Tenant hereby waives all claims against such persons for, damages to goods, wares and merchandise in, upon or about the Premises, or for injuries to Tenant, its agents or third persons in upon or about the Premises, from any cause whatsoever other than negligence or willful misconduct or omission by Landlord, its agents or employees. Tenant shall give prompt notice to Landlord of any casualty or accident in, on or about the Premises.

(b) Landlord shall indemnify, defend and hold Tenant and its partners, shareholders, officers, directors, affiliates, agents, employees and contractors harmless from any and all liability for injury to or death of any person, or loss of or damage to the property of any person, and all actions, claims, demands, costs (including, without limitation, reasonable attorneys' fees), damages or expenses of any kind arising therefrom which may be brought or made against Tenant or which Tenant may pay or incur, to the extent such liabilities or other matters arise by reason of any negligence or willful misconduct or omission by Landlord, its agents or employees.

12.7 Blanket Policy. Any policy required to be maintained hereunder may be maintained under a so-called "blanket policy insuring other parties and other locations so long as the amount of insurance required to be provided hereunder is not thereby diminished.

13. SUBLEASE AND ASSIGNMENT

13.1 Assignment And Sublease Of Property. Tenant shall not have the right or power to assign its interest in this Lease, or make any sublease of the Premises or any portion thereof, nor shall any interest of Tenant under this Lease be assignable involuntarily or by operation of law, without on each occasion obtaining the prior written consent of Landlord, which consent shall not be unreasonably withheld. Any purported sublease or assignment of Tenant's interest in this Lease requiring but not having received Landlord's consent thereto shall be void, at the election of Landlord. Without limiting the generality of the foregoing, Landlord may withhold consent to any proposed subletting or assignment solely on the ground, if applicable, that the use by the proposed subtenant or assignee is reasonably likely to be incompatible with Landlord's use of the remainder of the Building or Property or of any adjacent property owned or operated by Landlord. If any dissolution, consolidation, merger or other reorganization of Tenant, or my sale or transfer of the stock of or other interest in Tenant, or any series of one or more of such events occurring within an eighteen (18) consecutive month period, involving in the aggregate a change of sixty-seven percent (67%) or more in the voting control of all classes of ownership interests in Tenant then outstanding occurs, such occurrence or series of occurrences shall be deemed to be an assignment hereunder and, at the election of Landlord, shall be void unless Tenant has obtained the prior written consent of Landlord, which consent shall not be unreasonably withheld; provided, however, such occurrence or series of occurrences shall not require Landlord's prior written consent if the transferee of such voting control is an entity which controls, is controlled by or is under common control with Tenant or Xenova group plc. When calculating the number of shares or other ownership interests outstanding, shares or other ownership interests issued to Landlord pursuant to Section 4.1 hereof shall be included, but transfers of shares or other ownership interests so issued to Landlord or issued to employees of either Tenant or Xenova group plc shall be excluded from the calculation of shares or other ownership interests deemed to have been sold or otherwise transferred. Notwithstanding the foregoing, (i) an initial-public offering of the common stock of Tenant shall not be deemed to be an assignment hereunder, and (ii) Tenant shall have the right to assign this Lease or sublet the Premises, or any portion thereof, without Landlord's consent (but with prior or concurrent written notice by Tenant to Landlord), to any parent, subsidiary or other entity which controls, is controlled by or is under common control with Tenant, or to any entity which results from a merger or consolidation with Tenant, or to any entity which acquires all or substantially all of the stock or assets of Tenant as a going concern (hereinafter each a "Permitted Transfer"). In addition, a sale or transfer of the capital stock of Tenant shall be deemed a Permitted Transfer if (x) such sale or transfer occurs in connection with any bona fide financing or capitalization for the benefit of Tenant, or (y) Tenant becomes a publicly traded corporation. Except as expressly set forth in this Section 13.1, however, the provisions of Section 13.2 shall remain applicable to any Permitted Transfer and

the transferee under such Permitted Transfer shall be and remain subject to all of the terms and provisions of this Lease.

13.2 Rights Of Landlord. Consent by Landlord to one or more assignments of this Lease, or to one or more subletting of the Premises or any portion thereof, or collection of rent by Landlord from any assignee or sublessee, shall not operate to exhaust Landlord's rights under this Article 13, nor constitute consent to any subsequent assignment or subletting. No assignment of Tenant's interest in this Lease and no sublease shall relieve Tenant of its obligations hereunder, notwithstanding any waiver or extension of time granted by Landlord to any assignee or sublessee, or the failure of Landlord to assert its rights against any assignee or sublessee, and regardless of whether Landlord's consent thereto is given or required to be given hereunder. In the event of a default by any assignee, sublessee or other successor of Tenant in the performance of any of the terms or obligations of Tenant under this Lease, Landlord may proceed directly against Tenant without the necessity of exhausting

remedies against any such assignee, sublessee or other successor. In addition. Tenant immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any subletting of all or a part of the Premises as permitted under this Lease, and Landlord, as Tenant's assignee and as attorney-in-fact for Tenant, or any receiver for Tenant appointed on Landlord's application, may collect such rent and apply it toward Tenant's obligations under this Lease, except that, until the occurrence of an act of default by Tenant, Tenant shall have the right to collect such rent and to retain all sublease profits.

14. RIGHT OF ENTRY AND QUIET ENJOYMENT

14.1 Right Of Entry. Landlord and its authorized representatives shall have the right to enter the Premises at any time during the term of this Lease during normal business hours and upon not less than forty-eight (48) hours prior notice, except in the case of emergency (in which event no notice shall be required and entry may be made at any time), for the purpose of inspecting and determining the condition of the Premises or for any other proper purpose including, without limitation, to make repairs, replacements or improvements which Landlord may deem necessary, to show the Premises to prospective purchasers, to show the Premises to prospective tenants (but only during the final year of the term of this Lease), and to post notices of nonresponsibility. Landlord shall not be liable for inconvenience, annoyance, disturbance, loss of business, quiet enjoyment or other damage or loss to Tenant by reason of making any repairs or performing any work upon the Building or the Property or by reason of erecting or maintaining any protective barricades in connection with any such work, and the obligations of Tenant under this Lease shall not thereby be affected in any manner whatsoever, provided. however. Landlord shall use reasonable efforts to minimize the inconvenience to Tenant's normal business operations caused thereby. If Landlord's entry to the Premises pursuant to this Section 14.1 continues for more than forty-eight (48) hours and materially impairs Tenant's ability to use the Premises for their intended purposes hereunder, then, following such forty-eight (48) hour period. Tenant's rental obligations under this Lease shall be abated in proportion to the degree of impairment of Tenant's use of the Premises, and such abatement shall continue until Tenant's use of the Premises is no longer materially impaired thereby.

14.2 Quiet Enjoyment Landlord covenants that Tenant upon paying the rent and performing its obligations hereunder and subject to all the terms and conditions of this Lease, shall peacefully and quietly have, hold and enjoy the Premises throughout the term of this Lease, or until this Lease is terminated as provided by this Lease.

15. CASUALTY AND TAKING

15.1 Termination Or Reconstruction. If during the term of this Lease the Premises Of Building, or any substantial part of either, (i) is damaged materially by fire or other casualty or by action of public or other authority in consequence thereof, (ii) is taken by eminent domain or by reason of any public improvement or condemnation proceeding, or in any manner by exercise of the right of eminent domain (including any transfer in avoidance of an exercise of the power of eminent domain), or (iii) receives irreparable damage by reason of anything lawfully done under color of public or other authority, this Lease shall terminate as to the entire Premises at Landlord's election by written notice given to Tenant within sixty (60) days after the damage or

taking has occurred. Notwithstanding anything in the preceding sentence to the contrary, if the damage results from a casualty for which Landlord is obligated to carry insurance under this Lease and the damage can reasonably be repaired within one (1) year (or, in the case of a casualty during the last year of the term of this Lease, within sixty (60) days) following the date of the casually, then Landlord shall repair the damage, provided, however, the Landlord's repair obligation shall not exceed the amount of insurance proceeds received by Landlord from insurers by reason of such casualty, plus the amount of any

applicable deductible (provided that Landlord shall be obligated to use its best efforts to recover any available proceeds from its then existing insurance), and, if such proceeds are insufficient to repair the damage. Landlord may terminate the Lease unless Tenant promptly elects and agrees, in writing, to contribute the amount of the shortfall; provided further, however, if the proceeds are insufficient because Landlord failed to maintain the insurance required to be maintained by Landlord under this Lease, any shortfall shall be contributed by Landlord; and provided further, however, if the casualty occurs during the last year of the initial term or the first extended term (if applicable), the 60-day limitation period on rebuilding shall be inapplicable if Tenant properly exercises (or had previously properly exercised) its next option to extend the term of this Lease. If Landlord does not elect to terminate this Lease as hereinabove provided. Landlord shall promptly and diligently repair any such damage and restore the Premises and the Building is nearly as reasonably possible to the condition existing before the damage or taking; provided, however, that Landlord shall have-no obligation to repair or restore any improvements, alterations or additions originally installed or directly paid for by Tenant under this Lease.

15.2 Tenant's Rights. If any portion of the Premises is so taken by condemnation. Tenant may elect to terminate this Lease if the portion of the Premises taken is of such extent and nature as substantially to handicap, impede or permanently impair Tenant's use of the balance of the Premises. Tenant must exercise its right to terminate by giving notice to Landlord within thirty (30) days after the nature and extent of the taking have been finally determined. If Tenant elects to terminate this Lease. Tenant shall also notify Landlord of the date of termination, which date shall not be earlier than thirty (30) days nor later than ninety (90) days after Tenant has notified Landlord of its election to terminate, except that this Lease shall terminate on the date of taking if the date of taking falls on any date before the date of termination designated by Tenant.

15.3 Lease To Remain In Effect. If neither Landlord nor Tenant terminates this Lease as hereinabove provided, this Lease shall continue in full force and effect, except that minimum monthly rental and Tenant's Operating Cost Share shall abate to the extent Tenant's use of the Premises is impaired for any period that any portion of the Premises is unusable or inaccessible because of a casualty or taking hereinabove described. Each party waives the provisions of Code of Civil Procedure Section 1265.130, allowing either party to petition the Superior Court to terminate this Lease in the event of a partial condemnation of the Premises.

15.4 Reservation Of Compensation. Landlord reserves, and Tenant waives and assigns to Landlord, all rights to any award or compensation for damage to the Premises, the Building, the improvements, the Property and the leasehold estate created hereby, accruing by reason of any taking in any public improvement, condemnation or eminent domain proceeding or in any other manner by exercise of the right of eminent domain or of anything lawfully done by public authority, except that Tenant shall be entitled to any and all compensation or damages paid for or on account of Tenant moving expenses, trade fixtures, equipment and any leasehold improvements in the Premises installed by Tenant at its own expense, but only to the extent of the then remaining unamortized value of such improvement computed, on a straight-line basis over the term of this Lease. Tenant covenants to driver such further assignments of the foregoing as Landlord may from time to time request.

15.5 Restoration Of Fixtures. If Landlord repairs or causes repair of the Premises after such damage or taking. Tenant at its sole expense shall repair and replace promptly all fixtures, equipment and other property of Tenant located at in or upon the Premises and all additions, alterations and improvements and all other items installed or paid for by Tenant under this Lease that were damaged or taken, so as to restore the same to a condition substantially equal to that which existed immediately prior to the damage or taking. Tenant shall have the right to make modifications to the Premises, fixtures and improvements, subject to the prior written approval of Landlord. In its review of Tenant's plans and specifications. Landlord may take into

consideration the effect of the proposed modifications on the exterior appearance, the structural integrity and the mechanical and other operating systems of the Building.

16. DEFAULT

16.1 Events Of Default. The occurrence of any of the following shall constitute an event of default on the part of Tenant:

(a) [Omitted.]

(b) Nonpayment. Failure to pay, when due, any amount payable to Landlord hereunder, such failure continuing for a period of five (5) days after written notice of such failure; provided, however, that any such notice shall be in lieu of, and not in addition to, any notice required under California Code of Civil Procedure Section 1161 et seq., as amended from time to time;

(c) Other Obligations. Failure to perform any obligation, agreement or covenant under this Lease other than those matters specified in subsection (b) hereof, such failure continuing for thirty (30) days after written notice of such failure; provided, however, that if such failure is curable in nature but cannot reasonably be cured within such 30-day period, then Tenant shall not be in default if, and so long as, Tenant promptly (and in all events within such 30-day period) commences such cure and thereafter diligently pursues such cure to completion; and provided further, however, that any such notice shall be in lieu of, and not in addition to, any notice required under California Code of Civil Procedure Section 1161 C seq., as amended from time to time;

(d) General Assignment. A general assignment by Tenant for the benefit of creditors;

(e) Bankruptcy. The filing of any voluntary petition in bankruptcy by Tenant, or the filing of an involuntary petition by Tenant's creditors, which involuntary petition remains undischarged for a period of thirty (30) days. In the event that under applicable law the trustee in bankruptcy or Tenant has the right to affirm this Lease and continue to perform the obligations of Tenant hereunder, such trustee or Tenant shall in such time period as may be permitted by the bankruptcy court having jurisdiction, cure all defaults of Tenant hereunder outstanding as of the date of the affirmance of this Lease and provide to Landlord such adequate assurances as may be necessary to ensure Landlord of the continued performance of Tenant's obligations under this Lease. Specifically, but without limiting the generality of the foregoing, such adequate assurances must include assurances that the Premises continue to be operated only for the use permitted hereunder. The provisions hereof are to assure that the basic understandings between Landlord and Tenant with respect to Tenant's use of the Premises and the benefits to Landlord therefrom are preserved, consistent with the purpose and intent of applicable bankruptcy laws;

(f) Receivership. The employment of a receiver appointed by court order to take possession of substantially all of Tenant's assets or the Premises, if such receivership remains undissolved for a period of thirty (30) days;

(g) Attachment. The attachment, execution or other judicial seizure of all or substantially all of Tenant's assets or the Premises, if such attachment or other seizure remains undismissed or undischarged for a period of thirty (30) days after the levy thereof; or

(h) Insolvency. The admission by Tenant in writing of its inability to pay its debts as they become due, the filing by Tenant of a petition seeking any reorganization or arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, the filing by Tenant of in answer admitting or failing timely to contest a material allegation of a petition filed against Tenant in any such

proceeding or, if within thirty (30) days after the commencement of any proceeding against Tenant seeking any reorganization or arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, such proceeding shall not have been dismissed.

16.2 Remedies Upon Tenant's Default.

(a) Upon the occurrence of any event of default described in Section 16.1 hereof, Landlord, in addition to and without prejudice to any other rights or remedies it may have, shall have the immediate right to re-enter the Premises or any part thereof and repossess the same, expelling and removing therefrom all persons and property (which property may be stored in a public warehouse or elsewhere at the cost and risk of and for the account of Tenant), using such force as may be necessary to do so (as to which Tenant hereby waives any claim for loss or damage that may thereby occur). In addition to or in lieu of such re-entry, and without prejudice to any other rights or remedies it may have, Landlord shall have the right either (i) to terminate this Lease and recover from Tenant all damages incurred by Landlord as a result of Tenant's default, as hereinafter provided, or (ii) to continue this Lease in effect and recover rent and other charges and amounts as they become due.

(b) Even if Tenant has breached this Lease or abandoned the Premises, this Lease shall continue in effect for so long as Landlord does not terminate Tenant's right to possession under subsection (a) hereof and Landlord may enforce all of its rights and remedies under this Lease, including the right to recover rent as it becomes due, and Landlord, without terminating this Lease, may exercise all of the rights and remedies of a lessor under California Civil Code Section 1951.4 (lessor may continue lease in effect after lessee's breach and abandonment and recover rent is it becomes due, if lessee has right to sublet or assign, subject only to reasonable limitations), or any successor Code section. Acts of maintenance, preservation or efforts to relet the Premises or the appointment of a receiver upon application of Landlord to protect Landlord's interests under this Lease shall not constitute a termination of Tenant's right to possession.

(c) If Landlord terminates this Lease pursuant to this Section 16.2, Landlord shall have all of the rights and remedies of a landlord provided by Section 1951.2 of the Civil Code of the State of California, or any successor Code section, which remedies include Landlord's right to recover from Tenant (i) the worth at the time of award of the unpaid rent and additional rent which had been earned at the time of termination, (ii) the worth at the time of award of the amount by which the unpaid rent and additional rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided, (iii) the worth at the time of award of the amount by which the unpaid rent and additional rent for the balance of the term after the time of award exceeds the amount of such rental loss that Tenant proves could be reasonably avoided, and (iv) any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, including, but not limited to, the cost of recovering possession of the Premises, expenses of reletting, including necessary repair, renovation and alteration of the Premises, reasonable attorneys' fees, and other reasonable costs. The "worth at the time of award" of the amounts referred to in clauses (i) and (ii) above shall be computed by allowing interest at ten percent (10%) per annum from the date such amounts accrued to Landlord. The "worth at the time of award" of the amounts referred to in clause (iii) above shall be computed by discounting such amount at one percentage point above the discount rate of the Federal Reserve Bank of San Francisco at the time of award.

16.3 Remedies Cumulative. All rights, privileges and elections or remedies of Landlord contained in this Article 16 are cumulative and not alternative to the extent permitted by law and except as otherwise provided herein.

17. SUBORDINATION, ATTORNMENT AND SALE

17.1 Subordination To Mortgage. This Lease, and any sublease entered into by Tenant under the provisions of this Lease, shall be subject and subordinate to any ground lease, mortgage, deed of trust, sale/leaseback transaction or any other hypothecation for security now or hereafter placed upon the Building, the Property, or both, and the rights of any assignee of Landlord or of any ground lessor, mortgagee, trustee, beneficiary or leaseback lessor under any of the foregoing, and to any and all advances made on the security thereof and to all renewals, modifications, consolidations, replacements and extensions thereof; provided, however, that (i) such subordination in the case of any future ground lease, mortgage, deed of trust,

sale/leaseback transaction or any other hypothecation for security placed upon the Building, the Property, or both shall be conditioned on Tenant's receipt from the ground lessor, mortgagee, trustee, beneficiary or, leaseback lessor of a Non-Disturbance Agreement in a form reasonably acceptable to Tenant confirming that so long is Tenant is not in default hereunder, Tenant's rights hereunder shall not be disturbed by such person or entity, and (ii) with respect to the existing deed of trust on the Property, Landlord shall deliver to Tenant within sixty (60) days after the mutual execution of this Lease a Non-Disturbance Agreement from the beneficiary under such existing deed of trust, SDK Incorporated, in a form reasonably acceptable to Tenant confirming that so long as Tenant is not in default hereunder, Tenant's rights hereunder shall not be disturbed by SDK Incorporated. If any mortgagee, trustee, beneficiary, ground lessor., sale/leaseback lessor or assignee elects to have this Lease be an encumbrance upon the Property prior to the lien of its mortgage, deed of trust, ground lease of leaseback lease or other security arrangement and gives notice thereof to Tenant, this Lease shall be deemed prior thereto, whether this Lease is dated prior or subsequent to the date thereof or the date of recording thereof. Tenant, and any sublessee, shall execute such documents as may reasonably be requested by any mortgagee, trustee, beneficiary, ground lessor, sale/Leaseback lessor or assignee to evidence the subordination herein set forth, subject to the conditions set forth above, or to make this Lease prior to the lien of any mortgage, deed of trust, ground lease, leaseback lease or other security arrangement, as the case may be. Upon any default by Landlord in the performance of its obligations under any mortgage, deed of trust, ground lease, leaseback lease or assignment, Tenant (and any sublessee) shall, notwithstanding any subordination hereunder, attorn to the mortgagee, trustee, beneficiary, ground lessor, leaseback lessor or assignee thereunder upon demand and become the tenant of the successor in interest to Landlord, at the option of such successor in interest, and shall execute and deliver any instrument or instruments confirming the attornment herein provided for.

17.2 Sale Of Landlord's Interest. Upon sale, transfer or assignment of Landlord's entire interest in the Building and Property. Landlord shall be relieved of its obligations hereunder with respect to liabilities accruing from and after the date of such sale, transfer or assignment. Nothing contained in this Section 17.2 shall be deemed, however, to relieve Landlord of liability for any liability arising prior to such sale, transfer or assignment.

17.3 Estoppel Certificates. Each of Tenant and Landlord (as applicable, the "certifying party") shall at any time and from time to time, within ten (10) days after written request by the other (the "requesting party"), execute, acknowledge and deliver to the requesting party a certificate in writing stating: (i) that this Lease is unmodified and to full force and effect, or if there have been any modifications, that this Lease is in full force and effect as modified and stating the date and the nature of each modification; (ii) the date to which rental and all other sums payable hereunder have been paid; (iii) that the requesting party is not in default in the performance of any of its obligations under this Lease, that the certifying party has given no notice of default to the requesting party and that no event has occurred which, but for the expiration of the applicable time period, would constitute an event of default hereunder, or if the certifying party alleges

that any such default, notice or event has occurred, specifying the same in reasonable detail; and (iv) such other matters as may reasonably be requested by the requesting party or any institutional lender, mortgagee, trustee; beneficiary, ground lessor, sale/leaseback lessor or prospective purchaser of the Property. Any such certificate provided under this Section 17.3 may be relied upon by any lender, mortgagee, trustee, beneficiary, assignee or successor in interest to the requesting party, by any prospective purchaser, by any purchaser on foreclosure or sale, by any grantee under a deed in lieu of foreclosure of any mortgage or deed of trust on the Property or Building, or by any other third party.

17.4 Subordination to CC&R's. This Lease, any permitted sublease entered into by Tenant under the provisions of this Lease, and the interests in real property conveyed hereby and thereby shall be subject and subordinate (a) to any declarations of covenants, conditions and restrictions affecting the Property from time to time, provided that the terms of such declarations are reasonable and do not discriminate against Tenant relative to other similarly situated tenants occupying portions of the Property, (b) to the Declaration of Covenants, Conditions and Restrictions for Pointe Grand Business Park dated November 4, 1991 and recorded on February 25, 1992 as Instrument No. 92025214. Official Records of San Mateo County, as amended from time to time (the "Master Declaration"), the provisions of which Master Declaration are an integral part of this Lease, (c) to the Declaration of Covenants, Conditions and Restrictions dated November 23, 1987 and recorded on November 24, 1987 as Instrument

No. 87177987, Official Records of San Mateo County, which declaration imposes certain covenants, conditions and restrictions on the Property, and (d) to the Environmental Restriction and Covenant dated April 16, 1997 and recorded on April 16, 1997 as Instrument No. 97-043682. Official Records of San Mateo County, which declaration imposes certain covenants, conditions and restrictions on the Property. Tenant agrees to execute, upon request by Landlord, any documents reasonably required from time to time to evidence such subordination.

17.5 Mortgagee Protection.

(a) If, in connection with any future ground lease, mortgage, deed of trust, sale/leaseback transaction or any other hypothecation for security placed upon the Building, the Property, or both, the ground lessor, mortgagee, trustee, beneficiary or leaseback lessor requests any changes in this Lease as a condition to its willingness to enter into or accept the ground lease, mortgage, deed of trust, sale/leaseback transaction or other hypothecation for security, then Tenant shall not unreasonably withhold its consent to any such requested changes and shall execute, at the request of Landlord, an amendment to this Lease incorporating the changes thus reasonably consented to by Tenant. Tenant's obligations under this Section 17.5(a) shall be conditioned on Tenant's concurrent receipt, from the ground lessor, mortgagee, trustee, beneficiary or leaseback lessor, of a Non-Disturbance Agreement in a form reasonably acceptable to Tenant confirming that so long as Tenant is not in default hereunder, Tenant's rights hereunder shall not be disturbed by such person or entity.

(b) If, following a default by Landlord under any mortgage, deed of trust, ground lease, leaseback lease or other security arrangement covering the Property, the Property is acquired by the mortgagee, beneficiary, master lessor or other secured party, or by any other successor owner, pursuant to a foreclosure, trustee's sale, sheriff's sale, lease termination or other similar procedure (or deed in lieu thereof), then any such person or entity so acquiring the Property shall not be:

(i) liable for any act or omission of a prior landlord or owner of the Property (including, but not limited to, Landlord);

(ii) subject to any offsets or defenses that Tenant may have against any prior landlord or owner of the Property (including, but not limited to, Landlord);

(iii) bound by any rent or additional rent that Tenant may have paid in advance to any prior landlord or owner of the Property (including, but not limited to, Landlord) for a period in excess of one month, or by any security deposit, cleaning deposit or other prepaid charge that Tenant may have paid in advance to any prior landlord or owner (including, but not limited to, Landlord);

(iv) liable for any warranties or representations of any nature whatsoever, whether pursuant to this Lease or otherwise, by any prior landlord or owner of the Property (including, but not limited to, Landlord) with respect to the use, construction, zoning, compliance with laws, title, habitability, fitness for purpose or possession, or physical condition (including, without limitation, environmental matters) of the Property or Improvements; or

(v) liable to Tenant in any amount beyond the interest of such mortgagee, beneficiary, master lessor or other secured party or successor owner in the Property as it exists from time to time, it being the intent of this provision that Tenant shall look sololy to the interest of any such mortgagee, beneficiary, master lessor or other secured party or successor owner in the Property for the payment and discharge of the landlord's obligations under this Lease and that such mortgagee, beneficiary, master lessor or other secured party or successor owner shall have no separate personal liability for any such obligations.

18. SECURITY

18.1 Deposit. Concurrently with Tenant's execution of this Lease. Tenant shall deposit with Landlord the sum of Fifty-Eight Thousand Forty-Five and No/100 Dollars ($58,045,00), which sum (the "Security Deposit") shall be held by Landlord as security for the faithful performance of all of the terms, covenants, and conditions of this Lease to be kept and performed

by Tenant during the term hereof. The amount of said Security Deposit represents one month's rent, as of the Commencement Date, at a rate of $2.47 per square foot per month for an assumed size of 23,500 square feet for the Premises, as reflected in Section 3.1(a) hereof; if the size of the Premises is increased by Tenant's exercise of its expansion option under Section l.l(c) hereof, then concurrently with such exercise Tenant shall increase the amount of the Security Deposit to an amount equal to $2.47 per square foot times the increased size of the Premises as determined under Section 3.1(b) hereof. If Tenant defaults with respect to any provision of this Lease, including, without limitation, the provisions relating to the payment of rental and other sums due hereunder. Landlord shall have the right, but shall not be required, to use. apply or retain all or any part of the Security Deposit for the payment of rental or any other amount which Landlord may spend or become obligated to spend by reason of Tenant's default or to compensate Landlord for any other loss or damage which Landlord may suffer by reason of Tenant's default. If any portion of the Security Deposit is so used or applied, Tenant shall, within ten (10) days after written demand therefor, deposit cash with Landlord in an amount sufficient to restore the Security Deposit to the full amount required hereunder and Tenant's failure to do so shall be a material breach of this Lease. Landlord shall not be required to keep any deposit under this Section separate from Landlord's general funds, and Tenant shall not be entitled to interest thereon. If Tenant fully and faithfully performs every provision of this Lease to be performed by it, the Security Deposit, or any balance thereof, shall be returned to Tenant or, at Landlord's option, to the last assignee of Tenant's interest hereunder, at the expiration of the term of this Lease and after Tenant has vacated the Premises. In the event of termination of Landlord's interest in this Lease. Landlord shall transfer all deposits then held by Landlord under this Section to Landlord's successor in interest, whereupon Tenant agrees to release Landlord from all liability for the return of such deposit or the accounting thereof.

19. MISCELLANEOUS

19.1 Notices. All notices, consents, waivers and other communications which this Lease requires or permits either party to give to the other shall be in writing and shall be deemed given when delivered personally (including delivery by private courier or express delivery service), when successfully transmitted by facsimile (as evidenced by a facsimile transmission confirmation) or four (4) days after deposit in the United States mail, registered or certified mail, postage prepaid, addressed to the parties at their respective addresses as follows:

To Tenant: (until Commencement Date)
MetaXen, LLC
3181 Porter Drive
Palo Alto, CA 94304
Attn: Michael J. Ross
Facsimile: (415)858-4931

(after Commencement Date)
MetaXen, LLC
____East Grand Avenue [to be determined]
South San Fracisco, CA 94080
Attn: Michael J. Ross
Facsimile: (415)_____

with copy to: Laurance M. May. Esq.
Carr, McClellan, Ingersoll, Thompson & Horn
216 Park Road
Burlingame, CA 94010
Facsimile: (415)342-7685

To Landlord: Britannia Pointe Grand Limited Partnership
1939 Harrison Street, Suite 412
Park Plaza Building
Oakland, CA 94612
Attn: T. J. Bristow
Facsimile: (510)834-7133

with copy to: Folger Levin & Kahn LLP
Embarcadero Center West
275 Battery Street, 23rd Floor
San Francisco. CA 94111
Attn: Donald E. Kelley. Jr.
Facsimile: (415) 986-2827

or to such other address as may be contained in a notice at least fifteen (15) days prior to the address change from either party to the other given pursuant to this Section. Rental payments and other sums required by this Lease to be paid by Tenant shall be delivered to Landlord at Landlord's address provided in this Section, or to such other address as Landlord may from time to time specify in writing to Tenant, and shall be deemed to be paid only upon actual receipt.

19.2 Successors And Assigns. The obligations of this Lease shall run with the land and this Lease shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, except that the original Landlord named herein and each successive Landlord under this Lease shall be liable only for obligations accruing during the period of its ownership of the Property, said liability terminating upon termination of such ownership and passing to the successor lessor.

19.3 No Waiver. The failure of Landlord to seek redress for violation, or to insist upon the strict performance, of any covenant or condition of this Lease shall not be deemed a waiver of such violation, or prevent a subsequent act which would originally have constituted a violation from having all the force and effect of an original violation.

19.4 Severability. If any provision of this Lease or the application thereof is held to be invalid or unenforceable, the remainder of this Lease or the application of such provision to persons or circumstances other than those as to which it is invalid or unenforceable shall not be affected thereby, and each of the provisions of this Lease shall be valid and enforceable, unless enforcement of this Lease as so invalidated would be unreasonable or grossly inequitable under all the circumstances or would materially frustrate the purposes of this Lease.

19.5 Litigation Between Parties. In the event of any litigation or other dispute resolution proceedings between the parties hereto arising out of or in connection with this Lease, the prevailing party shall be reimbursed for all reasonable costs, including, but not limited to, reasonable accountants' fees and attorneys' fees, incurred in connection with such proceedings (including, but not limited to, any appellate proceedings relating thereto) or in connection with the enforcement of any judgment or award rendered in such proceedings. "Prevailing party" within the meaning of this Section shall include, without limitation, a party who dismisses an action for recovery hereunder in exchange for payment of the sums allegedly due, performance of covenants allegedly breached or consideration substantially equal to the relief sought in the action.

19.6 Surrender. A voluntary or other surrender of this Lease by Tenant, or a mutual termination thereof between Landlord and Tenant, shall not result in a merger but shall, at the option of Landlord, operate either as an assignment to Landlord of any and all existing subleases and subtenancies, or a termination of all or any existing subleases and subtenancies. This provision shall be contained in any and all assignments or subleases made pursuant to this Lease.

19.7 Interpretation. The provisions of this Lease shall be construed as a whole, according to their common meaning, and not strictly for or against Landlord or Tenant. The captions preceding the text of each Section and subsection hereof are included only for convenience of reference and shall be disregarded in the construction or interpretation of this Lease.

19.8 Entire Agreement. This written Lease, together with the exhibits hereto, contains all the representations and the entire understanding between the parties hereto with respect to the subject matter hereof. Any prior correspondence, memoranda or agreements are replaced in total by this Lease and the exhibits hereto. This Lease may be modified only by an agreement in writing signed by each of the parties.

19.9 Governing Law. This Lease and all exhibits hereto shall be construed and interpreted in accordance with and be governed by all the provisions of the laws of the State of California.

19.10 No Partnership. The relationship between Landlord and Tenant is solely that of a lessor and lessee. Nothing contained in this Lease shall be construed as creating any type Of manner of partnership, joint venture or joint enterprise with or between Landlord and Tenant.

19.11 Financial Information. From time to time Tenant shall promptly provide directly to prospective lenders and purchasers of the Property designated by Landlord such financial information pertaining to the financial status of Tenant is Landlord may reasonably request; provided. Tenant shall be permitted to provide such financial information in a manner which Tenant deems reasonably necessary to protect the confidentiality of such information. In addition, from time to time. Tenant shall provide Landlord with such financial information pertaining to the financial status of Tenant as Landlord may reasonably request. Landlord agrees that all financial information supplied to Landlord by Tenant shall be treated as confidential material, and shall not be disseminated to any party or entity (including any entity affiliated with Landlord without Tenant's prior written consent, except that Landlord shall be entitled to provide such information, subject to reasonable precautions to protect the confidential nature thereof, (i) to Landlord's partners and

professional advisors, solely to use in connection with Landlord's execution and enforcement of this Lease, and (ii) to prospective lenders and/or purchasers of the Property, solely for use in connection with their bona fide consideration of a proposed financing or purchase of the Property, provided that such prospective lenders and/or purchasers are not engaged in businesses directly competitive with the business then being conducted by Tenant. For purposes of this Section, without limiting the generality of the obligations provided herein, it shall be deemed reasonable for Landlord to request copies of Tenant's most recent audited annual financial statements, or, if audited statements have not been prepared, unaudited financial statements for Tenant's most recent fiscal year, accompanied by a certificate of Tenant's chief financial officer that such financial statements fairly present Tenant's financial condition as of the date(s) indicated.

Landlord and Tenant recognize the need of Tenant to maintain the confidentiality of information regarding its financial status and the need of Landlord to be informed of, and to provide to its partners and to prospective lenders and purchasers of the Property financial information pertaining to. Tenant's financial status. Landlord and Tenant agree to cooperate with each other in achieving these needs within the context of the obligations set forth in this Section.

19.12 [Omitted.]

19.13 Time. Time is of the essence of this Lease, and of every term and condition hereof.

19.14 Rules And Regulations. Tenant shall observe, comply with and obey, and shall cause its employees, agents and, to the best of Tenant's ability, invitees to observe, comply with and obey such rules and regulations as Landlord may promulgate from time to time for the safety, care, cleanliness, order and use of the Premises, the Building and the Property, provided that such rules and regulations are not discriminatory against Tenant.

19.15 Brokers. Landlord agrees to pay a brokerage commission to Catalyst Real Estate Group and to Cornish & Carey Commercial in connection with the consummation of this Lease in accordance with a separate agreement. Tenant represents and warrants that no other broker participated in the consummation of this Lease and agrees to indemnify, defend and hold Landlord harmless against any liability, cost or expense, including, without limitation, reasonable attorneys' fees, arising out of any claims for brokerage commissions or other similar compensation in connection with any conversations, prior negotiations or other dealings by Tenant with any other broker.

19.16 Memorandum Of Lease. At any time during the term of this Lease, either party, at its sole expense, shall be entitled to record a memorandum of this Lease and, if either party so elects, both parties agree to cooperate in the preparation, execution, acknowledgement and recordation of such document in reasonable form.

19.17 Authority. The person signing this Lease on behalf of Tenant warrants that he or she is fully authorized to do so and, by so doing, to bind Tenant, As evidence of such authority. Tenant shall deliver to Landlord, upon or prior to execution of this Lease, a certified copy of a resolution of Tenant's board of directors or other governing body authorizing the execution of this Lease and naming the officer that is authorized to execute this Lease on behalf of Tenant. The person signing this Lease on behalf of Landlord warrants that he or she is fully authorized to do so and, by so doing, to bind Landlord.

19.18 Execution and Delivery. This Lease may be executed in one or more counterparts and by separate parties on separate counterparts, but each such counterpart shall constitute an original and all such counterparts together shall constitute one and the same instrument.

19.19 Survival. Without limiting survival provisions which would

otherwise be implied or construed under applicable law, the provisions of Sections 2.6, 5.2, 5.3, 7.4, 9.2, 9.3, 9.4, 11.6, 12.6, 16.2, 19.5 and 19.11 hereof shall survive the termination of this Lease with respect to matters occurring prior to the expiration of this Lease.

IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the day and year first set forth above.

"Landlord"	"Tenant"
BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership	METAXEN, LLC. a Delaware limited liability company
By: BRITANNIA POINTE GRAND, LLC. a California limited liability company. General Partner	By: /s/ Michael J. Ross Michael J. Ross President & CEO
By: /s/ T. J. Bristow T. J. Bristow President & Manager	

EXHIBITS

EXHIBIT A	Real Property Description (Center)
EXHIBIT B	Location of Premises (Site Plan)
EXHIBIT C	Construction
EXHIBIT D	Estimated Construction Schedule
EXHIBIT E	Acknowledgment of Lease Commencement

EXHIBIT A

REAL PROPERTY DESCRIPTION(CENTER)

AN that certain real property in the City of South San Francisco, County of San Mateo, State of California, more particularly described as follows:

Lots 1, 2, 3 and 4, inclusive, is shown on Parcel Map No. 91-284, "Being a resubdivision of the parcels described in the deeds to Metal and Thermit Corporation, recorded in Book 293, at Page 394 of Deeds; in Book 49, at Page 490, Official Records; in Book 77, at Page 415, Official Records; and, except that parcel described in Book 1352, at Page 373, Official Records," filed on February 25, 1992, in Book 65 of Parcel Maps, in the Office of the Recorder of the County of San Mateo, California.

EXHIBIT B

LOCATION OF PREMISES(SITE PLAN)

[MAP]

EXHIBIT B

CONSTRUCTION

Landlord, at its sole cost and expense (except as otherwise expressly provided in this Lease or as may otherwise be expressly agreed in writing between Landlord and Tenant at any time hereafter), shall undertake and diligently complete, subject to delays for causes beyond its reasonable control. construction of (a) a Building Shell as described in Schedule 1 attached hereto. (b) common area improvements (parking, landscaping, lighting, etc.) in the areas of the Property adjacent to the Building, and (c) Tenant Improvements to the Premises in accordance with the Approved Plans and Specifications (as defined below and as modified from time to time in accordance with this Exhibit C). Such work shall be performed in a neat and workmanlike manner and shall conform to all applicable governmental codes, laws and regulations in force at the time such work is completed. Landlord and Tenant shall both use their best endeavors to develop, review and approve all space plans, working drawings, final drawings, specifications, changes (if applicable) and other matters promptly, diligently and within time periods set forth in Exhibit D attached to the Lease (as the same may be updated or amended from time to time by mutual agreement of Landlord and Tenant) or within such other time periods as may be reasonably requested by the other party or by the architects, contractors and other professionals engaged in the design and construction of the work.

The Building Shell shall be a professionally engineered building shell incorporating the elements described in Schedule I attached hereto. As of the date of execution of this Lease, Landlord and Tenant have reviewed and are mutually satisfied with a proposed footprint and column spacing for the Building Shell. Landlord shall cause its architect, Chamorro Design Group ("Architect"). to prepare detailed plans, specifications and working drawings for the Building Shell and to make such plans, specifications and working drawings available for review by Tenant and its advisors. Landlord agrees to consult with Tenant and to give reasonable consideration to Tenant's views regarding functional characteristics of the Building Shell, but the final approval of the plans, specifications and working drawings for the Building Shell (including any changes from the preliminary drawings reviewed by Landlord and Tenant) shall rest solely with Landlord in its sole discretion.

The Building Shell shall be designed and constructed at Landlord's sole cost and expense, except that a prorata share (based on the ratio between the square footage of the Premises and the total square footage of the Building) of the roof screens, elevator pit, 2,000 amp service and service yard, and any shell upgrades required to accommodate Tenant's special use needs and/or special design requirements for the Tenant Improvements shall be charged against the Tenant Improvement Allowance for the Tenant Improvements.

Landlord has agreed to make available for laboratory improvements and other tenant improvements over and above the Building Shell (the "Tenant Improvements") a tenant improvement allowance of One Hundred Dollars ($100.00) per square foot (the "Tenant Improvement Allowance"). Landlord's total direct costs of design and construction of the Tenant Improvements (including, but not limited to, payments to contractors or subcontractors for labor and materials, permit fees and charges, sales and use taxes, testing and inspection costs, architects', engineers' and other consulting and professional fees, costs of power, water and other utilities and of collection and removal of debris, and all other related costs incurred in connection with the design and construction of the work, but excluding any project or construction management fees, supervision, profit, overhead or general conditions by Landlord in connection with the construction of the tenant improvements) shall be chargeable against the Tenant Improvement Allowance. Any such costs in excess of the Tenant Improvement Allowance shall be payable solely by Tenant, within thirty (30) days after written request by Landlord accompanied by evidence reasonably satisfactory to Tenant of the nature and amount of the expense or work for which such payment is requested.

Fifty percent (50%) of the cost of the demising wall(s) between the Premises and the remainder of the Building shall be part of the Tenant Improvements and chargeable against the Tenant Improvement Allowance.

The general contractor for the Building Shell shall be Concrete Shell

Structures. Inc., or any other licensed and qualified general contractor selected by Landlord in its sole discretion.

The architect for the Building Shell shall be Architect, or any other licensed and qualified architect selected by Landlord in its sole discretion.

The general contractor for the Tenant Improvements shall be Concrete Shell Structures, Inc., or any other licensed and qualified general contractor selected by mutual agreement of Landlord and Tenant, which agreement shall not be unreasonably withheld by either party. Landlord shall contract with such general contractor for construction of the Tenant Improvements. The architect for the Tenant Improvements (the "TI Architect") shall be selected by mutual agreement of Landlord and Tenant, which agreement shall not be unreasonably withheld by either party, and Tenant shall contract with the TI Architect for its services relating to the design and construction of the Tenant Improvements. The costs and fees of the TI Architect shall be chargeable against the Tenant Improvement Allowance and shall be payable by Landlord, either directly to the TI Architect or to Tenant (in reimbursement of amounts paid by Tenant to the TI Architect), as Tenant may direct from tune to time, within thirty (30) days after Landlord's receipt of a request for payment accompanied by reasonable supporting documentation relating to the services and amounts for which payment is requested.

Landlord and Tenant shall engage only union contractors for construction of the Improvements and, in the case of Tenant, for the construction and installation of Tenant's furnishings, fixture and equipment in the Premises, and shall require all such contractors, and all of their subcontractors, to use only union labor on or in connection with such work.

Tenant shall cause the TI Architect to prepare a space plan and initial plans and specifications for the Tenant Improvements, in consultation with Landlord and Architect, which plans and specifications shall be mutually approved (such approval not to be unreasonably withheld or delayed) by Landlord and Tenant (the "Approved Plans and Specifications"). Tenant shall then cause the TI Architect to produce detailed working drawings, based on the Approved Plans and Specifications, for submission to the City of South San Francisco for building permit approval. Any material changes from the Approved Plans and Specifications shall be subject to mutual approval (not unreasonably withheld or delayed) by Landlord and Tenant, provided, however, that any changes required from time to time in the Approved Plans and Specifications, working drawings and/or final plans and specifications as a result of applicable law or governmental requirements, or at the insistence of any other third party whose approval may be required with respect to such improvements, or as a result of unanticipated conditions encountered in the course of construction, may be implemented by Landlord after prior notice to Tenant, but shall not require Tenant's approval or consent.

All material subcontracts for the Tenant Improvements shall be competitively bid. Tenant shall have the right to submit names of specific subcontractors from which it would like bids to be invited in particular areas or trades, but such subcontractors shall be subject to approval (prior to requests for bids) by Landlord and the general contractor, such approval not to be unreasonably withheld, and Landlord shall in all events have the right to solicit bids from additional subcontractors. Tenant shall also have a right to approve or disapprove all subcontractors involved in any aspect of construction of the Tenant Improvements, which approval shall not be unreasonably withheld or delayed. Tenant shall at all times have access to the details of all bids and estimates, and to all other construction cost information, for both the Tenant Improvements and the Building Shell (provided, however, that Tenant shall have no right to approve or disapprove bids or cost information relating to the Building Shell, nor shall the cost of construction of the Building Shell, whether greater or less than budgets or estimates, have any effect on the rent or other economic terms under the Lease); the cost aspects of all subcontractor bids for the Tenant Improvements shall be jointly reviewed by Landlord and Tenant. Cost aspects of any changes requested by Tenant from time to time in the

Approved Plans and Specifications, working drawings and/or final plans and specifications shall be subject to mutual approval by Landlord and Tenant; cost aspects of any changes required from time to time in the Approved Plans and Specifications, working drawings and/or final plans and specifications as a result of applicable law or governmental requirements, or at the insistence of any other third party whose approval may be required with respect to such improvements, or as a result of unanticipated conditions encountered in the course of construction, shall not require Tenant's approval or consent, but Tenant shall at all times have access to the details of the cost aspects of such changes (including estimates and actual expenses) for information purposes.

At any time up to thirty (30) days after the Commencement Date, Tenant shall be entitled to submit one or more lists to Landlord specifying any corrections of construction or decoration details, mechanical adjustments and other corrections that are required in order to cause the Improvements as constructed to conform to the Approved Plans in all material respects. Upon receipt of such list(s). Landlord shall promptly and diligently complete the corrective work described therein at Landlord's sole cost and expense.

In or about the forty-eighth (48th) month of the initial term of the Lease, Landlord shall make available to Tenant an additional improvement allowance of $75,000.00, which allowance shall be used by Tenant only for design and construction costs, of modifications and improvements in the Premises as Tenant may deem necessary or appropriate. Tenant shall construct any such modifications and improvements in accordance with the provisions of Article 9 of the Lease, and shall be entitled to be reimbursed by Landlord for the direct costs thereof up to a maximum aggregate reimbursement of $75,000.00. Such reimbursement shall, at Tenant's direction, be payable either directly to the person or entity providing services or materials in connection with the improvements or to Tenant (in which event Tenant shall be responsible for making full payment to the person or entity providing services or materials), shall be conditional upon Landlord's receipt of reasonable supporting documentation relating to the services or materials provided and the amounts claimed therefor, and, subject to the foregoing conditions, shall be paid by Landlord within thirty (30) days after receipt of the appropriate supporting information from Tenant.

Schedule I to Acknowledgment of Lease Commencement

Revised rent schedule under Section 3.1(a) of Lease (based on _____square feet in Premises):

Months	Monthly Minimum Rental	
1 - 12	$ --	($2.47 per square foot)
13 - 24	--	($2.53 per square foot)
15 - 36	--	($2.59 per square foot)
37 - 48	--	($2.65 per square foot)
49 - 60	--	($2.71 per square foot)
61 - 72	--	($2.78 per square foot)
73 - 84	--	($2.85 per square foot)
85 - 96	--	($2.55 per square foot)
97 - 108	--	($2.63 per square foot)
109 - 120	--	($2.70 per square foot)
121 - 132	--	($2.42 per square foot)

133 - 144	--	($2.50 per square foot)
145 - 156	--	($2.59 per square foot)
157 - 168	--	($2.68 per square foot)
169 - 180	--	($2.45 per square foot)

[STAMP]

EXHIBIT E

ACKNOWLEDGEMENT OF LEASE COMMENCEMENT

This Acknowledgment is executed as of December 1, 1998, by BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership ("Landlord"), and METAXEN, LLC, a Delaware limited liability company ("Tenant"), pursuant to Section 2.4 of the Build-to Suit Lease dated May 27, 1997 between Landlord and Tenant (the "Lease") and as amended by the First Amendment to Lease dated April 13, 1998, covering premises located at 280 East Grand Avenue. South San Francisco, CA 94080 (the "Premises").

Landlord and Tenant hereby acknowledge and agree as follows:

1. The Commencement Date under the Lease is September 1, 1998.

2. The termination date under the Lease shall be August 31,2013 subject to any applicable provisions of the Lease for extension or early termination thereof.

3. Based on the final cost of the Improvements and on any change orders, delays and other factors reflected in that cost, the amount due from Tenant to Landlord pursuant to the terms of the Lease and Exhibit C attached thereto is to be determined upon final receipt of Contractor invoices.

4. The square footage of the Premises and of the Building, measured in accordance with Section 3.1(b) of the Lease, is 50.195 square feet. Based on this square footage for the Premises, the rent schedule Under Section 3 of the First Lease Amendment is revised to read as set forth on Schedule 1 attached hereto.

5. Tenant accepts the Premises and acknowledges the satisfactory completion of all Improvements therein required to be made by Landlord, subject only to any applicable "punch list" or similar procedures specifically provided under the Lease or Under Exhibit C attached thereto.

EXECUTED as of the date first act forth above.

"Landlord"

BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership

By: BRITANNIA POINTE GRAND, LLC, a California limited liability company, General Partner

By: /s/ T. J. Bristow

T. J. Bristow
President & Manager

"Tenant"

METAXEN, LLC, a Delaware limited liability company

By: /s/ Michael J. Ross

Michael J. Ross
President & CEO

Schedule 1 to Acknowledgement of Lease Commencement Revised

rent schedule under Section 3.1(a) of Lease (based on 50,195 square feet in Premises):

Months	Monthly Minimum Rental	
1 - 12	141,113.00	($2.81 per square foot)
13 - 24	144,124.00	($2.87 per square foot)
15 - 36	147,136.00	($2.93 per square foot)
37 - 48	150,148.00	($2.99 per square foot)
49 - 60	153,159.00	($3.05 per square foot)
61 - 72	139,542.00	($2.78 per square foot)
73 - 84	143,056.00	($2.85 per square foot)
85 - 96	127,997.00	($2.55 per square foot)
97 - 108	132,013.00	($2.63 per square foot)
109 - 120	135.527.00	($2.70 per square foot)
121 - 132	121,472.00	($2.42 per square foot)
133 - 144	125,488.00	($2.50 per square foot)
145 - 156	130.005.00	($2.59 per square foot)
157 - 168	134,523.00	($2.68 per square foot)
169 - 180	122,978.00	($2.45 per square foot)

Exhibit 10.6

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE ("Amendment"), dated (for reference purposes) as of April 13, 1998, is entered into by BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership ("Landlord") and METAXEN, LLC, a Delaware limited liability company ("Tenant"), with reference to the following facts:

A. Landlord and Tenant are parties to a Build-in-Suit Lease dated May 27, 1997 (the "lease"), covering certain premises consisting of approximately 27,680 square feet of space (the "Premises") in Building H (the "Building") presently under construction in the Britannia Pointe Grand Business Park, South San Francisco, California (the "Center").

B. Tenant wishes to exercise its option under Section 1.1(c) of the Lease to expand the Premises to include the entire Building (approximately 50,195 square feet) and, in connection therewith, wish to amend certain provisions of the Lease to reflect such expansion of the Premises.

C. Terms used herein as defined terms but not specifically defined herein shall have the meanings assigned to such terms in the Lease.

NOW, THEREFORE, in consideration of the mutual agreements set forth herein and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. Expansion of Premises. The Premises are hereby expanded to include the entire Building of approximately 50,195 square feet, and Exhibit B to the Lease is hereby deemed to be amended to show the Premises as consisting of the entire Building, for purposes of this Amendment, the area added to the Premises by this Amendment is hereinafter referred to as the "Option Space." As part of the design process for the original Premises under the Lease, Landlord and Tenant have already agreed upon a space plan and detailed plans and specifications for improvements in the Option Space. As contemplated in Section 1.1(c) of the Lease, (a) Landlord shall proceed diligently to construct improvements to the Option Space in accordance with such plans and specifications, at Landlord's sole cost and expense (subject to the provisions of Section 3.1(c) of the Lease), (b) rent and other charges shall commence with respect to the Option Space upon the later to occur of (i)substantial completion of the improvements in the Option Space or (ii) the date on which rent and other charges commence with respect to the original Premises under the Lease, (c) as hereinafter set forth, rent payable under the Lease and Tenant's Operating Cost Share shall be adjusted to reflect the addition of the Option Space to the Premises, using the same rates and formulas per square foot as are applicable to the original Premises under the Lease, and (d) Tenant shall occupy the Option Space during the term of the Lease upon and subject to all of the terms and provisions of the Lease, to the same extent and in the same manner is such terms and provisions are applicable to the original Premises under the Lease.

2. Minimum Rental. The table of monthly minimum rental contained in Section 3.1(a) of the Lease is amended to read as follows:

[rest of page intentionally left blank]

Months	Monthly Minimum Rental
001-012	$123,982 ($2.47/sq ft)
013-024	126,993 ($2.53/sq ft)

025-036	130,005	($2.59/sq ft)
037-048	133,017	($2.65/sq ft)
049-060	136,028	($2.71/sq ft)
061-072	139,542	($2.78/sq ft)
073-084	143,056	($2.85/sq ft)
085-096	127,997	($2.55/sq ft)
097-108	132,013	($2.63/sq ft)
109-120	135,527	($2.70/sq ft)
121-132	121,472	($2.42/sq ft)
133-144	125,488	($2.50/sq ft)
145-156	130,005	($2.59/sq ft)
157-168	134,523	($2.68/sq ft)
169-180	122,978	($2.45/sq ft)

The foregoing minimum rental amounts are based upon an estimated area of 50,195 square feet for the Building and Premises, measured in accordance with Section 3.1(b) of the Lease. If the actual area of the Building and Premises, when completed, differs from such estimated area, then such minimum rental amounts shall be adjusted in accordance with such Section 3.1(b), which is hereby amended to reflect the foregoing change in the estimated area of the Building and Premises.

3. Additional Tenant Improvement Allowance: Additional Minimum Rent. Landlord agrees to increase the Tenant Improvement Allowance for the entire Building (presently set at $ 100 per square foot under Exhibit C to the Lease) by an additional $15.00 per square foot, for an aggregate increase of Seven Hundred Fifty-Two Thousand Nine Hundred Twenty-five Dollars ($752,925), assuming a total estimated area of 50,195 square feet for the Building. As part of the consideration for such Increased Tenant Improvement Allowance. Tenant agrees to pay to Landlord as additional minimum rent, for each of the first sixty (60) months of the term of the Lease, the sum of Seventeen Thousand One Hundred Thirty-One Dollars ($17,131) per month, representing the equivalent of an amortization of such Increased Tenant Improvement Allowance over five (5) years with an imputed return factor of thirteen percent (13%) per annum.

4. Additional Warrants. In accordance with Section 4.1(b) of the Lease, Tenant shall issue to Landlord's nominees (as hereinafter identified), within thirty (30) days after execution of this Amendment, additional warrants registered in the name of such nominees for the acquisition of 100,000 shares of Tenant's Class D Preferred Shares, which warrants shall be identical in form to, and shall have the same terms, exercise price and registration tights as, the warrants issued or issuable by Tenant pursuant to Section 4.1(a) of the Lease with respect to the original Premises. Landlord's nominees, and the allocation of the additional warrants among them, are as follows:

Slough Estates USA Inc.	90,000 shares
Bristow Investments, L.P.	8,000 shares
Laurence S. Shushan and Magdalena Shushan, Trustees of The Laurence and Magdalena Shushan Family Trust, under agreement dated October 8, 1997	2,000 shares

5. Tenant's Operating Cost Share. Tenant's Operating Cost Share under Section 7.1(a) of the Lease is amended to twenty-two and one-tenth percent (22.1%), based upon an estimated area of 50,195 square feet for the Building and Premises and an estimated area of 227,068 square feet for the buildings owned by Landlord on die Property (Buildings D, E, F, G and H). If the actual area of the Building and Premises (when completed) or of the buildings owned from time to time by Landlord on the Property differ from these estimated

numbers, then Tenant's Operating Cost Share shall be adjusted in accordance with Section 7.1(b) of the Lease, which is hereby amended to reflect the foregoing changes in the estimated or assumed areas of the Building and Premises and of the buildings owned by Landlord on the Property.

6. Landlord's Notice Address. Effective immediately, the notice address for Landlord under Section 19.1 of the Lease is changed to the following:

Britannia Pointe Grand Limited Partnership
1939 Harrison Street, Suite 715
Park Plan Building
Oakland, CA 94612
Attn: T. J. Bristow
Facsimile: (510) 834-7133

7. Full Force and Effect. Except as expressly set forth herein, the Lease has not been modified or amended and remains in full force and effect.

IN WITNESS WHEREOF, Landlord and Tenant have executed this First Amendment as of the date first set forth above.

"Landlord"	"Tenant"
BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership	METAXEN, LLC, a Delaware limited liability company
By: BRITANNIA POINTE GRAND, LLC, a California limited liability company, General Partner	By: /s/ Michael J. Ross Michael J. Ross President & CEO
By: /s/ T. J. Bristow T. J. Bristow President Chief Financial Officer	By: /s/ Marlene Mc New Its: Director of Finance & Administration

Exhibit 10.7

SUBLEASE AGREEMENT

This Sublease Agreement (this "Sublease") dated May 1, 1998, for reference purposes only, is entered into by and between METAXEN LLC, a Delaware limited liability company ("Sublessor") and CYTOKINETICS, INC., a Delaware corporation ("Sublessee"), and is subject to the terms and conditions of that certain Build-To-Suit Lease ("Master Lease") dated May 27, 1997 (as amended by that certain First Amendment to Lease dated _____ , 1998 (the "First Amendment")) entered into by BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a California limited partnership ("Master Lessor"), as Landlord, and Sublessor as Tenant. A copy of the Master Lease is attached hereto as Exhibit "A".

1. Premises. Sublessor hereby leases to Sublessee, and Sublessee hereby hires from Sublessor, on and subject to the terms and conditions hereinafter set forth, the following premises (the "Sublease Premises"), situated in the City of South San Francisco, County of San Mateo, State of California, commonly known as a portion of the ground floor of Building H (the "Building") in the Britannia Pointe Grand Business Park (the "Center") and consisting of approximately thirteen thousand seven hundred fifty (13,750) leasable square feet. The Sublease Premises are more particularly described in Exhibit "B", attached hereto, and incorporated herein by this reference. The Sublease Premises include the laboratory benches, water systems, fume hoods, laminar flow hoods and other laboratory support space as specified in Exhibit "B-1", attached hereto, and incorporated herein by this reference. Sublessee shall have the right to use the Common Areas as described in the Master Lease, subject to the rights of Master Lessor, Sublessor and other tenants of the Center.

2. Sublease Term; Delivery of Possession.

a. Term. The term of this Sublease shall begin on the later of (i) the date Sublessor delivers possession of the Sublease Premises to Sublessee, or (ii) September 1, 1998 ("Commencement Date") and end on August 31, 2000 ("Expiration Date") unless sooner terminated pursuant to any provision hereof or of the Master Lease (the "Term"). Subject to the provisions of section 2(b)(1) below, in the event that Sublessor fails to deliver possession of the Sublease Premises to Sublessee prior to December 1, 1998, at Sublessee's request, Sublessor shall return any payments made by Sublessee to Sublessor within five (5) business days of such notification, and this Sublease shall thereafter be null and void, and of no further force and effect. Any extension beyond the Expiration Date must be in a writing signed by both parties on or before one hundred twenty (120) days prior to the Expiration Date. In no event shall the term of this Sublease extend beyond the expiration of the Master Lease.

b. Delivery of Possession.

(1) Notwithstanding said Commencement Date, if for any reason Sublessor cannot deliver possession of the Sublease Premises to Sublessee on said date, Sublessor shall not be subject to any liability therefore, nor shall such failure affect the validity

of this Sublease or the obligations of Sublessee hereunder or extend the term hereof, but in such case Sublessee shall not be obligated to pay rent until possession of the Sublease Premises is tendered to Sublessee; provided, however, that if Sublessor shall not have delivered possession of the Sublease Premises on or before December 1, 1998, Sublessee may, at Sublessee's option, by notice in writing to Sublessor within ten (10) days thereafter, cancel this Sublease, in which event the parties shall be discharged from all obligations hereunder. In addition, if Sublessee shall fail to deliver to Sublessor a schedule of improvements, along with plans and specifications thereto (including projected costs) reasonably acceptable to Sublessor on or before sixty (60) days following

the execution of this Sublease, Sublessor, in its discretion, may terminate its obligations under this Sublease at any time.

(2) Sublessor will deliver the Sublease Premises subject to all-applicable zoning, municipal, county and state laws, ordinances and regulations governing and regulating the use of the Sublease Premises, and Sublessee accepts the Sublease Premises subject thereto. Sublessee shall accept the Sublease Premises in broom clean condition and otherwise "as is". Notwithstanding the foregoing, Sublessor represents and warrants to Tenant that, as of the Commencement Date, the Sublease Premises, including any improvements made by Master Lessor shall be operational as designed and Building services serving the Sublease Premises shall be operational as designed. If, during the first sixty (60) days of the Term hereof, Sublessee notifies Sublessor of any defects in the condition of the Sublease Premises, Sublessee shall have no obligation to repair such defects upon the expiration or earlier termination of this Sublease and Sublessor shall promptly notify Master Lessor, if it is the responsibility of Master Lessor, or if the responsibility of Sublessor, shall promptly commence the repair of any such defect. Sublessor shall assign its rights or, alternatively, shall itself enforce such rights pursuant to any manufacturer or other warranty covering the Sublease Premises.

(3) Sublessor and Sublessee shall conduct a walk-through inspection of the Sublease Premises prior to the Commencement Date, and if the building systems in the Sublease Premises are found not to be in good and working condition, a "punchlist" shall be developed identifying those areas of repairs which are necessary to bring such building systems into good and working condition and Sublessor shall immediately notify Master Lessor of the need of such repairs, unless the repairs are the responsibility of Sublessor, in which case Sublessor shall promptly commence such repair. Sublessor shall use its reasonable efforts if necessary to compel Master Lessor to make such repairs (if such repairs are the obligation of Master Lessor)

c. Early Possession. In the event Sublessee, with Sublessor's consent, takes possession of the Sublease Premises prior to the Commencement Date, such occupancy shall be subject to all the provisions of this Sublease, shall not advance the termination date of this Sublease, and Sublessee shall pay Base Rent for the period prior to the Commencement Date at the Base Rent prescribed for the initial month of the Sublease term, prorated at the rate of 1/30th thereof per day. If Sublessor consents to entry by Sublessee for the purpose of installing furniture, equipment, telephone and computer systems, and the like and/or for temporary staging

or storage of Sublessee's property, such entry shall not trigger an obligation to pay Base Rent prior to the Commencement Date.

3. Rent. Sublessee shall pay to Sublessor no later than the first day of each calendar month of the Term of this Sublease without deduction, set off, prior notice or demand, as rent for the Sublease Premises, monthly rent ("Base Rent") as set forth in the rent schedule below, and subject to the terms and provisions of section 3.2 of the Master Lease.

Rent Schedule

Time Period	Base Rent Per Month
Months 1-12	$3.80 per sq. ft./mo., or $52,250.00
Months 13-24	$3.90 per sq. ft./mo., or $53,625.00

Sublessor and Sublessee each hereby acknowledge and agree that the parties hereto intend this Sublease to be on a "full-service" basis and Sublessee shall

only be responsible to pay Base Rent and no other operating costs or service expenses.

4. Security Deposit

a. Letter of Credit. Contemporaneously with the execution of this Sublease, Sublessee shall deliver to Sublessor an irrevocable letter of credit (the "Letter of Credit") issued by a Bank containing the terms and provisions set forth herein. "Bank" shall mean a financial institution selected by Sublessee and reasonably and previously approved by Sublessor. The Letter of Credit shall initially be in the amount of Three Hundred Thirteen Thousand Five Hundred Dollars ($313,500.00) (the "LC Amount"), which is equal to six (6) months rent under the Rent Schedule, above. The LC Amount shall be reduced to One Hundred Fifty-Six Thousand Seven Hundred Fifty Dollars ($156,750.00) following the six (6) month anniversary of the Commencement Date. The Letter of Credit shall be terminated following the one (1) year anniversary of the Commencement Date and no further renewal shall be required. The term of the original Letter of Credit shall expire (the "LC Expiration Date") one (1) year prior to the Expiration Date. The Letter of Credit, or any replacement thereof, shall be in a form and content reasonably acceptable to Sublessor. Sublessor may reject the form and content of the original letter of Credit if the form to be utilized would in any manner make it more difficult for Sublessor to draw down upon the Letter of Credit, or if the credit rating of the issuing bank is not reasonably satisfactory to Sublessor. The proceeds of the cashing of the Letter of Credit in the event of default, beyond any applicable cure period (as hereinafter defined), shall be held by Sublessor as an additional security deposit and shall be applied by Sublessor to the rent due and payable for the last six (6) months of the Term. If Sublessee defaults with respect to any provision of this Sublease, Sublessor may use, negotiate, draw down, apply or retain all or any part of the Letter of Credit or Security Deposit for the payment of any Rent or other sum in default, for the payment of any amount which Sublessor may expend or become obligated to expend by reason of such Sublessee's

default, or to compensate Sublessor for any loss or damage which Sublessor may suffer by reason of Sublessee's default. If any portion of the Letter of Credit or Security Deposit is used or applied, Sublessee shall replenish the Letter of Credit to an amount equal to the then applicable face amount, within five (5) days after written demand therefor by Sublessor. Sublessor shall not be required to keep the any cash portion of the Security Deposit separate from its general funds, or to pay any interest thereon.

b. Security Deposit. Concurrently herewith, Sublessee shall deposit One Hundred Four Thousand Five Hundred Dollars and No/100 ($104,500.00) with Sublessor as security for Sublessee's performance of its obligations under the terms of this Sublease. Sublessor shall not be required to keep the any cash portion of the Security Deposit separate from its general funds, or to pay any interest thereon. The Security Deposit shall be held by Sublessor and may be applied by Sublessor in accordance with the provisions of Article 18 of the Master Lease.

5. Use.

a. Permitted Use. The Sublease Premises shall be used and occupied only for office, biotechnology/pharmaceutical research and development, manufacturing, warehousing related to such uses, and other permitted uses under the Master Lease. Sublessee shall use and occupy the Sublease Premises in accordance with the Master Lease, including, but not limited to Section 11.6, thereof.

b. No Representations or Warranties. Sublessee acknowledges that neither Sublessor nor Sublessor's agents have made any representation or warranty as to the suitability of the Sublease Premises for the conduct of Sublessee's business.

6. Master Lease.

a. Sublease is Subordinate to Master Lease. This Sublease is subject and subordinate to the Master Lease. Sublessee shall not commit or permit to be committed on the Sublease Premises any act or omission which shall violate any terms or condition of the Master Lease. If the Master Lease terminates, this Sublease shall terminate. Sublessor shall have no liability to Sublessee, if the Master Lease terminates without fault of Sublessor. Sublessor hereby represents and warrants to Sublessee that (i) Sublessor knows of no claims or defenses or circumstances which, with the passage of time, would lead to claims or defenses by Master Lessor against Sublessor as tenant under the Master Lease; (ii) this Sublease, if consented to by Master Lessor as provided for herein, does not violate any provision of the Master Lease, and (iii) no provision of this Sublease is in violation of the terms of the Master Lease. Sublessor hereby covenants and agrees that, without the prior written consent of Sublessee, which consent shall not be unreasonably withheld or delayed, Sublessor shall not (i) terminate the Master Lease, (ii) amend or otherwise modify the terms of the Master Lease, unless such modification would apply only to a matter that would take effect only after the Expiration Date (or earlier termination of this Sublease), or (iii) willfully breach the terms of the Sublease or the Master

Lease. Sublessor hereby agrees to perform its obligations as tenant under the Master Lease if and to the extent those obligations are not assumed by Sublessee pursuant to the terms of this Sublease.

b. Application of Master Lease Provisions. Except as otherwise expressly provided in this Sublease, Sublessee shall assume and perform, with respect to the Sublease Premises, the obligations of the Sublessor as Lessee under the Master Lease. Therefore, except as otherwise provided, for the purpose of this Sublease, wherever in the Master Lease "Landlord" is used, it shall be deemed to mean the Sublessor herein, and wherever in the Master Lease "Tenant" is used, it shall be deemed to mean the Sublessee herein, and wherever in the Master Lease "Lease" is used, it shall be deemed to mean this Sublease.

c. Incorporation of Master Lease Provisions.

(1) All of the terms and conditions in the Master Lease, as they relate to the Sublease Premises, are incorporated herein except for: Sections 1.3 (First Refusal); 2.1 (Term); 2.6 (Option to Extend); 3.1 (Minimum Rent); 6.2 (Real Property Taxes); 7 (Operating Expenses); 8.1 (Payment of Utilities); Tenant's obligation for HVAC repair and entry into a service contract under 10.2(a); 12.1(b); 19.1 (Notices), 19.16 (Memorandum of Lease), Articles 4 (Stock Warrants), 5 (Construction) and Article 18 (Security Deposit), the First Amendment to Lease as it pertains to warrants, and Exhibit C.

(2) Except as otherwise provided herein, Sublessor is responsible for all financial obligations under the Master Lease.

d. Indemnity. Except to the extent caused by Sublessor's, or Sublessor's agents', employees' or invitees' negligence or willful misconduct, Sublessee shall indemnify and hold Sublessor harmless against and from all liability, judgments, costs, damages, claims or demands, including reasonable attorney's fees, arising out of Sublessee's failure to comply with or perform Sublessee's obligations under this Sublease, including, but not limited to, Sublessee's obligation to immediately disclose any violations of the warranty as set forth in section 6.f, below.

e. Master Lease in Effect. Sublessor represents to Sublessee that the Master Lease is in full force and effect and that, to Sublessor's knowledge, no default exists on the part of any party to the Master Lease. Subject to the terms and provisions of this Sublease, Sublessor agrees to keep the Master Lease in full force and effect during the term of this Sublease, subject, however, to any earlier termination of the Master Lease without the default of Sublessor.

f. Warranty. Section 5.2 of the Master Lease creates a

warranty in favor of Sublessor. Sublessee shall immediately provide Sublessor with written notification of any violation of the warranty in Section 5.2.

g. To the extent that any financial terms contained in this Sublease that are applicable to Sublessor and Sublessee only conflict with similar provisions in the Master Lease, this Sublease shall prevail.

7. Operating Expenses. At no time prior to the Expiration Date, is Sublessee required to pay as additional rent the amounts for which Sublessor is liable to Master Lessor pursuant to Article 7 (Operating Expenses) of the Master Lease. In addition, until the Expiration Date, Sublessee shall have no liability for any utilities it consumes in the Premises. The parties hereto hereby acknowledge that this Sublease is on a "full service" basis and Sublessee shall not be responsible for any operating costs or expenses, insurance or taxes.

8. Alterations. Notwithstanding the provisions of Article 9 of the Master Lease, any alteration, which requires Master Lessor's approval pursuant to the Master Lease, shall not be commenced by Sublessee unless and until such consent is obtained. At the time Sublessor and Master Lessor consent to any alteration, additions or improvements, Sublessor and Master Lessor shall inform Sublessee in writing whether Sublessee is responsible for the removal of such alterations and improvements at the expiration or earlier termination of the term of this Sublease, provided that Sublessee, in its request for consent to the alteration, addition, or improvement, has expressly requested that Sublessor and Master Lessor specify the nature and extent of any such removal obligation. If such notification is not made, Sublessee shall have no responsibility to remove any such alteration or improvement at the expiration or earlier termination of this Sublease. Any alteration made by Sublessee shall become a part of the Sublease Premises, and at Sublessor's election, shall be surrendered to Sublessor at the end of the Sublease term. Any alteration made by Sublessee shall, at Sublessor's election become Sublessor's property throughout the Sublease term except for any specialized improvements installed by Sublessee (which improvements shall be part of Sublessee's Equipment and Alterations, as defined in Exhibit B-l), which improvements shall remain the property of Sublessee and which improvements shall be removed by Sublessee at the expiration or earlier termination hereof. In the event Sublessor is (or becomes) obligated under the Master Lease to remove any of Sublessee's alterations, Sublessee shall be obligated to remove same at Sublessee's sole cost and expense and to restore the Sublease Premises to its condition prior to the alteration but only to the extent required by Sublessor or Master Lessor in their written consent to any such alteration. In the event that Sublessee removes any items it is permitted to remove under Exhibit B-l, Sublessee, at its sole cost and expense, shall restore the Sublease Premises to its condition prior to alteration.

9. Repairs. Pursuant to the Master Lease, Master Lessor is responsible to repair and maintain the roof (structural portions only), exterior walls and other structural portions of the Building and the Common Areas. As to such matters, Sublessor's sole obligation to Sublessee shall be to request performance of such obligations by Master Lessor. In the event Master Lessor breaches its obligations, Sublessor will assign to Sublessee its right to enforce such obligation and shall otherwise cooperate with Sublessee in connection therewith, provided, however, Sublessee, at its sole cost and expense, shall be responsible for enforcement thereof without reimbursement from Sublessor. Sublessee, not Master Lessor, shall be responsible for the repair

of the roof and structural portions of the Building to the extent the need for maintenance or repair is caused by the negligence or willful misconduct of Sublessee, in which case Sublessee shall pay to Sublessor the cost of (including reasonable overhead expense of Sublessor) the maintenance and repairs caused by Sublessee (except (i) to the extent the damage is covered by any insurance maintained by Master Lessor or Sublessor, or, (ii) if Master Lessor fails to maintain the insurance required to be maintained by Master Lessor pursuant to the terms of the Master Lease, to the extent the damage would have been covered

by insurance, if Master Lessor had maintained the required insurance). There shall be no abatement of Base Rent and no liability of Master Lessor or Sublessor by reason of any injury to or interference with Sublessee's business arising from the making of any repairs, alterations or improvements in or to the fixtures, appurtenances and equipment therein, provided that Sublessor shall request Master Lessor to use reasonable efforts to minimize the interruption of Sublessee's use and occupancy of the Sublease Premises in connection with its performance of the repairs and maintenance (although nothing contained herein shall be deemed to obligate Master Lessor to pay any overtime costs in order to minimize such interference, or otherwise to perform the repairs or maintenance during hours other than normal business hours). As to all matters that neither Master Lessor nor Sublessee is required to maintain or repair under the Master Lease or this Sublease, as the case may be, Sublessor shall be responsible therefore, and shall promptly and regularly maintain and repair the Sublease Premises. Notwithstanding anything to foregoing, any damage caused by the negligence or willful misconduct of Sublessee, shall promptly be repaired by Sublessee, at Sublessee's own cost and expense, and in a manner reasonably acceptable to Master Lessor and Sublessor.

10. Insurance.

a. Sublessee shall maintain commercial general liability insurance coverage as required by section 12.1 (a) of the Master Lease (but prorated based upon the Sublease Premises to the Premises under the Master Lease) which has been incorporated into this Sublease by reference. Each policy of insurance, which Sublessee is required to maintain pursuant to this Lease, shall name both Sublessor and Master Lessor (as well as Master Lessor's general partners and Managing Agent) as additional insureds (including cross-liability endorsements). Sublessee's insurance coverage shall be primary and non-contributory as respects any insurance maintained by Sublessor and/or Master Lessor. Sublessee shall deliver evidence of the coverage required hereunder (i) thirty (30) days prior to occupancy and (ii) within ten (10) days of the renewal date for each policy of insurance required hereunder.

b. Pursuant to the terms of the Master Lease as provided in Section 12.1(b) thereof, Master Lessor is obligated to maintain certain insurance coverage with respect to certain perils. Sublessor's sole obligation to Sublessee with respect to Master Lessor's obligations pursuant to said Section 12.1(b) shall be to request performance of such obligations by Master Lessor. In the event Master Lessor breaches its obligations, Sublessor will assign to Sublessee its right to enforce such obligation and shall otherwise cooperate with Sublessee in connection therewith, provided, however, Sublessee, at its sole cost and expense, shall be responsible for

enforcement thereof without reimbursement from Sublessor. In the event Sublessor cannot assign such rights, Sublessor shall diligently enforce its rights as Tenant under the Master Lease,

11. Damage or Destruction.

a. Master Lessor Has Obligation to Restore. If the Sublease Premises are damaged or destroyed, Master Lessor has the obligation pursuant to Article 15 of the Master Lease to repair the Sublease Premises unless Master Lessor has the right to terminate. If Master Lessor fails to perform its obligations pursuant to Article 15 of the Master Lease, Sublessor's sole obligation to Sublessee shall be to request performance of such obligations by Master Lessor. In the event Master Lessor breaches its obligations, Sublessor will assign to Sublessee its right to enforce such obligation, provided, however, Sublessee, at its sole cost and expense, shall be responsible for enforcement thereof without reimbursement from Sublessor. In the event' Sublessor cannot assign its rights, Sublessor shall diligently enforce its rights under the Master Lease.

b. Termination of Master Lease. If the Master Lease terminates pursuant to Article 15 of the Master Lease, this Sublease shall terminate concurrently with the termination of the Master Lease.

c. Sublessee Notice; Right to Terminate. Within twenty (20) days following written request from Sublessor, Sublessee shall give notice to Sublessor in writing whether Sublessee agrees to continue this Sublease in effect if Master Lessor reasonably determines that the repair of the Sublease Premises or the Building cannot be completed within three hundred sixty five (365) days after the casualty. If Sublessee does not so agree to continue this Sublease in effect then this Sublease shall terminate. If Sublessee agrees to continue this Sublease in effect as aforesaid, then Sublessor shall have no right to exercise its right (if any) to terminate the Master Lease or this Sublease. If (i) Master Lessor reasonably determines that the repair of the Sublease Premises or the Building cannot be completed within three hundred sixty five (365) days after the casualty, (ii) neither Master Lessor nor Sublessor have elected to terminate the Master Lease, and (iii) Sublessee agrees to continue this Sublease in effect notwithstanding the time to reconstruct, then this Sublease shall continue in effect, and Sublessee shall fulfill all of the obligations of Sublessor pursuant to the provisions of Article 15 of the Master Lease, as it pertains to the Sublease Premises.

d. Limited Obligation to Repair. Master Lessor's obligation, should Master Lessor elect or be obligated to repair or rebuild, shall be limited to the terms and conditions of the Master Lease. Master Lessor shall have no obligation to replace or restore the Sublessee Equipment and Alterations (as described in Exhibit B-1) or any other alterations installed by Sublessor or Sublessee, unless specifically required by the Master Lease.

e. Abatement of Rent. Rent under this Sublease shall abate to the same extent as the Rent owing by Sublessor under the Master Lease abates during any casualty repair period.

f. Damage Near End of Term. In addition to the rights to terminate specified in subsection 11.c of this Sublease, either Sublessor or Sublessee shall have the right to cancel and terminate this Sublease as of the date of the occurrence of destruction or damage if the Sublease Premises or the Building is substantially destroyed or damaged (i.e., there is damage or destruction which Sublessor reasonably determines would require more than sixty (60) days to repair) and made untenantable during the last twelve (12) months of the term of the Master Lease. Sublessor or Sublessee, as applicable, shall give written notice of its election to terminate this Sublease under this subsection f. within thirty (30) days after Master Lessor or Sublessor determines that the damage or destruction would require more than sixty (60) days to repair. If either Master Lessor or Sublessor elects to terminate the Master Lease pursuant to Article 15 of the Master Lease, this Sublease shall terminate concurrently with the termination of the Master Lease. If neither Master Lessor nor Sublessor terminates the Master Lease and if neither Sublessor nor Sublessee elects to terminate this Sublease, the repair of the damage shall be governed by Article 15 of the Master Lease.

g. Insurance Proceeds. If this Sublease is terminated, Master Lessor and Sublessor may each keep all their respective insurance proceeds resulting from the damage except for those proceeds, if any, which specifically insured Sublessee's personal property and trade fixtures which Sublessee has a right or obligation to remove upon the expiration of the Sublease term. Sublessor shall be entitled to receive from Sublessee the proceeds of insurance carried by Sublessee with respect to Sublessee Improvements or other alterations installed in the Sublease Premises by Sublessor or at Sublessor's expense. To the extent that Sublessee has paid for any alterations regardless of whether the alterations may become the property of Sublessor upon termination of this Sublease, Sublessee shall receive any portion of the insurance proceeds payable with respect to the then unamortized cost (based on a 2 year life of the alteration on a straight line amortization schedule) for the applicable alterations, reduced by the amounts necessary to pay off any equipment lease or other lien against the applicable alteration, and the balance of the proceeds, if any, will be payable to Sublessor. With respect to those Alterations, which Sublessee is obligated to remove at the end of the Sublease term which are the property of Sublessee, all proceeds of any

insurance, carried by Sublessor or Sublessee shall be paid to Sublessee.

h. Uninsured Casualty. If the Master Lease terminates pursuant to the provisions of Article 15 of the Master Lease, this Sublease shall terminate.

12. Eminent Domain. If all or any part of the Sublease Premises is taken for public or quasi-public use by a governmental authority under the power of eminent domain or is conveyed to a governmental authority in lieu of such taking, and if the taking or conveyance causes the remaining part of the Sublease Premises to be untenantable and inadequate for use by Sublessee for the purpose for which they were leased, then Sublessee, at its option and by giving notice within fifteen (15) days after the taking, may terminate this Sublease as of the date Sublessee is required to surrender possession of the Sublease Premises. If a part of the Sublease Premises is taken or conveyed but the remaining part is tenantable and adequate for Sublessee's use in

Sublessee's reasonable determination, then this Sublease shall be terminated as to the part taken or conveyed as of the date Sublessee surrenders possession. All compensation awarded for the taking or conveyance shall be the property of Master Lessor and Sublessor, as their interests may appear, and Sublessee hereby assigns to Sublessor all its right, title and interest in and to the award, unless the governmental authority makes only one (1) award, and the award contains compensation for the value of moving expenses, Sublessee's personal property, trade fixtures and alterations (including the Sublessee Improvements), Sublessee's Equipment and Alterations, in which case, subject to the rights of any mortgagee or beneficiary of a deed of trust holding a lien on the Property and to Master Lessor's rights under the Master Lease, Sublessee shall be entitled to the compensation paid for Sublessee's moving expenses, trade fixtures, personal property, Sublessee's Equipment and Alterations, and the portion of the award attributable to the then unamortized cost of alterations and improvements constructed at Sublessee's expense (which are to be amortized on a straight line basis over the initial term of this Sublease). Sublessee shall have the right, however, to recover from the governmental authority, but not from Sublessor or Master Lessor, except as provided in the preceding sentence, such compensation as may be awarded to Sublessee on account of the interruption of Sublessee's business, moving and relocation expenses and removal of Sublessee's trade fixtures and personal property.

13. Assignment and Subletting. Notwithstanding any pro vision of this Sublease to the contrary, if Sublessor consents to a sublet, Sublessee shall pay to Sublessor on a monthly basis as additional Rent, on the date Base Rent is due, an amount equal to fifty percent (50%) of the amount by which the rent payable to Sublessee ("Subrent") under the sublease exceeds the rent due for the applicable portion of the Sublease Premises after deducting from the Subrent (A) the actual out-of pocket costs incurred by Sublessee for brokerage commissions and tenant concessions (which concessions are not reflected in the reduced Subrent) and (B) the costs of any additional improvements constructed by Sublessee in connection with the sublease (amortized on a straight line basis over the term of the sublease). Notwithstanding the foregoing, Sublessee may assign this Sublease or sublet any portion of the Sublease Premises without Sublessor's or Master Lessor's consent to any of the following (i) any corporation which controls, is controlled by or under common control with Sublessee; (ii) any corporation resulting from the merger or consolidation of Sublessee; and (iii) any person or entity which acquires all of the assets of Sublessee as a going concern of the business that is being conducted on the Sublease Premises (collectively, "Sublessee Affiliate"), provided that such assignee assumes in full the obligations of Sublessee under the Sublease. Any right of Sublessor or Master Lessor to terminate the Sublease OF the Master Lease in response to a requested assignment or subletting shall not apply to an assignment of the Sublease or a subletting of the Sublease Premises to a Sublessee Affiliate. Sublessee shall have the same assignment and sublease rights and limitations as provided in section 13.1 of the Master Lease.

14. Access to Premises. Master Lessor shall have the same right of access to the Sublease Premises as Sublessor which right of access is described

in Section 14 of the Master Lease.

15. Surrender at End of Term. Upon expiration or termination of this Sublease, Sublessee shall surrender the Sublease Premises to Sublessor in good and sanitary order, except for any alterations Sublessee is not required to remove, normal wear and tear, acts of God, damage, destruction (except to the extent Sublessee is obligated to restore the same under this Sublease) and eminent domain covered by the provisions of this Sublease. Sublessee shall remove from the Sublease Premises all of Sublessee's personal property and trade fixtures, Sublessee's Equipment and Alterations, and any alterations and improvements Sublessee is required to remove pursuant to Sublessor's or Master Lessor's written consent to such alterations and improvements, and shall repair all damage caused by the removal. Except to the extent caused by Sublessor's or Master Lessor's or their agents', employees' or invitees', negligence or willful misconduct, Sublessee shall indemnify Sublessor against all loss or liability resulting from delay by Sublessee in so surrendering the Sublease Premises, including without limitation, any claims made by any succeeding tenant, losses to Sublessor due to lost opportunities to lease to a succeeding tenant, and reasonable attorneys' fees and costs. Sublessee shall have no obligation to remove any fixtures, alterations, or personal property placed or installed in the Sublease Premises prior to the Commencement Date hereof.

16. Sublessor Indemnity re: Hazardous Materials.

a. Sublessor will provide to Sublessee copies of the documents referred to in section 17.4 of the Master Lease.

b. Sublessee shall indemnify, defend and hold Sublessor harmless from and against any claim, damage, loss, liability, cost or expense (including reasonable attorneys' fees) arising out of any spill or release of any Hazardous Substance (as defined in Section 11.6 of the Master Lease which has been incorporated by reference into this Sublease) on or about the Sublease Premises by Sublessee, its employees, agents or contractors during the period of time Sublessee has occupied the Sublease Premises.

c. Sublessor is entitled to indemnification from the Master Lessor under certain circumstances as provided in Section 11.6 of the Master Lease. To the extent such indemnification may apply to the benefit of Sublessee, Sublessor agrees to cooperate with Sublessee to enforce such indemnity obligation against Master Lessor; provided, however, Sublessee shall pay any and all costs incurred by Sublessor or Sublessee in connection with the enforcement thereof for the benefit of Sublessee.

17. Signs. Master Lessor shall have the same approval rights with respect to signs as Sublessor; Sublessor shall use its best efforts to obtain Master Lessor's approval of signage rights reasonably satisfactory to Sublessee, so long as such rights do not unreasonably interfere with the rights of Sublessor under the Master Lease.

18. Holding Over. This Sublease shall terminate without further notice at the expiration of the Sublease term. Any holding over by Sublessee after expiration or sooner

termination of this Sublease without the consent of Sublessor shall be construed to be a tenancy at sufferance. Base Rent for the Sublease Premises during any tenancy at sufferance, or if Sublessor shall have consented to Sublessee's holding over, shall be at a rate equal to 150% of the Base Rent for the last month of the term, and shall otherwise be on the terms and conditions herein specified insofar as applicable.

19. Brokers. For purposes of Section 19.15 of the Master Lease as incorporated into this Sublease, Vertex Real Estate Group ("Broker") is the only broker to whom a commission is owing, which commission shall be paid by Sublessor, as follows: 3% of the total rental for the first 12 months in which

rent is to be paid, which shall be paid on the Commencement Date, and then 3% of the total rental for the second 12 months in which Base Rent is to be paid, and shall be payable on or before January 5, 1999. Sublessor and Sublessee each warrants and represents for the benefit of the other that it has had no dealings with any real estate broker or agent other than Broker in connection with the negotiation of this Sublease, and that it knows of no real estate broker or agent other than Broker who is or might be entitled to a real estate brokerage commission or finder's fee in connection with this Sublease. Sublessor and Sublessee warrant and represent that they have dealt with no real estate broker in connection with this Sublease other than Broker.

a. Broker Disclaimer. Sublessor and Sublessee agree and accept that, except as otherwise expressly stated herein, Broker has not made any investigation, determination, warranty or representation with respect to any of the following: (a) the legality of the present or any possible future use of the Sublease Premises under any federal, state or local law; (b) the physical condition or square footage of the Sublease Premises; (c) the terms of the Master Lease or any other relevant legal document or agreement; or (d) the presence or location of any hazardous materials on or about the property in which the Sublease Premises are located (including, but not limited to, asbestos, PCB's, other toxic, hazardous or contaminated substances, and underground storage tanks).

b. Acknowledgement: The parties acknowledge that they are not relying on information from Broker relating to the field of toxic materials, hazardous waste, underground tanks, and asbestos contamination, location of the property within or outside a specific flood zone or special studies seismic area, nor the property's compliance with the guidelines as set forth in the Americans with Disabilities Act (ADA) regarding the determination of the condition of the subject Premises, but rather from their own independently initiated investigations.

20. Notices. All notices or demands of any kind required to be given by Sublessor or Sublessee hereunder shall be in writing and shall be deemed delivered forty-eight (48) hours after depositing the notice or demand in the United States Mail, certified or registered, postage prepaid, addressed to the Sublessor or Sublessee respectively at the addresses set forth after their signatures at the end of this Sublease. Either party may change its address by written notice to the other party in accordance with this Section 20, All Base Rent shall be paid by Sublessee to Sublessor at the same address.

21. Condition To Effectiveness of This Sublease. This Sublease is contingent upon Sublessor obtaining the written consent of the Master Lessor to this Sublease within 15 days of the date hereof. Sublessor and Sublessee acknowledge and agree that in granting such consent, notwithstanding any other provisions contained in or implied in this Sublease, Master Lessor shall not be deemed or construed (a) to have released Sublessor from any responsibility for the full and timely performance of all obligations of Sublessor as Tenant under the Master Lease as it pertains to the Sublease Premises, nor (b) to have authorized Sublessor to act on Master Lessor's behalf in exercising or waiving any rights, remedies or privileges of Master Lessor as Landlord under the Master Lease as it pertains to the Sublease Premises, nor (c) to have assumed, incurred or undertaken any obligations or liabilities running directly to Sublessee with respect to the Sublease Premises, it being the explicit intention and understanding of the parties that notwithstanding the incorporation by reference of substantially all of the Master Lease into this Sublease, Master Lessor and Sublessor shall look solely to one another for the performance of their respective obligations with respect to the Sublease Premises as Landlord and Tenant under the Master Lease, and that Sublessor and Sublessee shall look solely to one another for the performance of their respective obligations with respect to the Sublease Premises under this Sublease. Nothing in this Section 21 is intended, however, to preclude Sublessee from enforcing, by direct action against Master Lessor, any rights of Sublessor under the Master Lease to the extent such rights are expressly assigned by Sublessor to Sublessee pursuant to this Sublease.

22. Sublessee Improvements. Sublessor, at Sublessor's sole cost and expense and not later than December 1, 1998, shall cause to be performed the work (the "Sublessee Improvements"), as shown on Exhibit B, attached hereto.

23. Authority. Each person executing this Sublease on behalf of a party hereto represents and warrants that he or she is authorized and empowered to do so and to thereby bind the party on whose behalf he or she is signing.

24. Attorneys' Fees. In the event either party shall bring any action or proceeding for damages or for an alleged breach of any provision of this Sublease to recover rents, or to enforce, protect or establish any right or remedy hereunder, the prevailing party shall be entitled to recover reasonable attorneys' fees and court costs as part of such action or proceeding.

IN WITNESS WHEREOF, the undersigned have executed this Sublease as of the dates set forth below.

SUBLESSOR:

METAXEN LLC,
a Delaware limited liability company

By: /s/ Michael J. Ross, Ph.D.

Michael J. Ross, Ph.D.
Its: President and CEO Date May 5, 1998

3910 Trust Way
Hayward, CA 94545

SUBLESSEE:

CYTOKINETICS, INC.,
a Delaware corporation

By: /s/ James Sabry Date May 4/98

James Sabry, MD, Ph.D.
President and CEO

2800 Sand Hill Road, Suite 250
Menlo Park, California 94025

EXHIBIT "B"

[MAP]

EXHIBIT "B"

[FLOOR PLAN]

[ILLEGIBLE TEXT]

EXHIBIT "B-1"

Subject, to the provisions of Article 9 of the Master Lease, the following fixtures and equipment shall remain with the Sublease Premises and shall be surrendered by Sublessee at the expiration or earlier termination of the Sublease:

Subject to the provisions of Article 9 of the Master Lease, the following fixtures and equipment shall be removed from the Sublease Premises at the expiration or earlier termination of the Sublease (the "Sublessee Equipment and Alterations"):

[NEED TO COMPLETE]

Exhibits B-1

The following fixtures and equipment shall be retained by the Sublessee and shall be removed by the Sublessee from the Sublease Premises at the expiration or earlier termination of the Sublease:

Centrifuges
Tissue Culture Incubators
Tissue Culture Hoods
All Robotic and Automated Devices purchased by the Sublessee including Robotic Plate, Liquid Handling
and Imaging Devices
Vibration isolation Tables
Freezers
Refrigerator/Freezers
Microscopes
Free standing Shelving

Exhibit 10.8

SUBLEASE AGREEMENT

This Sublease Agreement (this "Sublease") dated March 1, 1999, for reference purposes only, is entered into by and between METAXEN LLC, a Delaware limited liability company ("Sublessor") and EXELIXIS PHARMACEUTICALS, INC., a Delaware corporation ("Sublessee"), and is subject to the terms and conditions of that certain Build-To-Suit Lease ("Master Lease") dated May 27, 1997 (as amended by that certain First Amendment to Lease dated as of April 13, 1998 (the "First Amendment")) entered into by BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a California limited partnership ("Master Lessor"), as Landlord, and Sublessor as Tenant. A copy of the Master Lease is attached hereto as Exhibit "A".

1. Premises. Sublessor hereby leases to Sublessee, and Sublessee hereby hires from Sublessor, on and subject to the terms and conditions hereinafter set forth, the following premises (the "Sublease Premises"), situated in the City of South San Francisco, County of San Mateo, State of California, commonly known as a portion of the ground floor of Building H (the "Building") in the Britannia Pointe Grand Business Park (the "Center") and consisting of the following: (i) approximately three thousand forty (3,040) leasable square feet backward lined in Exhibit "B", attached hereto, and incorporated herein by this reference (the "Ground Floor Leased Area"); (ii) approximately fifty percent (50%) of four thousand nine hundred sixty eight (4,968) leasable square feet dotted in the above referenced Exhibit B (the "Ground Floor Shared Area"); (iii) approximately three thousand nineteen (3,019) leasable square feet backward lined in Exhibit "B-1", attached hereto and incorporated herein by this reference (the "Second Floor Leased Area"); and (iv) approximately twenty five percent (25%) of five thousand six hundred seventy seven (5,677) leasable square feet forward dotted in the above referenced Exhibit B-1 (the "Second Floor Shared Area"). The Sublease Premises include the laboratory benches, water systems, fume hoods, laminar flow hoods and other laboratory support space as specified in Exhibit "B-2", attached hereto, and incorporated herein by this reference. Sublessee shall have the right to use the Common Areas as described in the Master Lease, subject to the rights of Master Lessor, Sublessor and other tenants of the Center. The right of Sublessee to use the Ground Floor Shared Area and the Second Floor Shared Area is non-exclusive and shall be subject to reasonable rules and requirements of Sublessor. Sublessor shall have the primary right to use both the Ground Floor Shared Area and the Second Floor Shared Area. Sublessee shall have the right to use no more than fifty percent (50%) of the Ground Floor Shared Area. Furthermore, Sublessee shall have the right to use no more than twenty five percent (25%) the Second Floor Shared Area.

2. Master Lease.

a. Sublease is Subordinate to Master Lease. This Sublease is subject and subordinate to the Master Lease. Sublessee shall not commit or permit to be committed on the Sublease Premises any act or omission which shall violate any terms or condition of the Master Lease. If the Master Lease terminates, this Sublease shall terminate. Sublessor shall have no liability to Sublessee, if the Master Lease terminates without fault of Sublessor. Sublessor hereby represents and warrants to Sublessee that (i) Sublessor knows of no claims or defenses or circumstances which, with the passage of time, would lead to claims or defenses by Master

Lessor against Sublessor as tenant under the Master Lease; (ii) this Sublease, if consented to by Master Lessor as provided for herein, does not violate any provision of the Master Lease, and (iii) no provision of this Sublease is in violation of the terms of the Master Lease. Sublessor hereby covenants and agrees that, without the prior written consent of Sublessee, which consent shall not be unreasonably withheld or delayed, Sublessor shall not (i) terminate the Master Lease, (ii) amend or otherwise modify the terms of the Master Lease, unless such modification would apply only to a matter that would take effect

only after the Expiration Date (or earlier termination of this Sublease), or (iii) willfully breach the terms of the Sublease or the Master Lease. Sublessor hereby agrees to perform its obligations as tenant under the Master Lease if and to the extent those obligations are not assumed by Sublessee pursuant to the terms of this Sublease.

b. Application of Master Lease Provisions. Except as otherwise expressly provided in this Sublease, Sublessee shall assume and perform, with respect to the Sublease Premises, the obligations of the Sublessor as Lessee under the Master Lease arising after the date of this Sublease. Therefore, except as otherwise provided, for the purpose of this Sublease; wherever in the Master Lease "Landlord" is used, it shall be deemed to mean the Sublessor herein, and wherever in the Master Lease "Tenant" is used, it shall be deemed to mean the Sublessee herein, and wherever in the Master Lease "Lease" is used, it shall be deemed to mean this Sublease.

c. Incorporation of Master Lease Provisions.

(1) All of the terms and conditions in the Master Lease, as they relate to the Sublease Premises, are incorporated herein except for: 1.1 (Premises); 1.2 (Landlord's Reserved Rights); Sections 1.3 (First Refusal); 2,1 (Term); 2.2 (Early Possession); 2.3 (Delay in Possession); 2.6 (Option to Extend); 3.1 (Minimum Rent); 4.1 (Stock Warrants); 6,2 (Real Property Taxes); 7 (Operating Expenses); 8.1 (Payment of Utilities); Tenant's obligation for HVAC repair and entry into a service contract under 10.2(a); 12.1(b); 19.1 (Notices), 19.11 (Financial Information); Financial Information); 19.15 (Brokers); 19.16 (Memorandum of Lease), Articles 4 (Stock Warrants), 5 (Construction) and Article 18 (Security Deposit), the First Amendment to Lease as it pertains to warrants, and Exhibit C.

(2) Except as otherwise provided herein, Sublessor is responsible for all financial obligations under the Master Lease.

(3) As between Sublessor and Sublessee only, it is hereby agreed that any breach or default under that certain AGREEMENT BETWEEN METAXEN AND EXELEXSIS REGARDING PROPRIETARY INFORMATION AND NON SOLICITATION (the "Non-Solicitation Agreement") dated as of even date herewith shall constitute an additional default under section 16.1 of the Master Lease and shall not require any additional notice to either Sublessor or Sublessee except as expressly provided in said Non-Solicitation Agreement. Any such breach or default shall entitle the party to the remedies provided in the Master Lease, in addition to the remedies provided in the Non-Solicitation Agreement.

d. Indemnity. Except to the extent caused by Sublessor, or Sublessor's agents', employees' or invitees' negligence or willful misconduct, Sublessee shall indemnify and hold Sublessor harmless against and from all liability, judgments, costs, damages, claims or demands, including reasonable attorney's fees, arising out of Sublessee's failure to comply with or perform Sublessee's obligations under this Sublease, including, but not limited to, Sublessee's obligation to immediately disclose any violations of the warranty as set forth in section 2.f, below. Except to the extent caused by Sublessee, or Sublessee's agents', employees' or invitees' negligence or willful misconduct, Sublessor shall indemnify and hold Sublessee harmless against and from all liability, judgments, costs, damages, claims or demands, including reasonable attorney's fees, arising out of Sublessor's failure to comply with or perform Sublessor's obligations under this Sublease.

e. Master Lease in Effect. Sublessor represents to Sublessee that the Master Lease is in full force and effect and that, to Sublessor's knowledge, no default exists on the part of any party to the Master Lease; furthermore Sublessor represents and warrants that it has not received any notification from Master Lessor of any default under the Master Lease or notice of any potential default under the Master Lease. Subject to the terms and provisions of this Sublease, Sublessor agrees to keep the Master Lease in full

force and effect during the term of this Sublease, subject, however, to any earlier termination of the Master Lease without the default of Sublessor.

f. Warranty. Section 6.2 of the Master Lease creates a warranty in favor of Sublessor. Sublessee shall provide Sublessor with written notification of any violation of the warranty in Section 6.2, promptly following the discovery by Sublessee of such violation.

g. To the extent that any financial terms contained in this Sublease that are applicable to Sublessor and Sublessee only conflict with similar provisions in the Master Lease, this Sublease shall prevail.

3. Sublease Term; Delivery of Possession.

a. Term. The term of this Sublease shall begin on March 1, 1999 ("Commencement Date") and end no earlier than May 31,2000 and no later than September 30 2000 ("Expiration Date") unless sooner terminated pursuant to any provision hereof or of the Master Lease (the "Term"). Any extension beyond the Expiration Date must be in a writing signed by both parties on or before one hundred twenty (120) days prior to the Expiration Date. In no event shall the term of this Sublease extend beyond the expiration of the Master Lease. The actual Expiration Date shall be that date set forth in a written notice to Sublessor delivered by Sublessee no earlier than May 1, 2000, and shall be effective at the completion of the 30th day thereafter, so long as the actual Expiration Date is no earlier than May 31, 2000 and no later than September 30, 2000.

b. Delivery of Possession.

(1) If Sublessee is to seek to have any improvements performed in either the Ground Floor Leased Area or the Second Floor Leased Areas (Sublessee shall have no

right to modify or otherwise alter the Ground Floor Shared Area and/or the Second Floor Shared Area) and if Sublessee shall fail to deliver to Sublessor a schedule of improvements, along with plans and specifications thereto (including projected costs) reasonably acceptable to Sublessor on or before sixty (60) days following the execution of this Sublease, Sublessor, in its discretion, may terminate its obligations under this Sublease at any time.

(2) Sublessor will deliver the Sublease Premises subject to all- applicable zoning, municipal, county and state laws, ordinances and regulations governing and regulating the use of the Sublease Premises, and Sublessee accepts the Sublease Premises subject thereto. Sublessee shall accept the Sublease Premises in broom clean condition and otherwise "as is". Notwithstanding the foregoing, Sublessor represents and warrants to Tenant that, as of the Commencement Date, the Sublease Premises, including any improvements made by Master Lessor shall be operational as designed and Building services serving the Sublease Premises shall be operational as designed. If, during the first sixty (60) days of the Term hereof, Sublessee notifies Sublessor of any defects in the condition of the Sublease Premises, Sublessee shall have no obligation to repair such defects upon the expiration or earlier termination of this Sublease and Sublessor shall promptly notify Master Lessor, if it is the responsibility of Master Lessor, or if the responsibility of Sublessor, shall promptly commence the repair of any such defect. Sublessor shall assign its rights or, alternatively, shall itself enforce such rights pursuant to any manufacturer or other warranty covering the Sublease Premises.

(3) Sublessor and Sublessee shall conduct a walk-through inspection of the Sublease Premises prior to the Commencement Date, and if the building systems in the Sublease Premises are found not to be in good and working condition, a "punchlist" shall be developed identifying those areas of repairs which are necessary to bring such building systems into good and working condition and Sublessor shall immediately notify Master Lessor of the

need of such repairs, unless the repairs are the responsibility of Sublessor, in which case Sublessor shall promptly commence such repair. Sublessor shall use its reasonable efforts if necessary to compel Master Lessor to make such repairs (if such repairs are the obligation of Master Lessor)

c. Early Possession. In the event Sublessee, with Sublessor's consent, takes possession of the Sublease Premises prior to the Commencement Date, such occupancy shall be subject to all the provisions of this Sublease, shall not advance the termination date of this Sublease, and Sublessee shall pay Base Rent for the period prior to the Commencement Date at the Base Rent prescribed for the initial month of the Sublease term, prorated at the rate of 1/30th thereof per day. If Sublessor consents to entry by Sublessee for the purpose of installing furniture, equipment, telephone and computer systems, and the like and/or for temporary staging or storage of Sublessee's property, such entry shall not trigger an obligation to pay Base Rent prior to the Commencement Date. It is contemplated that Sublessee shall have access to the Premises on March 1, 1999, pursuant to the terms of this section relating to early possession.

4. Rent. Sublessee shall pay to Sublessor no later than the first day of each calendar month of the Term of this Sublease without deduction, set off, prior notice or demand, as rent for the Sublease Premises, monthly rent ("Base Rent") as set forth in the rent schedule below, and

subject to the terms and provisions of section 3.2 of the Master Lease. Base Rent shall commence on March 1, 1999 (the "Rent Commencement Date").

Rent Schedule

Leased Premises	Base Rent/Month	Rent/Sq.ft/month	Approx. Sq. Feet
Ground Floor Leased Area	$ 5,472.00	$1.80	3,040
Ground Floor Shared Area(1)	$ 4,471.20	$1.80	2,484 (2)
Second Floor Leased Area	$10,566.50	$3.50	3,019
Second Floor Shared Area(3)	$ 4,967.38	$3.50	1,419.25 (4)
Total	$25,477.00		

Sublessor and Sublessee each hereby acknowledge and agree that the parties hereto intend this Sublease to be on a "full-service" basis and Sublessee shall only be responsible to pay Base Rent and no other operating costs or service expenses.

5. Security Deposit. Concurrently herewith, Sublessee shall deposit Fifty Thousand Nine Hundred Fifty Four Dollars ($50,944.00) with Sublessor as security for Sublessee's performance of its obligations under the terms of this Sublease. Sublessor shall not be required to keep the any cash portion of the Security Deposit separate from its general funds, or to pay any interest thereon. The Security Deposit shall be held by Sublessor and may be applied by Sublessor in accordance with the provisions of Article 18 of the Master Lease.

6. Use.

a. Permitted Use. The Sublease Premises shall be used and occupied only for office, biotechnology/pharmaceutical research and development, manufacturing, warehousing related to such uses, and other permitted uses under the Master Lease. Sublessee shall use and occupy the

Sublease Premises in accordance with the Master Lease, including, but not limited to Section 11.6, thereof.

b. No Representations or Warranties. Sublessee acknowledges that neither Sublessor nor Sublessor's agents have made any representation or warranty as to the suitability of the Sublease Premises for the conduct of Sublessee's business.

7. Operating Expenses. At no time prior to the Expiration Date, is Sublessee required to pay as additional rent the amounts for which Sublessor is liable to.Master Lessor pursuant to Article 7 (Operating Expenses) of the Master Lease. In addition, until the Expiration

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(1) Gross Ground Floor Shared Area equal to 4,968 square feet divided by 2, or 2,484x1.80.

(2) See footnote 1, above.

(3) Gross Second Floor Shared Area equal to 5,677 square feet divided by 4, or 1,419.25x3.50

(4) See footnote 3, above.

Date, Sublessee shall have no liability for any utilities it consumes in the Premises, The parties hereto hereby acknowledge that this Sublease is on a "full service" basis and Sublessee shall not be responsible for any operating costs or expenses, insurance or taxes.

8. Alterations. Notwithstanding the provisions of Article 9 of the Master Lease, any alteration, which requires Master Lessor's approval pursuant to the Master Lease, shall not be commenced by Sublessee unless and until such consent is obtained. At the time Sublessor and Master Lessor consent to any alteration, additions or improvements, Sublessor and Master Lessor shall inform Sublessee in writing whether Sublessee is responsible for the removal of such alterations and improvements at the expiration or earlier termination of the term of this Sublease, provided that Sublessee, in its request for consent to the alteration, addition, or improvement, has expressly requested that Sublessor and Master Lessor specify the nature and extent of any such removal obligation. If such notification is not made, Sublessee shall have no responsibility to remove any such alteration or improvement at the expiration or earlier termination of this Sublease. Any alteration made by Sublessee shall become a part of the Sublease Premises, and at Sublessor's election (and to the extent required, the consent of the Master Lessor), shall be surrendered to Sublessor at the end of the Sublease term. Any alteration made by Sublessee shall, at Sublessor's election become Sublessor's property throughout the Sublease term except for any specialized improvements installed by Sublessee (which improvements shall be part of Sublessee's Equipment and Alterations, as defined in Exhibit B-2), which improvements shall remain the property of Sublessee and which improvements shall be . removed by Sublessee at the expiration or earlier termination hereof. In the event Sublessor is (or becomes) obligated under the Master Lease to remove any of Sublessee's alterations, Sublessee shall be obligated to remove same at Sublessee's sole cost and expense and to restore the Sublease Premises to its condition prior to the alteration but only to the extent required by Sublessor or Master Lessor in their written consent to any such alteration. In the event that Sublessee removes any items it is permitted to remove under Exhibit B-2, Sublessee, subject to the provisions of the second sentence of this section 8, at its sole cost and expense, shall restore the Sublease Premises to its condition prior to alteration.

9. Repairs. Pursuant to the Master Lease, Master Lessor is responsible to repair and maintain the roof (structural portions only), exterior walls and other structural portions of the Building and the Common Areas. As to

such matters, Sublessor's sole obligation to Sublessee shall be to request performance of such obligations by Master Lessor. In the event Master Lessor breaches its obligations, Sublessor will assign to Sublessee its right to enforce such obligation and shall otherwise cooperate with Sublessee in connection therewith, provided, however, Sublessee, at its sole cost and expense, shall be responsible for enforcement thereof without reimbursement from Sublessor. Sublessee, not Master Lessor, shall be responsible for the repair of the roof and structural portions of the Building to the extent the need for maintenance or repair is caused by the gross negligence or willful misconduct of Sublessee, in which case Sublessee shall pay to Sublessor the cost of (including reasonable overhead expense of Sublessor) the maintenance and repairs caused by Sublessee (except (i) to the extent the damage is covered by any insurance maintained by Master Lessor or Sublessor, or, (ii) if Master Lessor fails to maintain the insurance required to be maintained by Master Lessor pursuant to the terms of the Master Lease, to the extent the damage would have been covered by insurance, if Master Lessor

had maintained the required insurance). There shall be no abatement of Base Rent and no liability of Master Lessor or Sublessor by reason of any injury to or interference with Sublessee's business arising from the making of any repairs, alterations or improvements in or to the fixtures, appurtenances and equipment therein, provided that Sublessor shall request Master Lessor to use reasonable efforts to minimize the interruption of Sublessee's use and occupancy of the Sublease Premises in connection with its performance of the repairs and maintenance (although nothing contained herein shall be deemed to obligate Master Lessor to pay any overtime costs in order to minimize such interference, or otherwise to perform the repairs or maintenance during hours other than normal business hours). As to all matters that neither Master Lessor nor Sublessee is required to maintain or repair under the Master Lease or this Sublease, as the case may be, Sublessor shall be responsible therefore, and shall promptly and regularly maintain and repair the Sublease Premises. Notwithstanding anything to foregoing, any damage caused by the negligence or willful misconduct of Sublessee, shall promptly be repaired by Sublessee, at Sublessee's own cost and expense, and in a manner reasonably acceptable to Master Lessor and Sublessor.

10. Insurance.

a. Sublessee shall maintain commercial general liability insurance coverage as required by section 12. l(a) of the Master Lease (but prorated based upon the Sublease Premises to the Premises under the Master Lease) which has been incorporated into this Sublease by reference. Each policy of insurance, which Sublessee is required to maintain pursuant to this Lease, shall name both Sublessor and Master Lessor (as well as Master Lessor's general partners and Managing Agent) as additional insureds (including cross-liability endorsements). Sublessee's insurance coverage shall be primary and non-contributory as respects any insurance maintained by Sublessor and/or Master Lessor. Sublessee shall deliver evidence of the coverage required hereunder (i) thirty (30) days prior to occupancy and (ii) within ten (10) days of the renewal date for each policy of insurance required hereunder.

b. Pursuant to the terms of the Master Lease as provided in Section 12. l(b) thereof, Master Lessor is obligated to maintain certain insurance coverage with respect to certain perils. Sublessor's sole obligation to Sublessee with respect to Master Lessor's obligations pursuant to said Section 12.1(b) shall be to request performance of such obligations by Master Lessor. In the event Master Lessor breaches its obligations, Sublessor will assign to Sublessee its right to enforce such obligation and shall otherwise cooperate with Sublessee in connection therewith, provided, however, Sublessee, at its sole cost and expense, shall be responsible for enforcement thereof without reimbursement from Sublessor. In the event Sublessor cannot assign such rights, Sublessor shall diligently enforce its rights as Tenant under the Master Lease.

11. Damage or Destruction.

a. Master Lessor Has Obligation to Restore. If the Sublease Premises are damaged or destroyed, Master Lessor has the obligation pursuant to Article 15 of the Master Lease to repair the Sublease Premises unless Master Lessor has the right to terminate. If Master Lessor fails to perform its obligations pursuant to Article 15 of the Master Lease, Sublessor's sole obligation to Sublessee shall be to request performance of such obligations by Master Lessor. In

the event Master Lessor breaches its obligations, Sublessor will assign to Sublessee its right to enforce such obligation, provided, however, Sublessee, at its sole cost and expense, shall be responsible for enforcement thereof without reimbursement from Sublessor. In the event Sublessor cannot assign its rights, Sublessor shall diligently enforce its rights under the Master Lease.

b. Termination of Master Lease. If the Master Lease terminates pursuant to Article 15 of the Master Lease, this Sublease shall terminate concurrently with the termination of the Master Lease.

c. Sublessee Notice; Right to Terminate. Within twenty (20) days following written request from Sublessor, Sublessee shall give notice to Sublessor in writing whether Sublessee agrees to continue this Sublease in effect if Master Lessor reasonably determines that the repair of the Sublease Premises or the Building cannot be completed within three hundred sixty five (365) days after the casualty. If Sublessee does not so agree to continue this Sublease in effect then this Sublease shall terminate. If Sublessee agrees to continue this Sublease in effect as aforesaid, then Sublessor shall have no right to exercise its right (if any) to terminate the Master Lease or this Sublease. If (i) Master Lessor reasonably determines that the repair of the Sublease Premises or the Building cannot be completed within three hundred sixty five (365) days after the casualty, (ii) neither Master Lessor nor Sublessor have elected to terminate the Master Lease, and (iii) Sublessee agrees to continue this Sublease in effect notwithstanding the time to reconstruct, then this Sublease shall continue in effect, and Sublessee shall fulfill all of the obligations of Sublessor pursuant to the provisions of Article 15 of the Master Lease, as it pertains to the Sublease Premises.

d. Limited Obligation to Repair. Master Lessor's obligation, should Master Lessor elect or be obligated to repair or rebuild, shall be limited to the terms and conditions of the Master Lease. Master Lessor shall have no obligation to replace or restore the Sublessee Equipment and Alterations (as described in Exhibit B-2) or any other alterations installed by Sublessor or Sublessee, unless specifically required by the Master Lease.

e. Abatement of Rent. Rent under this Sublease shall abate to the same extent as the Rent owing by Sublessor under the Master Lease abates during any casualty repair period.

f. Damage Near End of Term. In addition to the rights to terminate specified in subsection 11. c of this Sublease, either Sublessor or Sublessee shall have the right to cancel and terminate this Sublease as of the date of the occurrence of destruction or damage if the Sublease Premises or the Building is substantially destroyed or damaged (i.e., there is damage or destruction which Sublessor reasonably determines would require more than sixty (60) days to repair) and made untenantable during the last twelve (12) months of the term of the Master Lease. Sublessor or Sublessee, as applicable, shall give written notice of its election to terminate this Sublease under this subsection f. within thirty (30) days after Master Lessor or Sublessor determines that the damage or destruction would require more than sixty (60) days to repair. If either Master Lessor or Sublessor elects to terminate the Master Lease pursuant to Article 15 of

the Master Lease, this Sublease shall terminate concurrently with the termination of the Master Lease. If neither Master Lessor nor Sublessor terminates the Master Lease and if neither Sublessor nor Sublessee elects to terminate this Sublease, the repair of the damage shall be governed by Article 15 of the Master Lease.

g. Insurance Proceeds. If this Sublease is terminated, Master Lessor and Sublessor may each keep all their respective insurance proceeds resulting from the damage except for those proceeds, if any, which specifically insured Sublessee's personal property and trade fixtures which Sublessee has a right or obligation to remove upon the expiration of the Sublease term. Sublessor shall be entitled to receive from Sublessee the proceeds of insurance carried by Sublessee with respect to Sublessee Improvements or other alterations installed in the Sublease Premises by Sublessor or at Sublessor's expense. To the extent that Sublessee has paid for any alterations regardless of whether the alterations may become the property of Sublessor upon termination of this Sublease, Sublessee shall receive any portion of the insurance proceeds payable with respect to the then unamortized cost (based on a 2 year life of the alteration on a straight line amortization schedule) for the applicable alterations, reduced by the amounts necessary to pay off any equipment lease or other lien against the applicable alteration, and the balance of the proceeds, if any, will be payable to Sublessor. With respect to those Alterations, which Sublessee is obligated to remove at the end of the Sublease term which are the property of Sublessee, all proceeds of any insurance, carried by Sublessor or Sublessee shall be paid to Sublessee.

h. Uninsured Casualty. If the Master Lease terminates pursuant to the provisions of Article 15 of the Master Lease, this Sublease shall terminate.

12. Eminent Domain. If all or any part of the Sublease Premises is taken for public or quasi-public use by a governmental authority under the power of eminent domain or is conveyed to a governmental authority in lieu of such taking, and if the taking or conveyance causes the remaining part of the Sublease Premises to be untenantable and inadequate for use by Sublessee for the purpose for which they were leased, then Sublessee, at its option and by giving notice within fifteen (15) days after the taking, may terminate this Sublease as of the date Sublessee is required to surrender possession of the Sublease Premises. If a part of the Sublease Premises is taken or conveyed but the remaining part is tenantable and adequate for Sublessee's use in Sublessee's reasonable determination, then this Sublease shall be terminated as to the part taken or conveyed as of the date Sublessee surrenders possession. All compensation awarded for the taking or conveyance shall be the property of Master Lessor and Sublessor, as their interests may appear, and Sublessee hereby assigns to Sublessor all its right, title and interest in and to the award, unless the governmental authority makes only one (1) award, and the award contains compensation for the value of moving expenses, Sublessee's personal property, trade fixtures and alterations (including the Sublessee Improvements), Sublessee's Equipment and Alterations, in which case, subject to the rights of any mortgagee or beneficiary of a deed of trust holding a lien on the Property and to Master Lessor's rights under the Master Lease, Sublessee shall be entitled to the compensation paid for Sublessee's moving expenses, trade fixtures, personal property, Sublessee's Equipment and Alterations, and the portion of the award attributable to the then unamortized cost of alterations and improvements constructed at Sublessee's expense (which are

to be amortized on a straight line basis over the initial term of this Sublease). Sublessee shall have the right, however, to recover from the governmental authority, but not from Sublessor or Master Lessor, except as provided in the preceding sentence, such compensation as may be awarded to Sublessee on account of the interruption of Sublessee's business, moving and

relocation expenses and removal of Sublessee's trade fixtures and personal property.

13. Assignment and Subletting. Notwithstanding any provision of this Sublease to the contrary, if Sublessor consents to a sublet, Sublessee shall pay to Sublessor on a monthly basis as additional Rent, on the date Base Rent is due, an amount equal to fifty percent (50%) of the amount by which the rent payable to Sublessee ("Subrent") under the sublease exceeds the rent due for the applicable portion of the Sublease Premises after deducting from the Subrent (A) the actual out-of pocket costs incurred by Sublessee for brokerage commissions and tenant concessions (which concessions are not reflected in the reduced Subrent) and (B) the costs of any additional improvements constructed by Sublessee in connection with the sublease (amortized on a straight line basis over the term of the sublease). Notwithstanding the foregoing, Sublessee may assign this Sublease or sublet any portion of the Sublease Premises without Sublessor's or Master Lessor's consent to any of the following (i) any corporation which controls, is controlled by or under common control with Sublessee; (ii) any corporation resulting from the merger or consolidation of Sublessee; and (iii) any person or entity which acquires all of the assets of Sublessee as a going concern of the business that is being conducted on the Sublease Premises (collectively, "Sublessee Affiliate"), provided that such assignee assumes in full the obligations of Sublessee under the Sublease. Any right of Sublessor or Master Lessor to terminate the Sublease or the Master Lease in response to a requested assignment or subletting shall not apply to an assignment of the Sublease or a subletting of the Sublease Premises to a Sublessee Affiliate. Sublessee shall have the same assignment and sublease rights and limitations as provided in section 13.1 of the Master Lease.

14. Access to Premises. Master Lessor shall have the same right of access to the Sublease Premises as Sublessor which right of access is described in Section 14 of the Master Lease.

15. Surrender at End of Term. Upon expiration or termination of this Sublease, Sublessee shall surrender the Sublease Premises to Sublessor in good and sanitary order, except for any alterations Sublessee is not required to remove, normal wear and tear, acts of God, damage, destruction (except to the extent Sublessee is obligated to restore the same under this Sublease) and eminent domain covered by the provisions of this Sublease. Sublessee shall remove from the Sublease Premises all of Sublessee's personal property and trade fixtures, Sublessee's Equipment and Alterations, and any alterations and improvements Sublessee is required to remove pursuant to Sublessor's or Master Lessor's written consent to such alterations and improvements, and shall repair all damage caused by the removal. Except to the extent caused by Sublessor's or Master Lessor's or their agents', employees' or invitees', negligence or willful misconduct, Sublessee shall indemnify Sublessor against all loss or liability resulting from delay by Sublessee in so surrendering the Sublease Premises, including without limitation, any claims made by any succeeding tenant, losses to Sublessor due to lost opportunities to lease to a succeeding tenant, and reasonable attorneys' fees and costs. Sublessee shall have no

obligation to remove any fixtures, alterations, or personal property placed or installed in the Sublease Premises prior to the Commencement Date hereof.

16. Sublessor Indemnity re: Hazardous Materials.

a. Sublessor will provide to Sublessee copies of the documents referred to in section 17.4 of the Master Lease.

b. Sublessee shall indemnify, defend and hold Sublessor harmless from and against any claim, damage, loss, liability, cost or expense (including reasonable attorneys' fees) arising out of any spill or release of any Hazardous Substance (as defined in Section 11.6 of the Master Lease which has been incorporated by reference into this Sublease) on or about the Sublease Premises by Sublessee, its employees, agents or contractors during the period of

time Sublessee has occupied the Sublease Premises. Sublessor shall indemnify, defend and hold Sublessee harmless from and against any claim, damage, loss, liability, cost or expense (including reasonable attorneys' fees) arising out of any spill or release of any Hazardous Substance (as defined in Section 11.6 of the Master Lease which has been incorporated by reference into this Sublease) on or about the Sublease Premises by Sublessor, its employees, agents or contractors during the period of time Sublessee occupies the Sublease Premises.

c. Sublessor is entitled to indemnification from the Master Lessor under certain circumstances as provided in Section 11.6 of the Master Lease. To the extent such indemnification may apply to the benefit of Sublessee, Sublessor agrees to cooperate with Sublessee to enforce such indemnity obligation against Master Lessor; provided, however, Sublessee shall pay any and all costs incurred by Sublessor or Sublessee in connection with the enforcement thereof for the benefit of Sublessee.

17. Signs. Master Lessor shall have the same approval rights with respect to signs as Sublessor; Sublessor shall use its best efforts to obtain Master Lessor's approval of signage rights reasonably satisfactory to Sublessee, so long as such rights do not unreasonably interfere with the rights of Sublessor under the Master Lease.

18. Holding Over. This Sublease shall terminate without further notice at the expiration of the Sublease term. Any holding over by Sublessee after expiration or sooner termination of this Sublease without the consent of Sublessor shall be construed to be a tenancy at sufferance. Base Rent for the Sublease Premises during any tenancy at sufferance, or if Sublessor shall have consented to Sublessee's holding over, shall be at a rate equal to 150% of the Base Rent for the last month of the term, and shall otherwise be on the terms and conditions herein specified insofar as applicable.

19. Brokers. Sublessor and Sublessee each warrants and represents for the benefit of the other that it has had no dealings with any real estate broker or agent in connection with the negotiation of this Sublease, and that it knows of no real estate broker or agent who is or might be entitled to a real estate brokerage commission or finder's fee in connection with this Sublease.

Sublessor and Sublessee warrant and represent that they have dealt with no real estate broker in connection with this Sublease.

a. Broker Disclaimer. Sublessor and Sublessee agree and accept that, except as otherwise expressly stated herein, no broker or agent has made or conducted any investigation, determination, warranty or representation with respect to any of the following: (a) the legality of the present or any possible future use of the Sublease Premises under any federal, state or local law; (b) the physical condition or square footage of the Sublease Premises; (c) the terms of the Master Lease or any other relevant legal document or agreement; or (d) the presence or location of any hazardous materials on or about the property in which the Sublease Premises are located (including, but not limited to, asbestos, PCB's, other toxic, hazardous or contaminated substances, and underground storage tanks).

b. Acknowledgement: The parties acknowledge that they are not relying on information from any real estate licensee relating to the field of toxic materials, hazardous waste, underground tanks, and asbestos contamination, location of the property within or outside a specific flood zone or special studies seismic area, nor the property's compliance with the guidelines as set forth in the Americans with Disabilities Act (ADA) regarding the determination of the condition of the subject Premises, but rather from their own independently initiated investigations.

20. Notices. All notices or demands of any kind required to be given by Sublessor or Sublessee hereunder shall be in writing and shall be deemed delivered forty-eight (48) hours after depositing the notice or demand in

the United States Mail, certified or registered, postage prepaid, addressed to the Sublessor or Sublessee respectively at the addresses set forth after their signatures at the end of this Sublease. Either party may change its address by written notice to the other party in accordance with this Section 20. All Base Rent shall be paid by Sublessee to Sublessor at the same address.

21. Condition To Effectiveness of This Sublease. This sublease is contingent upon Sublessor obtaining the written consent of the Master Lessor to this Sublease within 15 days of the date hereof. Sublessor and Sublessee acknowledge and agree that in granting such consent, notwithstanding any other provisions contained in or implied in this Sublease, Master Lessor shall not be deemed or construed (a) to have released Sublessor from any responsibility for the full and timely performance of all obligations of Sublessor as Tenant under the Master Lease as it pertains to the Sublease Premises, nor (b) to have authorized Sublessor to act on Master Lessor's behalf in exercising or waiving any rights, remedies or privileges of Master Lessor as Landlord under the Master Lease as it pertains to the Sublease Premises, nor (c) to have assumed; incurred or undertaken any obligations or liabilities running directly to Sublessee with respect to the Sublease Premises, it being the explicit intention and understanding of the parties that notwithstanding the incorporation by reference of the Master Lease into this Sublease (except as specifically excluded by section 2 above, and as otherwise specifically excluded in this Sublease), Master Lessor and Sublessor shall look solely to one another for the performance of their respective obligations with respect to the Sublease Premises as Landlord and Tenant under the Master Lease, and that Sublessor and Sublessee shall look solely to one another for the

performance of their respective obligations with respect to the Sublease Premises under this Sublease. Nothing in this Section 21 is intended, however, to preclude Sublessee from enforcing, by direct action against Master Lessor, any rights of Sublessor under the Master Lease to the extent such rights are expressly assigned by Sublessor to Sublessee pursuant to this Sublease.

22. Authority. Each person executing this Sublease on behalf of a party hereto represents and warrants that he or she is authorized and empowered to do so and to thereby bind the party on whose behalf he or she is signing.

23. Attorneys' Fees. In the event either party shall bring any action or proceeding for damages or for an alleged breach of any provision of this Sublease to recover rents, or to enforce, protect or establish any right or remedy hereunder, the prevailing party shall be entitled to recover reasonable attorneys' fees and court costs as part of such action or proceeding.

IN WITNESS WHEREOF, the undersigned have executed this Sublease as of the dates set forth below.

Sublessor:

METAXEN LLC,
a Delaware limited liability company

By: /s/ Michael J. Ross

Michael J. Ross, Ph.D.
Its: President and CEO Date 3/25/99

280 East Grand Avenue
South San Francisco, CA 94080

Sublessee:

EXELIXIS PHARMACEUTICALS, INC.,
a Delaware corporation

By: /s/ George Scangos Date_____

George Scangos, Ph.D
President and CEO
260 Littlefield Avenue
South San Francisco, CA 94080

EXHIBIT "B-2"

Subject to the provisions of Article 9 of the Master Lease, the following fixtures and equipment shall remain with_the Sublease Premises and shall be surrendered by Sublessee at the expiration or earlier termination of the Sublease:

ALL FIXED PARTITIONS
ALL CASE WORK AND BENCHES, SCREWED DOWN OR HARD WIRED TO THE BUILDING

Subject to the provisions of Article 9 of the Master Lease, the following fixtures and equipment shall be removed from the Ground Floor Leased Area and the Second Floor Leased Area at the expiration or earlier termination of the Sublease (the "Sublessee Equipment and Alterations"):

Centrifuges
Tissue Culture Incubators
Tissue Culture Hoods
All robotic and automated devices purchased by the Sublessee including Robotic Plate, Liquid Handling and Imaging Devices
Vibration Isolation Tables
Freezers
Refrigerator/Freezers
Microscopes
Free Standing shelving
Water treatment systems which are not part of the "house" system

Subleases

Cytokinetics	8/1/98 - 8/31/00 ($52,250/mo first year, $53,625/mo second year) first year: $3.80/sq ft; second year: $3.80/sq ft 13 750 square feet	
Exelixis	3/1/99-5/31/00 (9/30/00) ($25,477/mo) ground floor: $1.80/sq ft second floor: $3.50/sq ft	3,040 Exe only, 4,986 (50%) shared 3,019 Exe only, 5,677 (25%) shared

Who occupies how much space		MelaXen	Cytokinetics	Exelixis	M/E shared	MetaXen %age
	Ground	4,757	13,750	3040	4968	50%
	Second	14,984	-	3019	5677	75%
		19,741	13,750	6,059	10,645	50,195

Exhibit 10.9

ASSIGNMENT AND ASSUMPTION AGREEMENT AND CONSENT

THIS ASSIGNMENT AND ASSUMPTION AGREEMENT AND CONSENT (this "Agreement") is made as of July 11, 1999, by and among EXELIXIS PHARMACEUTICALS, INC. ("Exelixis"), METAXEN, LLC ("MetaXen"), XENOVA GROUP PLC ("Xenova") and BRITANNIA POINTE GRAND LIMITED PARTNERSHIP ("Landlord").

RECITALS

WHEREAS, pursuant to the Build-to-Suit Lease dated May 27, 1997, as amended by the First Amendment to Lease dated as of April 13, 1998 (collectively the "MetaXen Lease"), MetaXen leased the premises described therein as Building H in Britannia Pointe Grand Business Park, South San Francisco, California containing approximately 50,195 square feet, and the nonexclusive use of the Common Areas of the Britannia Pointe Grand Business Park, from Landlord.

WHEREAS, MetaXen is in default in its obligation to reimburse Landlord an amount deemed by the parties to equal $750,000 (the "Outstanding Tenant Improvement Amount") for MetaXen' s share of the excess costs incurred by Landlord in constructing tenant improvements in the Premises.

WHEREAS, pursuant to the Sublease Agreement dated March 1, 1999 (the "Exelixis Sublease"), MetaXen subleased a portion of Building H to Exelixis (the "Exelixis Premises").

WHEREAS, pursuant to the Sublease Agreement dated May 1, 1998 (the "Cytokinetics Sublease"), MetaXen subleased a portion of Building H to Cytokinetics, Inc. ("Cytokinetics").

WHEREAS, in connection with the purchase by Exelixis of certain assets of MetaXen pursuant to the Asset Purchase Agreement dated July 11, 1999 (the "Asset Purchase" and the "Asset Purchase Agreement", respectively), and conditioned upon the closing thereof, the parties wish to provide for the repayment of the Outstanding Tenant Improvement Amount to Landlord, the assignment of the MetaXen Lease to Exelixis, followed by the subsequent assignment of the MetaXen Lease to a new tenant, to be selected by Exelixis and approved by Landlord (which approval shall not be unreasonably withheld) and the release of Exelixis.

WHEREAS, all capitalized terms used but not defined herein shall have the meanings assigned to them in the MetaXen Lease.

AGREEMENT

NOW, THEREFORE, the parties agree as follows:

1. ASSIGNMENT AND ASSUMPTION OF METAXEN LEASE BY EXELIXIS. Conditioned upon, and effective as of, the closing of the Asset Purchase (the "Effective Date"), MetaXen hereby assigns to Exelixis all of its right, title and interest in the Premises, including, without

limitation, its entire leasehold interest under the MetaXen Lease (subject to the Cytokinetics Sublease) and the $104,500.00 security deposit deposited with MetaXen by Cytokinetics, but excluding the MetaXen security deposit in the amount of $58,045.00, which shall be refunded to MetaXen by Landlord. Exelixis will deposit the sum of $58,045.00 with Landlord to serve as a substitute security deposit under Section 18.1 of the MetaXen Lease as assumed by Exelixis. Conditioned upon, and effective as of, the closing of the Asset Purchase, Exelixis hereby assumes and agrees to perform all of the obligations of the Tenant under the MetaXen Lease which arise subsequent to the Effective Date.

Exelixis shall defend, indemnify and hold MetaXen harmless from (i) all claims, damages, liabilities, indebtedness and obligations arising under the MetaXen Lease following the Effective Date, and (ii) any further obligation of MetaXen or Xenova with respect to the Outstanding Tenant Improvement Amount. MetaXen and Xenova shall defend, indemnify and hold Exelixis harmless against all claims, damages, liabilities, indebtedness and obligations arising under the MetaXen Lease prior to the Effective Date.

(a) CONSENT TO ASSIGNMENT TO AND ASSUMPTION BY EXELIXIS. Effective as of the closing of the Asset Purchase, Landlord hereby consents to the foregoing assignment and assumption between MetaXen and Exelixis conditioned upon (1) Landlord's receipt of the Outstanding Tenant Improvement Amount as described in Section 2, below, (2) the closing of the Asset Purchase, and (3) Landlord's receipt of the approval of its Lender, Northwestern Mutual Life, no later than 15 days following the Effective Date. Landlord hereby releases each of MetaXen and Xenova from any and all further liabilities of either of them to Landlord in connection with the leased premises, such release to become effective upon the closing of the Asset Purchase, but Exelixis acknowledges that such release shall not affect the liabilities and obligations of Exelixis under the MetaXen Lease as assumed by Exelixis herein, except as expressly set forth herein.

(b) SUBSEQUENT ASSIGNMENT BY AND RELEASE OF EXELIXIS. Conditioned upon its receipt of warrants to purchase a satisfactory number of the common shares of a prospective assignee ("Proposed Assignee"), a fully executed assignment and assumption agreement between Exelixis and such Proposed Assignee, in form and substance satisfactory to Landlord, approval by Landlord and its lender, Northwestern Mutual Life, of the Proposed Assignee and its financial statements (such approval not to be unreasonably withheld by Landlord), and evidence that such Proposed Assignee meets any other applicable requirements under Section 13 of the MetaXen Lease, Landlord agrees to consent to the assignment and assumption between Exelixis and the Proposed Assignee and agrees that upon execution and delivery of such assignment and assumption agreement and satisfaction of the other conditions set forth in this sentence, Exelixis shall be fully released from all obligations of Tenant arising under the MetaXen Lease after the effective date of such assignment and assumption agreement. The warrants described in the preceding sentence shall be issued to Landlord or its designees (who may include any of Landlord's partners and any persons or entities directly or indirectly controlling, controlled by or under common control with Landlord or any of its partners), shall provide in the aggregate for the purchase of a satisfactory number of shares of common stock of the Proposed Assignee at an exercise price equal to the price reflected in the most recent issuance of the Proposed Assignee's stock prior to or substantially concurrently with this Agreement, shall be issued within thirty (30) days after the date of the assignment and assumption agreement with the Proposed Assignee, shall be exercisable throughout the period from the date of issuance until five (5) years after an

initial public offering of the Proposed Assignee's stock and shall contain other reasonable and customary provisions (including but not limited to, a net exercise or "cashless" exercise provision). Landlord agrees, in connection with the receipt of such warrants, to return for cancellation any and all warrants to purchase shares of MetaXen currently held by Landlord.

2. PAYMENT OF OUTSTANDING TENANT IMPROVEMENT AMOUNT. Conditioned upon the closing of the Asset Purchase, and concurrently therewith, (a) Xenova shall pay to Exelixis in cash the amount of $375,000 (which, subject to compliance with the terms and conditions of this Agreement shall constitute payment in full of MetaXen's and Xenova's obligations with respect to the Outstanding Tenant Improvement Amount, but shall not satisfy obligations of Exelixis with respect to the Outstanding Tenant Improvement Amount, which obligations are set forth herein and shall be satisfied in accordance with the remainder of this Section); (b) Exelixis shall pay to Landlord in cash the amount of $550,000; and (c) Landlord and Exelixis shall execute a second

amendment to the MetaXen Lease, in the form attached hereto as Exhibit A, which shall provide for an increase in the Monthly Minimum Rental, in order to amortize the remaining $200,000 of the Outstanding Tenant Improvement Amount over seven years at a rate of thirteen percent per annum. Landlord agrees that its receipt of such amounts and the execution of the second amendment shall constitute payment in full of all amounts due to Landlord under the MetaXen Lease in connection with the construction of tenant improvements.

3. STATUS OF METAXEN LEASE AND CYTOKINETICS SUBLEASE. Landlord, MetaXen and Xenova each represent and warrant: a) that the copy of the MetaXen Lease and of the amendments to the MetaXen Lease attached hereto as Exhibit B constitute the entire MetaXen Lease; b) that the MetaXen Lease has not previously been amended or modified except as reflected in Exhibit B; and c) that neither Landlord nor MetaXen is in breach of or in default under any provision of the MetaXen Lease, except for MetaXen's failure to reimburse Landlord the Outstanding Tenant Improvement Amount. MetaXen and Xenova hereby represent a) that the copy of the Cytokinetics Sublease attached as Exhibit C constitutes the entire Cytokinetics Sublease, b) that the Cytokinetics Sublease has not been amended or modified except as reflected in Exhibit C, c) that neither MetaXen nor Cytokinetics is in breach of or in default of any provisions under the Cytokinetics Sublease, and d) that Cytokinetics' security deposit in the amount of $104,500 has not been applied to any default by Cytokinetics. Landlord represents that Landlord is the sole owner of the Landlord's interest under the MetaXen Lease, subject to the rights of Landlord's Lender under an assignment of the MetaXen Lease (and other leases at Britannia Pointe Grand Business Park) for security, and has the power and authority to enter into this Agreement and that any consent by any lender or other person required to enter into this Agreement has been obtained (other than the consent of Landlord's Lender to be obtained after the Effective Date as provided in Section 1(a) above).

4. SUCCESSORS. All rights and liabilities under this Agreement extend to and bind the successors and assigns of the parties.

5. INTEGRATION. This Agreement, together with the MetaXen Lease, sets forth all the covenants, promises, agreements, conditions and understandings between Landlord and the other parties hereto with respect to the Premises, and this Agreement, together with the Asset Purchase Agreement, sets forth all the covenants, promises, agreements, conditions and understandings between such other parties concerning the Premises. No alteration, amendment or addition to

this Agreement will be binding upon any party unless in writing and signed by the party against whom enforcement is sought.

6. GOVERNING LAW. This Agreement will be construed in accordance with and governed by the laws of the State of California.

7. ATTORNEYS' FEES. If any party brings an action or proceeding to enforce the terms hereof or declare rights hereunder, the prevailing party in any such proceeding, action, or appeal thereon, shall be entitled to reasonable attorneys' fees. Such fees may be awarded in the same suit or recovered in a separate suit, whether or not such action or proceeding is pursued to decision or judgment.

8. COUNTERPARTS. This Agreement may be executed in two or more counterparts, and once at least one counterpart has been executed by each party, shall be deemed fully executed. Each such counterpart shall be deemed an original but all such counterparts shall be deemed one and the same agreement.

9. BROKERAGE. The parties each hereby represent and warrant to the other parties that they have dealt with no brokers in connection with this Agreement, nor is there any broker or other person entitled to any commission or other compensation as a result of such person's dealings with such party in

connection with this Agreement. Each party (the "Indemnifying Party") agrees to indemnify, defend and hold the other parties (each an "Indemnified Party") harmless from and against any and all losses, liabilities, damages, costs and/or expenses incurred by the Indemnified Party as a result of the breach of such representation and warranty by the Indemnifying Party.

10. NO FURTHER TENANT IMPROVEMENTS. The parties hereby acknowledge and agree that Landlord is under no obligation to construct or finance any improvements to the Premises for any party, including, without limitation, Exelixis or any Proposed Assignee or other person or entity to whom Exelixis may assign the MetaXen Lease or sublet the Premises or any portion thereof.

IN WITNESS WHEREOF, the parties have entered into this Agreement as of the date first written above.

EXELIXIS PHARMACEUTICALS, INC.,
a Delaware corporation

By: /s/ [ILLEGIBLE]

Its: [ILLEGIBLE]

And By: /s/ [ILLEGIBLE]

Its: SECRETARY, SENIOR DIR FIN

METAXEN, LLC, a Delaware limited liability company

By: /s/ [ILLEGIBLE]

Its: Interim President

And By: /s/ DANIEL ABRAMS

Its: DANIEL ABRAMS

XENOVA GROUP PLC, a

By: /s/ Daniel Abrams

Its: Daniel Abrams
Finance Director

And By: /s/ [ILLEGIBLE]

Its: CEO

BRITANNIA POINTE GRAND LIMITED PARTNERSHIP,
a Delaware limited partnership

By: BRITANNIA POINTE GRAND, LLC, a

California limited liability company,

By:_____
Name: T. J. Bristow
Its: Manager, President and
Chief Financial Officer

METAXEN, LLC, a Delaware limited liability company

By: /s/ [ILLEGIBLE]

Its: [ILLEGIBLE]

And By: /s/ [ILLEGIBLE]

Its: DANIEL ABRAM

XENOVA GROUP PLC, a

By: /s/ Daniel Abrams

Its: Daniel Abrams
Finance Director

And By: /s/ [ILLEGIBLE]

Its: CEO

BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership

By: BRITANNIA POINTE GRAND, LLC, a California limited liability company,

By:_____
Name: T. J. Bristow
Its: Manager, President and
Chief Financial Officer

METAXEN, LLC, a Delaware limited liability company

By:

Its:

And By:

Its:

XENOVA GROUP PLC, a

By:

Its:

And By:

Its:

BRITANNIA POINTE GRAND LIMITED PARTNERSHIP,
a Delaware limited partnership

By: BRITANNIA POINTE GRAND, LLC, A
California limited liability company,

By: /s/ T. J. Bristow

Name: T. J. Bristow
Its: Manager, President and
Chief Financial Officer

EXHIBIT A

FORM OF SECOND AMENDMENT

1.

SECOND AMENDMENT TO LEASE

THIS SECOND AMENDMENT TO LEASE ("Second Amendment"), dated (for reference purposes) as of July ___, 1999, is entered into by BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership ("Landlord") and EXELIXIS PHARMACEUTICALS, INC., a'Delaware corporation ("Tenant"), with reference to the following facts:

A. Landlord and MetaXen, LLC, a Delaware limited liability company ("MetaXen"), entered into a Build-to-Suit Lease dated May 27, 1997 and a First Amendment to Lease dated as of April 13, 1998 (collectively, as amended, the "Lease"), covering certain premises described therein as all of Building H (the "Premises") in the Britannia Pointe Grand Business Park, South San Francisco, California (the "Center"), consisting of approximately 50,195 square feet, together with the nonexclusive right to use the Common Areas of the Center as they exist from time to time.

B. By an Assignment and Assumption Agreement and Consent dated as of July___, 1999 among Tenant, MetaXen, Xenova Group plc and Landlord (the "Assignment Agreement"), MetaXen assigned its entire leasehold interest under the Lease to Tenant, with Landlord's consent, upon and subject to the terms and conditions set forth in such Assignment Agreement.

C. Among the terms and conditions set forth in the Assignment Agreement is a requirement that Landlord and Tenant enter into this Second Amendment, providing for an increase in the monthly minimum rental payable under the Lease for a period of seven (7) years as set forth herein, as part of the

consideration to Landlord to discharge certain unpaid obligations of MetaXen under the Lease in connection with excess costs incurred by Landlord in constructing tenant improvements in the Premises.

D. Terms used herein as defined terms but not specifically defined herein shall have the meanings assigned to such terms in the Lease.

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual agreements set forth herein and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. Monthly Minimum Rental. In addition to the monthly minimum rental prescribed in Section 3.1 (a) of the Lease (as amended) and the additional minimum rent prescribed in Paragraph 3 of the First Amendment to Lease described above, Tenant agrees to pay to Landlord as additional minimum rent, for each of the eighty-four (84) months of the term of the Lease beginning with the month of August, 1999 and ending with the month of July, 2006, inclusive, the sum of Three Thousand Six Hundred Thirty-Eight Dollars ($3,63 8.00) per month, representing the equivalent of an amortization of $200,000 of excess tenant improvement costs over seven (7) years with an imputed return factor of thirteen percent (13%) per annum.

EXHIBIT A

2. Tenant's Notice Address. The notice address for Tenant under Section 19.1 of the Lease is changed to the following:

Exelixis Pharmaceuticals, Inc.
260 Littlefield Avenue
South San Francisco, CA 94080
Attn: George A. Scangos
Facsimile: (650) 825-2202

3. Union Labor. The fourth sentence of Section 9.1 of the Lease (beginning "In addition, Tenant shall engage only union contractors...") is deleted in its entirety.

4. Effectiveness. This Second Amendment is being executed substantially concurrently with the Assignment Agreement. The Assignment Agreement contains certain conditions subsequent which must be satisfied before the Assignment Agreement will become effective. The effectiveness of this Second Amendment is expressly conditioned upon the Assignment Agreement becoming effective in accordance with its terms, in which event this Second Amendment shall be deemed to become effective immediately after the Assignment Agreement becomes effective. Landlord and Tenant shall execute a written acknowledgment of the effectiveness of this Second Amendment promptly following the date on which the Assignment Agreement becomes effective, but such written acknowledgment is intended solely for evidentiary purposes and the failure or refusal of either or both parties to execute such a written acknowledgment shall not impair the effectiveness of this Second Amendment when it has otherwise become effective in accordance with its terms. If the Assignment Agreement has not become effective by August 31, 1999, this Second Amendment shall be deemed to be rescinded and to be of no further force or effect.

5. Full Force and Effect. Except as expressly set forth herein, the Lease has not been modified or amended and remains in full force and effect.

[rest of page intentionally left blank]

IN WITNESS WHEREOF, Landlord and Tenant have executed this Second Amendment as of the date first set forth above.

"Landlord"	"Tenant"
BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership	EXELIXIS PHARMACEUTICALS, INC., a Delaware corporation
By: BRITANNIA POINTE GRAND, LLC, a California limited liability company, General Partner	By: _____ George A. Scangos President & CEO
By: _____ T. J. Bristow Manager	By: _____ Its: _____

Exhibit 10.10

SECOND AMENDMENT TO LEASE

THIS SECOND AMENDMENT TO LEASE ("Second Amendment"), dated (for reference purposes) as of July 11, 1999, is entered into by BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership ("Landlord";) and EXELIXIS PHARMACEUTICALS, INC., a Delaware corporation ("Tenant"), with reference to the following facts:

A. Landlord and MetaXen, LLC, a Delaware limited liability company ("MetaXen"), entered into a Build-to-Suit Lease dated May 27,1997 and a First Amendment to Lease dated as of April 13, 1998 (collectively, as amended, the "Lease"), covering certain premises described therein as all of Building H (the "Premises") in the Britannia Pointe Grand Business Park, South San Francisco, California (the "Center"), consisting of approximately 50,195 square feet, together with the nonexclusive right to use the Common Areas of the Center as they exist from time to time.

B. By an Assignment and Assumption Agreement and Consent dated as of July 11, 1999 among Tenant, MetaXen, Xenova Group plc and Landlord (the "Assignment Agreement"), MetaXen assigned its entire leasehold interest under the Lease to Tenant, with Landlord's consent, upon and subject to the terms and conditions set forth in such Assignment Agreement.

C. Among the terms and conditions set forth in the Assignment Agreement is a requirement that Landlord and Tenant enter into this Second Amendment, providing for an increase in the monthly minimum rental payable under the Lease for a period of seven (7) years as set forth herein, as part of the consideration to Landlord to discharge certain unpaid obligations of MetaXen under the Lease in connection with excess costs incurred by Landlord in constructing tenant improvements in the Premises.

D. Terms used herein as defined terms but not specifically defined herein shall have the meanings assigned to such terms in the Lease.

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual agreements set forth herein and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. Monthly Minimum Rental. In addition to the monthly minimum rental prescribed in Section 3.1 (a) of the Lease (as amended) and the additional minimum rent prescribed in Paragraph 3 of the First Amendment to Lease described above, Tenant agrees to pay to Landlord as additional minimum rent, for each of the eighty-four (84) months of the term of the Lease beginning with the month of August, 1999 and ending with the month of July, 2006, inclusive, the sum of Three Thousand Six Hundred Thirty-Eight Dollars ($3,638.00) per month, representing the equivalent of an amortization of $200,000 of excess tenant improvement costs over seven (7) years with an imputed return factor of thirteen percent (13%) per annum.

2. Tenant's Notice Address. The notice address for Tenant under Section 19.1 of the Lease is changed to the following:

Exelixis Pharmaceuticals, Inc.
260 Littlefield Avenue
South San Francisco, CA 94080
Attn: George A. Scangos
Facsimile: (650) 825-2202

3. Union Labor. The fourth sentence of Section 9.1 of the Lease (beginning "In addition, Tenant shall engage only union contractors...") is deleted in its entirety.

4. Effectiveness. This Second Amendment is being executed substantially concurrently with the Assignment Agreement. The Assignment Agreement contains certain conditions subsequent which must be satisfied before the Assignment Agreement will become effective. The effectiveness of this Second Amendment is expressly conditioned upon the Assignment Agreement becoming effective in accordance with its terms, in which event this Second Amendment shall be deemed to become effective immediately after the Assignment Agreement becomes effective. Landlord and Tenant shall execute a written acknowledgment of the effectiveness of this Second Amendment promptly following the date on which the Assignment Agreement becomes effective, but such written acknowledgment is intended solely for evidentiary purposes and the failure or refusal of either or both parties to execute such a written acknowledgment shall not impair the effectiveness of this Second Amendment when it has otherwise become effective in accordance with its terms. If the Assignment Agreement has not become effective by August 31, 1999, this Second Amendment shall be deemed to be rescinded and to be of no further force or effect.

5. Full Force and Effect. Except as expressly set forth herein, the Lease has not been modified or amended and remains in full force and effect.

[rest of page intentionally left blank]

IN WITNESS WHEREOF, Landlord and Tenant have executed this Second Amendment as of the date first set forth above.

"Landlord"	"Tenant"
BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership	EXELIXIS PHARMACEUTICALS, INC., a Delaware corporation
By: BRITANNIA POINTE GRAND, LLC, a California limited liability company, General Partner	By: /s/ George A. Scangos George A. Scangos President & CEO
By: /s/ T. J. Bristow T.J. Bristow Manager	By: [ILLEGIBLE] Its: SECRETARY, SR. DR. FIN.

Exhibit 10.11

FIRST AMENDMENT TO SUBLEASE AGREEMENT

This First Amendment to Sublease Agreement ("First Amendment") dated July 20,1999, for reference purposes only, is entered into by and between METAXEN LLC, a Delaware limited liability company ("Sublessor") and CYTOKINETICS, INC. a Delaware corporation ("Sublessee"), and is subject to the terms and conditions of that certain Build-To-Suit Lease ("Master Lease") dated May 27,1997 (as amended) entered into by BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a California limited partnership ("Master Lessor"), as Landlord, and Sublessor as Tenant, with reference to the following facts:

A. Sublessor and Sublessee are parties to a sublease, dated May 1, 1998 ("Sublease"), covering certain premises of approximately 13,750 leasable square feet located within Building H in the Britannia Pointe Grand Business Park, South San Francisco, California;

B. By an Assignment and Assumption Agreement and Consent dated as of June 11,1999 among Sublessor, Master Lessor, Xenova Group plo and Exelixis Pharmaceuticals, Inc, ("Exelixis"), Sublessor assigned its entire leasehold interest under the Master Lease to Exelixis, with Master Lessor's consent, upon terms and conditions set forth in such Assignment Agreement; .

C. By an Agreement and Consent dated as of even date herewith, among Sublessee, Exelixis, and Master Lessor, Exelixis agreed that, in exchange for certain payments and other consideration and upon and subject to the terms and conditions set forth in such Agreement and Consent, it will assign to Sublessee its interests and rights under the Master Lease;

D. Sublessee wishes to extend the Expiration Date of the Sublease;

E. Capitalized tarms used in this Amendment which are not otherwise specifically defined herein shall have the meanings assigned to such terms in the Sublease.

NOW THEREFORE, in consideration of the mutual agreements and promises set forth herein, the parties agree as follows:

1. Sublease Term. The parties agree that the Expiration Date is amended to February 28, 2001.

2. Full Force and Effect. Except as expressly set forth herein, the Sublease has not been modified or amended and remains in full force and effect.

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first set forth above.

"Sublesseor"	"Sublessee"
METAXEN, LLC a Delaware limited liability company	CYTOKINETICS, INC., a Delaware corporation
By: /s/ [ILLEGIBLE] ---------- ---------- ----------	By: /s/ James Sabry ---------- James Sabry President & CEO
By: /s/ [ILLEGIBLE] ----------	By: /s/ Robert Blum ----------

---------- Robert Blum
---------- Vice President

The undersigned hereby consent to the foregoing, effective of the date first above written.

BRITANNIA POINTE GRAND LIMITED PARTNERSHIP,
a Delaware limited partnership

By: Britannia Pointe Grand LLC, a California limited liability company
General Partner

By: /s/ T.J. Bristow

T.J. Bristow
Manager, President and Chief Financial Officer

EXELIXIS PHARMACEUTICALS, INC.
a Delaware corporation

By: /s/ [ILLEGIBLE]

Its: PRES & CEO

By: /s/ [ILLEGIBLE]

Its: SECRETARY

Exhibit 10.12

AGREEMENT AND CONSENT

THIS AGREEMENT AND CONSENT (this "Agreement") is made as of July 20, 1999, by and among Exelixis Pharmaceuticals, Inc. ("Exelixis"), Cytokinetics,' Inc., a Delaware corporation ("Cytokinetics") and Britannia Pointe Grand Limited Partnership ("Landlord").

RECITALS

WHEREAS, pursuant to the Build-to-Suit Lease dated May 27, 1997, as amended by the First Amendment to Lease dated as of April 13, 1998 and the Second Amendment to Lease dated concurrently herewith (collectively the "MetaXen Lease"), MetaXen, LLC ("MetaXen") leased the premises described therein as Building H in Britannia Pointe Grand Business Park, South San Francisco, California containing approximately 50,195 square feet ("Building H" or the "Premises"), and the nonexclusive use of the Common Areas of the Britannia Pointe Grand Business Park, from Landlord.

WHEREAS, MetaXen is in default in its obligation to reimburse Landlord the amount of $750,000 (the "Outstanding Tenant Improvement Amount") for MetaXen's share of the excess costs incurred by Landlord in constructing tenant improvements in the Premises.

WHEREAS, in connection with the purchase by Exelixis of certain assets of MetaXen pursuant to the Asset Purchase Agreement dated July 11, 1999 (the "Asset Purchase" and the "Asset Purchase Agreement", respectively) and in consideration of Exelixis agreeing to pay a portion of such Outstanding Tenant Improvement Amount, MetaXen will assign all its right, title and interest under the MetaXen Lease to Exelixis.

WHEREAS, pursuant to the Sublease Agreement dated May 1, 1998 (the "Cytokinetics Sublease"), MetaXen subleased approximately 13,750 square feet on the ground floor of Building H to Cytokinetics (the "Cytokinetics Premises").

WHEREAS, pursuant to the Sublease Agreement dated March 1, 1999 (the "Exelixis Sublease"), MetaXen subleased a portion of Building H to Exelixis (the "Exelixis Premises").

"WHEREAS, conditioned upon the closing of the Asset Purchase, among other things as more expressly set forth in this Agreement, the parties wish to provide for the subsequent assignment of the MetaXen Lease to Cytokinetics and the release of Exelixis.

WHEREAS, all capitalized terms used but not defined herein shall have the meanings assigned to them in the MetaXen Lease.

AGREEMENT

Now, THEREFORE, the parties agree as follows:

1. CONDITIONAL AGREEMENT TO ASSIGN THE METAXEN LEASE TO CYTOKINETICS. Exelixis agrees to assign its interests and rights under the MetaXen Lease to Cytokinetics effective as of the date of actual completion and delivery of Building 1 (as defined in the Build-

to-Suit Lease between Landlord and Exelixis dated May 12, 1999, referred to herein as the "Exelixis Lease"), by executing an assignment and assumption agreement in form and substance satisfactory to Exelixis, and Cytokinetics conditioned upon: (i) actual completion and delivery to Exelixis of Building 1; and (ii) the mutual agreement by Landlord and Exelixis on all material terms and

conditions applicable to Building 2, as defined in the Exelixis Lease, no later than December 31, 1999. Cytokinetics hereby agrees to assume all rights and obligations of Tenant under the MetaXen Lease which arise subsequent to the effective date of such assignment and assumption.

(a) CONSENT TO ASSIGNMENT AND ASSUMPTION; WARRANTS. Conditioned upon its receipt of warrants to purchase Cytokinetics common stock as described below and a fully executed assignment and assumption agreement between Exelixis and Cytokinetics, in form and substance satisfactory to Landlord and upon receipt of consent from Landlord's lender, Northwestern Mutual Life, Landlord hereby consents to the assignment and assumption between Exelixis and Cytokinetics and agrees that upon execution and delivery of such assignment and assumption agreement and satisfaction of the other conditions set forth in this sentence, Exelixis shall be fully released from all obligations of Tenant arising under the MetaXen Lease after the effective date of such assignment and assumption agreement. The warrants described in the preceding sentence shall be issued to Landlord or its designees (who may include any of Landlord's partners and any persons or entities directly or indirectly controlling, controlled by or under common control with Landlord or any of its partners), shall provide in the aggregate for the purchase of 200,000 shares of common stock of Cytokinetics at an exercise price equal to the price reflected in the most recent issuance of Cytokinetics stock prior to or substantially concurrently with this Agreement, shall be issued within thirty (30) days after the date of this Agreement, shall be exercisable throughout the period from the effective date of the assignment and assumption of the MetaXen Lease to and by Cytokinetics until five (5) years after an initial public offering of Cytokinetics stock and shall contain other reasonable and customary provisions (including but not limited to, a net exercise or "cashless" exercise provision). Such warrants shall also contain a provision by which they would be deemed rescinded in the event that, Cytokinetics' assumption of the MetaXen Lease shall have failed to occur by July 31,2000.

2. POSSIBLE EXPANSION. Landlord and Cytokinetics have discussed the possibility that Landlord may acquire all or substantially all of the property identified in Exhibit A attached hereto and incorporated herein by this reference (the "Expansion Property") for development purposes, although Landlord is under no obligation to do so. Provided that Cytokinetics assumes the MetaXen Lease, Landlord will keep Cytokinetics informed of Landlord's progress, if any, from time to time toward acquisition of the Expansion Property. Provided that Cytokinetics assumes the MetaXen Lease, if at any time prior to expiration of the MetaXen Lease Landlord does acquire all or substantially all of the Expansion Property for development purposes, then Landlord shall promptly give Cytokinetics written notice thereof, specifying the size, location and general layout of the building that Landlord proposes to develop on the Expansion Property, the proposed timing for construction of such building, the proposed lease term and the economic terms (including, but not limited to, rent schedule and tenant improvement allowance) pursuant to which Landlord proposes to construct and lease such building, and Cytokinetics shall have a period of forty-five (45) days after the date Cytokinetics receives such written notice (the "Expansion Option Period") in which either to accept Landlord's proposed terms by written notice to Landlord or, at Cytokineties' election and risk, to attempt to negotiate and agree upon

with Landlord, in a letter of intent or other similar written statement of terms mutually acceptable to Landlord and Cytokinetics in their respective discretion and mutually executed by Landlord and Cytokinetics (a "Letter of Intent"), an alternative set of terms for construction of a building on the Expansion Property for Cytokinetics; provided, however, that the foregoing provisions shall not apply, and Landlord shall have no obligation to Cytokinetics with respect to the Expansion Property, during any period in which Cytokinetics is in default under this Agreement or in which the assumption of the MetaXen Lease by Cytokinetics has become effective and Cytokinetics is in default (beyond any applicable cure period) under the MetaXen Lease. If within the Expansion Option Period either Cytokinetics accepts Landlord's terms with respect to the

Expansion Property or Cytokinetics and Landlord enter into a Letter of Intent with respect to the Expansion Property, then the agreed terms shall be mutually binding upon Landlord and Cytokinetics and they shall promptly, diligently and in good faith (a) prepare and execute a new lease or an amendment to the MetaXen Lease, as Landlord may elect, providing for the construction of a building on the Expansion Property and the leasing of such building to Cytokinetics on such agreed terms and on other reasonable and customary additional terms and provisions and (b) prepare and execute an amendment to the MetaXen Lease extending the term of that Lease (on the same terms as if the extension were from an exercise or partial exercise of the renewal option(s) contained in that Lease) to make it coterminous with the lease of the Expansion Property. If within the Expansion Option Period Cytokinetics neither accepts Landlord's offered terms with respect to the Expansion Property nor enters into a Letter of Intent with Landlord, or if the parties reach an agreement on terms during the Expansion Option Period but thereafter fail to execute a new lease or an amendment to the MetaXen Lease within forty-five (45) days after expiration of the Expansion Option Period, then the parties' rights and obligations with respect to the Expansion Property shall terminate and be of no further force or effect and Landlord shall thereafter be free to develop and lease the Expansion Property to any third party on any terms that Landlord deems acceptable, without any further obligation to offer the same to Cytokinetics or to enter into any further negotiations with Cytokinetics with respect thereto. Except as specifically set forth in this Section, Landlord shall have no obligation to Cytokinetics with respect to the Expansion Property.

3. REIMBURSEMENT OF OUTSTANDING TENANT IMPROVEMENT AMOUNT TO EXELIXIS. Conditioned upon the closing of the Asset Purchase (a) concurrently with the closing of the Asset Purchase, Cytokinetics shall pay to Exelixis in cash the amount of $175,000, and (b) in the event that Exelixis shall have notified Cytokinetics in writing that Xenova shall have failed to pay $375,000 to Exelixis, Cytokinetics shall pay to Exelixis in cash an additional amount of $375,000 concurrently with the execution of the assignment and assumption of the MetaXen Lease to and by Cytokinetics. In the event that the assignment and assumption of the MetaXen Lease to and by Cytokinetics shall have failed to occur by July 31, 2000 for any reason other than a default by Cytokinetics in any of its obligations hereunder, Exelixis shall refund all amounts paid by Cytokinetics pursuant to this Section 3.

4. CONTINUED EFFECTIVENESS OF CYTOKINETICS SUBLEASE. Following the assumption of the MetaXen Lease by Exelixis, so long as Cytokinetics is not in default thereunder, the Cytokinetics Sublease shall remain in full force and effect, unless and until Exelixis assigns the MetaXen Lease to Cytokinetics or the Cytokinetics Sublease expires or is terminated in accordance with its terms.

5. SUBLEASE OF A PORTION OF BUILDING H BY EXELIXIS FOLLOWING ASSUMPTION OF THE METAXEN LEASE BY CYTOKINETICS. Cytokinetics hereby grants to Exelixis the option to sublease the Exelixis Premises, and such other space as may be agreed upon by Exelixis and Cytokinetics, from Cytokinetics following the assumption of the MetaXen Lease by Cytokinetics, upon the same terms and conditions set forth in the Exelixis Sublease, except for the term, which shall be 3 years from the effective date of the assignment of the MetaXen Lease to Cytokinetics, provided, that Exelixis may terminate such sublease at any time upon 30 days notice. Exelixis may exercise such option by giving written notice of its election to do so to Cytokinetics at any time up to 30 days following the assumption of the MetaXen Lease by Cytokinetics.

6. SUCCESSORS. All rights and liabilities under this Agreement extend to and bind the successors and assigns of the parties.

7. INTEGRATION. This Agreement, together with the MetaXen Lease, sets forth all the covenants, promises, agreements, conditions and understandings among the parties hereto with respect to the assumption of the MetaXen Lease by Cytokinetics. No alteration, amendment or addition to this Agreement will be binding upon any party unless in writing and signed by the

party against whom enforcement is sought.

8. GOVERNING LAW. This Agreement will be construed in accordance with and governed by the laws of the State of California.

9. ATTORNEYS' FEES. If any party brings an action or proceeding to enforce the terms hereof or declare rights hereunder, the prevailing party in any such proceeding, action, or appeal thereon, shall be entitled to reasonable attorneys' fees. Such fees may be awarded in the same suit or recovered in a separate suit, whether or not such action or proceeding is pursued to decision or judgment.

10. COUNTERPARTS. This Agreement may be executed in two or more counterparts, and once at least one counterpart has been executed by each party, shall be deemed fully executed. Each such counterpart shall be deemed an original but all such counterparts shall be deemed one and the same agreement.

11. BROKERAGE. The parties each hereby represent and warrant to the other parties that there is no broker or other person entitled to any commission, finder's fee or other compensation in connection with this Agreement. Each party (the "Indemnifying Party") agrees to indemnify, defend and hold the other parties (each an "Indemnified Party") harmless from and against any and all losses, liabilities, damages, costs and/or expenses incurred'by the Indemnified Party as a result of any claim for such commission, finder's fee or other compensation by a broker or other person claiming under or through the Indemnifying Party.

12. NO FURTHER TENANT IMPROVEMENTS. The parties hereby acknowledge and agree that Landlord is under no obligation to construct or finance any improvements to the Premises for any party, including, without limitation, Cytokinetics or any other person or entity to whom the MetaXen Lease may be assigned or the Premises or any portion thereof sublet.

13. ESTOPPEL. Cytokinetics hereby represents and warrants as follows: a) the copy of the Cytokinetics Sublease attached as Exhibit B constitutes the entire Cytokinetics Sublease, b)

the Cytokinetics Sublease has not been amended or modified except as reflected in Exhibit B, c) neither MetaXen nor Cytokinetics is in breach of or in default of any provisions under the Cytokinetics Sublease, and d) Cytokinetics' security deposit in the amount of $104,500 has not been applied to any default by Cytokinetics.

14. NO AMENDMENT OF LEASE OR ALTERATION OF THE BUILDING; COVENANT TO PERFORM. Exelixis and Landlord agree that, during the term of this Agreement and prior to the assignment, if any, of the MetaXen Lease to Cytokinetics: (i) the MetaXen Lease shall not be modified or amended and the Premises shall not be materially and adversely altered, improved or modified, without the prior written consent of Cytokinetics, which consent shall not be unreasonably withheld, conditioned or delayed. Exelixis covenants, during the term of this Agreement, to comply with the obligations of Tenant under the MetaXen Lease and agrees not to voluntarily surrender the Premises to Landlord or terminate the MetaXen Lease.

15. MEMORANDUM OF AGREEMENT. Concurrently with the execution of this Agreement and Consent, (a) Landlord and Cytokinetics shall sign and record a Memorandum of Agreement in the form attached hereto as Exhibit C, and (b) Landlord and Cytokinetics shall sign a Memorandum of Termination of Agreement in the form attached hereto as Exhibit D. Landlord shall hold the signed Memorandum of Termination of Agreement and is authorized to record it if either (i) this Agreement is terminated prior to the assignment and assumption of the MetaXen Lease to and by Cytokinetics becoming effective, or (ii) the assignment and assumption of the MetaXen Lease to and by Cytokinetics fails to become effective by July 31, 2000.

IN WITNESS WHEREOF, the parties have entered into this Agreement as of the date first written above.

CYTOKINETICS, INC., a Delaware corporation

By: /s/ JAMES SABRY

Its: PRESIDENT & CEO

And By:_____

Its:_____

EXELIXIS PHARMACEUTICALS, INC.,
a Delaware corporation

By: /s/ [ILLEGIBLE]

Its: PRESIDENT & CEO

And By: /s/ [ILLEGIBLE]

Its: SECRETARY, SENIOR DIR FIN

BRITANNIA POINTE GRAND LIMITED PARTNERSHIP,
a Delaware limited partnership

By: BRITANNIA POINTE GRAND, LLC, a
California limited liability company,
Its: GENERAL PARTNER

By: /s/ T.J. Bristow

Name: T.J. Bristow
Its: Manager, President and Chief Financial Officer

EXHIBIT A

EXPANSION PROPERTY

[MAP]

EXHIBIT A

EXHIBIT B

CYTOKINETICS SUBLEASE

EXHIBIT C

RECORDING REQUESTED BY:)
)
)
)
WHEN RECORDED MAIL TO:)
)
Eric C. Starr, Esq.)
Starr Finley LLP)
One California Street, Suite 2200)
San Francisco, CA 94111)
)

(Space Above This Line for Recorder's Use Only)

NO DOCUMENTARY TRANSFER TAX DUE.
TERM OF AGREEMENT AND LEASE IS LESS THAN 35 YEARS.

MEMORANDUM OF AGREEMENT

This Memorandum of Agreement ("Memorandum") is entered into this_____day of July, 1999, between BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership ("Landlord") and CYTOKINETICS, INC., a Delaware corporation ("Assignee"), with reference to the following facts:

A. Landlord and MetaXen, LLC entered into a Build-to-Suit Lease dated May 27, 1997, as amended by a First Amendment to Lease dated as of April 13, 1998, and as further amended by a Second Amendment to Lease dated concurrently herewith between Landlord and Exelixis Pharmaceuticals, Inc., as successor to MetaXen, LLC by assignment (collectively, as amended, the "MetaXen Lease"), covering a building commonly known as 280 East Grand Avenue, South San Francisco, California and located on a portion of the real property in the City of South San Francisco, County of San Mateo, State of California (the "Property") more particularly described as follows:

> Lots 1, 2, 3 and 4, inclusive, as shown on Parcel Map No. 91-284, "Being a resubdivision of the parcels described in the deeds to Metal and Thermit Corporation, recorded in Book 293, at Page 394 of Deeds; in Book 49, at Page 490, Official Records; in Book 77, at Page 415, Official Records; and, except that parcel described in Book 1352, at Page 373, Official Records," filed on February 25,1992, in Book 65 of Parcel Maps, in the Office of the Recorder of the County of San Mateo, California.

EXHIBIT C

B. Landlord, Assignee and Exelixis Pharmaceuticals, Inc. are parties to an Agreement and Consent dated concurrently herewith (such Agreement and Consent, as it may be amended from time to time in accordance with its terms, being hereinafter referred to as the "Agreement"), which Agreement provides for, among other things, the future assignment of the MetaXen Lease to Assignee, subject to the terms and conditions more specifically set forth in the Agreement.

C. Landlord and Assignee wish to evidence the Agreement and their respective rights and obligations thereunder with respect to the MetaXen Lease by executing and recording this Memorandum, and to make such respective rights and obligations binding upon the Property and upon the respective successors and assigns of Landlord and Assignee.

NOW, THEREFORE, in reliance upon the foregoing recitals and for good

and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Assignee hereby agree as follows:

1. Landlord consents to the assignment of the Tenant's interest in the MetaXen Lease to Assignee, at the time provided in and subject to the terms and conditions set forth in the Agreement. Assignee shall accept such assignment and assume and agree to perform the obligations of the Tenant under the MetaXen Lease, effective as of the time provided in and subject to the terms and conditions set forth in the Agreement.

2. Landlord and Assignee agree, and hereby declare as a matter of public record, that the rights and obligations of Landlord and Assignee with respect to the MetaXen Lease shall be binding upon and run with the Property, and shall be binding upon and inure to the benefit of the respective permitted successors and assigns (if any) of Landlord and Assignee with respect to their respective interests under the Agreement and the MetaXen Lease and with respect to their respective interests in the Property.

3. This Memorandum may be executed in two or more counterparts and by separate parties on separate counterparts, and, when each party has so executed at least one counterpart identical in form to the counterpart(s) executed by the other party or parties, shall constitute a single agreement with the same force and effect as though all signatures appeared on a single document. Any signature page of this Memorandum may be detached from any counterpart without impairing the legal effect of any signatures thereon, and may be attached to another counterpart identical in form thereto but having attached to it one or more additional signature pages.

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IN WITNESS WHEREOF, the parties hereto have executed this Memorandum as of the date first set forth above.

LANDLORD:	ASSIGNEE:
BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership	CYTOKINETICS, INC., a Delaware, corporation
By: BRITANNIA POINTE GRAND, LLC, a California limited liability company, General Partner	By: _____ Its: _____
By: _____ Its: Manager, President and Chief Financial Officer	By: _____ Its: _____

State of_____)
)
County of_____)

On July __, 1999, before me,_____, a Notary Public in and for said county and state, personally appeared_____ _____, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

_____
Notary Public

State of_____)
)
County of_____)

On July_____, 1999, before me,_____, a Notary Public In and for said county and state, personally appeared _____, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

_____
Notary Public

EXHIBIT D

MEMORANDUM OF TERMINATION OF AGREEMENT

10.

RECORDING REQUESTED BY:)
)
)
)
WHEN RECORDED MAIL TO:)
)
Donald E. Kelley, Jr., Esq.)
Folger Levin & Kahn LLP)
275 Battery Street, 23rd Floor)
San Francisco, CA 94111)

(Space Above This Line For Recorder's Use Only)

NO DOCUMENTARY TRANSFER TAX DUE.
TERM OF AGREEMENT AND LEASE IS LESS THAN 35 YEARS.

MEMORANDUM OF TERMINATION OF AGREEMENT

This Memorandum of Termination of Agreement ("Termination Memorandum") is entered into between BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership ("Landlord") and CYTOKINETICS, INC., a Delaware corporation ("Assignee"), with reference to the following facts:

A. Landlord and MetaXen, LLC entered into a Build-to-Suit Lease dated May 27, 1997, as amended by a First Amendment to Lease dated as of April 13, 1998, and as further amended by a Second Amendment to Lease dated as of July_____, 1999 between Landlord and Exelixis Pharmaceuticals, Inc. as successor to MetaXen, LLC by assignment (collectively, as amended, the "MetaXen Lease"), covering a building commonly known as 280 East Grand Avenue, South San Francisco, California and located on a portion of the real property in the City of South San Francisco, County of San Mateo, State of California (the "Property") more particularly described as follows:

Lots 1, 2, 3 and 4, inclusive, as shown on Parcel Map No. 91-284, "Being a resubdivision of the parcels described in the deeds to Metal and Thermit Corporation, recorded in Book 293, at Page 394 of Deeds; in Book 49, at Page 490, Official Records; in Book 77, at Page 415, Official Records; and, except that parcel described in Book 1352, at

Page 373, Official Records," filed on February 25, 1992, in Book 65 of Parcel Maps, in the Office of the Recorder of the County of San Mateo, California.

EXHIBIT D

B. Landlord, Assignee and Exelixis Pharmaceuticals, Inc. entered into an Agreement and Consent dated as of July_____, 1999 (such Agreement and Consent, as it may have been amended from time to time in accordance with its terms, being hereinafter referred to as the "Agreement"), which Agreement provided for, among other things, the future assignment of the o MetaXen Lease to Assignee, subject to the terms and conditions more specifically set forth in the Agreement.

C. Landlord and Assignee are parties to a Memorandum of Agreement that was recorded on July_____, 1999 as Instrument No._____ in the Official Records of San Mateo County, California (the "Memorandum") to evidence the Agreement and their respective rights and obligations thereunder with respect to the MetaXen Lease and to make such respective rights and obligations binding upon the Property and upon the respective successors and assigns of Landlord and Assignee.

D. The Agreement has now terminated and Landlord and Assignee wish to record this Termination Memorandum to evidence the termination of the Agreement and of the Memorandum as previously recorded and to eliminate any further force or effect of the Memorandum as a recorded document.

NOW, THEREFORE, in reliance upon the foregoing recitals and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Assignee hereby agree as follows:

1. The Memorandum and the rights and obligations created or described therein are terminated and of no further force or effect, and the Memorandum shall no longer be considered to create or to provide notice or evidence of any rights, obligations or interests with respect to the MetaXen Lease or the Property.

2. This Termination Memorandum may be executed in two or more counterparts and by separate parties on separate counterparts, and, when each party has so executed at least one counterpart identical in form to the counterpart(s) executed by the other party or parties, shall constitute a single agreement with the same force and effect as though all signatures appeared on a single document. Any signature page of this Termination Memorandum may be detached from any counterpart without impairing the legal effect of any signatures thereon, and may be attached to another counterpart identical in form thereto but having attached to it one or more additional signature pages.

[rest of page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have executed this Termination Memorandum as of the date first set forth above.

LANDLORD:	ASSIGNEE:
BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership	CYTOKINETICS, INC., a Delaware, corporation
By: BRITANNIA POINTE GRAND, LLC, a California limited liability company, General Partner	By: _____ Its: _____
By: _____	By: _____

Its: Manager, President and Chief Financial Officer

Its: _____

State of_____)
)
County of_____)

On July,___, 1999, before me,_____, a Notary Public in and for said county and state, personally appeared_____, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

_____
Notary Public

State of_____)
)
County of_____)

On July____, 1999, before me, _____, a Notary Public in and for said county and state, personally appeared _____, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

_____
Notary Public

[MAP]

EXHIBIT A

Exhibit 10.13

AMENDMENT TO AGREEMENT AND CONSENT

This Amendment to Agreement and Consent (this "Amendment") is entered into as of July 31, 2000, by and among CYTOKINETICS, INC., a Delaware corporation ("Cytokinetics"), EXELIXIS, INC., a Delaware corporation formerly known as Exelixis Pharmaceuticals, Inc. ("Exelixis") and BRITANNIA POINTE GRAND LIMITED PARTNERSHIP, a Delaware limited partnership ("Britannia")

RECITALS

A. Britannia, as "Landlord", and MetaXen, LLC, a Delaware limited liability company ("MetaXen") as "Tenant", entered into that certain Build-to-Suit Lease dated May 27, 1997 as amended by the First Amendment to Lease (the "First Amendment"), dated as of April 13, 1998 and the Second Amendment to Lease (the "Second Amendment"), dated as of July 20, 1999 (collectively, the "Master Lease") for the following described premises (the "Premises"):

> Approximately 50,195 square feet in Building H located at Britannia Pointe Grand Business Park and commonly known as 280 East Grand Avenue, South San Francisco, California 94080.

B. Pursuant to that certain Sublease Agreement dated May 1, 1998 as amended by the First Amendment to Sublease Agreement dated July 20, 1999 by and between Cytokinetics, as "Sublessee", and MetaXen, as "Sublessor" (the "MetaXen-Cytokinetics Sublease"), MetaXen leased to Cytokinetics a portion of the Premises consisting of approximately 13,750 leaseable square feet as more particularly described in the MetaXen-Cytokinetics Sublease.

C. Pursuant to that certain Sublease Agreement dated as of March 1, 1999 by and between MetaXen and Exelixis (the "MetaXen-Exelixis Sublease"), MetaXen leased to Exelixis a portion of the Premises as described more particularly in the MetaXen-Exelixis Sublease.

D. Pursuant to that certain Assignment and Assumption Agreement and Consent dated as of June 11, 1999 among Britannia, MetaXen, Exelixis and Xenova Group, PLC (the "Assignment and Assumption Agreement"), MetaXen assigned to Exelixis all of its right, title and interest in and to the Master Lease and Exelixis assumed all of MetaXen's obligations under the Master Lease.

E. Pursuant to that certain Agreement and Consent dated as of July 20, 1999 by and among Britannia, Cytokinetics and Exelixis (the "Consent Agreement"), Exelixis agreed to assign its interest as "Tenant" under the Master Lease to Cytokinetics and Cytokinetics agreed to assume all obligations of Exelixis as "Tenant" under the Master Lease on the terms and conditions contained therein. The Consent Agreement provides that Britannia's consent to the assignment and assumption as described above, is subject to, among other matters, receipt by Britannia of warrants to purchase Cytokinetics' common stock; provided, however, that such right is subject to recission in the event the assignment and assumption fails to occur by July 31, 2000. In addition, the Consent Agreement provides for the occurrence of certain other events in the event the assignment and assumption fails to occur by July 31, 2000.

F. The parties hereto desire to amend the Consent Agreement to extend the time frame for completing the assignment and assumption of the Master Lease.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

AGREEMENT

Section 1. Amendment to Consent Agreement. The Consent Agreement is hereby modified as follows:

1.1. The last sentence of Paragraph l(a) of the Consent Agreement is hereby amended to read in its entirety as follows:

Such warrants shall also contain a provision by which they would be deemed rescinded in the event that Cytokinetics' assumption of the MetaXen Lease shall have failed to occur by September 30, 2000.

1.2 The last sentence of Paragraph 3 of the Consent Agreement is hereby amended to read in its entirety as follows:

In the event that the assignment and assumption of the MetaXen lease to and by Cytokinetics shall have failed to occur by September 30, 2000 for any reason other than a default by Cytokinetics in any of its obligations hereunder, Exelixis shall refund all amounts paid by Cytokinetics pursuant to this Section 3.

1.3. The last sentence of Paragraph 15 of the Consent Agreement is hereby amended to read in its entirety as follows:

Landlord shall hold the signed Memorandum of Termination of Agreement and is authorized to record it if either (i) this Agreement is terminated prior to the assignment and assumption of the MetaXen Lease to and by Cytokinetics becoming effective, or (ii) the assignment and assumption of the MetaXen Lease to and by Cytokinetics fails to become effective by September 30, 2000.

Section 2. Ratification of Consent Agreement. Except as specifically amended hereby, all of the provisions of the Consent Agreement shall remain unamended and in full force and effect.

Section 3. Governing Law. This Amendment shall be governed by and construed in accordance with the laws of the State of California.

Section 4. Severability. If any term, provision, covenant or condition of this Amendment or any application thereof should be held by a court of competent jurisdiction to be

invalid, void or unenforceable, all terms, provisions, covenants and conditions hereof and all applications thereof not held invalid, void or unenforceable shall continue in full force and effect and shall in no way be affected, impaired or invalidated thereby.

Section 5. Successor and Assigns. The provisions of this Amendment shall be binding upon and inure solely to the benefit of the parties hereto, and their respective heirs, legal representatives, successors and assigns.

Section 6. Counterparts. This Amendment may be executed in any number of counterparts each of which shall be an original but all of which together shall constitute one agreement.

Section 7. Incorporation of Recitals. The recitals set forth above are incorporated herein and made a part hereof.

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date set forth above.

CYTOKINETICS:

CYTOKINETICS, INC

a Delaware corporation

By: /s/ James Sabry

Name: James Sabry
Its: CEO

By: /s/ Robert Blum

Name: Robert Blum
Its: V.P., Business Development

EXELIXIS:

EXELIXIS, INC.
a Delaware corporation

By: /s/ George A. Scangos 7-31-00

Name: George A. Scangos, Ph.D.
Its: President and CEO

By: /s/ Glen Y. Sato 7-31-00

Name: Glen Y. Sato
Its: CFO and VP, Legal Affairs

BRITANNIA:

BRITANNIA POINTE GRAND LIMITED
PARTNERSHIP, a Delaware limited partnership

By: Britannia Pointe Grand, LLC, a California limited liability company, its General partner

By: /s/ T. J. Bristow

Name: T. J. Bristow
Its: Manager

Exhibit 10.14

ASSIGNMENT AND ASSUMPTION OF LEASE

THIS ASSIGNMENT AND ASSUMPTION OF LEASE (this "Assignment") is made as of September 28, 2000, by and between EXELIXIS, INC., a Delaware corporation formerly known as Exelixis Pharmaceuticals, Inc. ("Assignor"), and CYTOKINETICS, INC., a Delaware corporation ("Assignee").

RECITALS

A. Britannia Pointe Grand Limited Partnership, a Delaware limited partnership as "Landlord", and MetaXen, LLC, a Delaware limited liability company ("MetaXen") as "Tenant", entered into that Build-to-Suit Lease dated May 27,1997 as amended by the First Amendment to Lease (the "First Amendment"), dated as of April 13, 1998 and the Second Amendment to Lease (the "Second Amendment"), dated as of July 11, 1999 (collectively, the "Lease") for the following described premises (the "Premises"):

> Approximately 50,195 square feet in Building H located at Britannia Pointe Grand Business Park and commonly known as 280 East Grand Avenue, South San Francisco, California 94080.

B. Pursuant to that certain Assignment and Assumption Agreement and Consent (the "Assignment and Assumption"), dated as of July 11, 1999 among Landlord, MetaXen, Assignor and Xenova Group, PLC ("Xenova"), MetaXen assigned to Assignor all of its right, title and interest in and to the Lease and Assignor assumed all of MetaXen's obligations under the Lease.

C. Pursuant to that certain Sublease Agreement dated May 1, 1998 as amended by the First Amendment to Sublease Agreement dated July 20, 1999 by and between Assignee, as "Sublessee" and MetaXen, as "Sublessor" (the "Sublease"), MetaXen leased to Assignee a portion of the Premises consisting of approximately 13,750 leaseable square feet as more particularly described in the Sublease.

D. Pursuant to the terms and conditions of that certain Agreement and Consent dated as of July 20, 1999 by and among Landlord, Assignor and Assignee (the "Consent Agreement"), Assignor agreed to assign its interest as "Tenant" under the Lease to Assignee and Assignee agreed to assume all obligations of Assignor as "Tenant" under the Lease on the terms and conditions contained, therein.

ASSIGNMENT AND ASSUMPTION

NOW, THEREFORE, for good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows.

1. Assignment of Lease. Assignor hereby sells, transfers, assigns and sets over all of Assignor's right, title and interest in and to the Lease to Assignee.

2. Assumption of Lease. Assignee hereby agrees to assume the Lease and to faithfully perform all of the covenants, duties and obligations of Assignor, as "Tenant" under the Lease.

3. Release of Assignor. Pursuant to the terms of the Consent Agreement, Landlord agreed, effective upon the execution and delivery of this Assignment and the satisfaction of certain other conditions set forth therein, to release Assignor from all covenants, duties and obligations of the "Tenant" under the Lease arising after the date of this Assignment.

4. Assignor's Representations and Warranties. Assignor represents and

warrants to Assignee that it has not assigned, transferred or conveyed its interest in the Lease to any other person, firm or entity, that it has full power and authority to make this Assignment, that the Lease is not in default and has been performed by Assignor according to its terms, that Assignor knows of no claims or defenses or circumstances which, with the passage of time, would lead to claims or defenses by Landlord under the Lease and that the Sublease (as hereinafter defined), when consented to by Landlord, does not violate any provision of the Lease.

5. Assignee's Representations and Warranties. Assignee represents and warrants to Assignor that it has full power and authority to enter into this Assignment, to assume the Lease as provided above and to perform its obligations thereunder.

6. Assignor's Option to Sublease. Assignee acknowledges and agrees that, pursuant to the terms of the Consent Agreement, Assignor has the option to sublease a portion of the Premises from Assignee. Assignee further acknowledges and agrees that Assignor has exercised such option by giving written notice thereof to Assignee. As a condition precedent to the effectiveness of this Assignment, Assignor and Assignee shall execute and deliver that certain Sublease Agreement in the form attached hereto as Exhibit A (the "Cytokinetics-Exelixis Sublease").

7. Return of Security Deposit. Concurrently with the execution and delivery of this Assignment, Assignor shall return to Assignee the security deposit deposited by Assignee with Assignor pursuant to the Sublease, which security deposit is in the amount of $104,500.00

8. Brokers. Assignor and Assignee each warrants and represents for the benefit of the other that it has had no dealings with any real estate broker or agent in connection with the negotiation of this Assignment and that it knows of no real estate broker or agent who is or might be entitled to a real estate brokerage, commission or finder's fee in connection with this Assignment.

9. Full Force and Effect Assignor and Assignee hereby agree that this Assignment will in no way change or modify the terms of the Lease, and Assignor and Assignee hereby ratify and agree that the terms of the Lease remain in full force and effect.

10. Memorandum: If requested by either party hereto, a mutually satisfactory memorandum of this Agreement shall be executed and recorded in the official records of San Mateo County, California.

11. Successors and Assigns. This Assignment shall inure to the benefit of, and shall be binding upon, the parties hereto and their respective heirs, representatives, successors and assigns.

12. Governing Law. This Assignment shall be governed by and construed in accordance with the laws of the State of California.

13. Counterparts. This Assignment may be executed in multiple counterparts, which taken together, shall constitute one and the same instrument.

[There is no further text on this page.]

IN WITNESS WHEREOF, the parties hereto have caused this Assignment to be duly executed as of the date first set forth above.

ASSIGNOR:

EXELIXIS, INC.,

a Delaware corporation
formerly known as Exelixis Pharmaceuticals, Inc.

By: /s/ Glen Sato

Name: Glen Sato
Title: CFO

By: /s/ [ILLEGIBLE]

Name: [ILLEGIBLE]
Title: [ILLEGIBLE]

ASSIGNEE:

CYTOKINETICS, INC.,
a Delaware corporation

By: /s/ James Sabry

Name: James Sabry
Title: CEO

By: /s/ Robert Blum

Name: Robert Blum
Title: VP Business Development

CONSENT BY LANDLORD

Britannia Pointe Grand Limited Partnership ("Landlord") is the owner of the interest of the "Landlord" under the Lease Landlord hereby consents to the assignment of the Lease by Assignor to Assignee, the assumption of the Lease by Assignee as provided above, and releases Assignor from all of its obligations as Tenant arising under the Lease after the date hereof. Landlord acknowledges and agrees that the obligation of Assignee to deliver warrants to Landlord is governed solely by the terms of Paragraph l(a) of the Consent Agreement and that Assignee shall have no additional obligation to deliver additional warrants to Landlord whether pursuant to the Lease, the First Amendment or otherwise. Landlord further acknowledges and agrees that Assignee has fully discharged its obligation to Landlord with respect to such warrants prior to the date hereof and has fulfilled all other conditions precedent to Landlord's consent to the assignment and assumption of the Lease as set forth in Paragraph l(a) or elsewhere in the Consent Agreement. Landlord represents and warrants to Assignee that (i) Landlord knows of no claims or defenses or circumstances, which with the passage of time, would lead to claims or defenses by Landlord against Assignee as tenant under the Lease; (ii) the Sublease does not violate any provision of the Lease; (iii) no provision of the Sublease is in violation of the terms of the Lease; and (iv) all rent and other charges due under the Lease have been paid through and including September 30, 2000.

LANDLORD:

BRITANNIA POINTE GRAND LIMITED
PARTNERSHIP, a Delaware limited partnership

By: Britannia Pointe Grand, LLC,
a California limited liability company,
its general partner

By: /s/ T.J. Bristow

Name: T.J. Bristow
Title: Manager

EXHIBIT A

Sublease Agreement

SUBLEASE AGREEMENT

This Sublease Agreement (this "Sublease,") dated September 28, 2000, for reference purposes only, is entered into by and between CYTOKINETICS, INC., a Delaware corporation ("Sublessor") and EXELIXIS, INC., a Delaware corporation formerly known as Exelixis Pharmaceuticals, Inc. ("Sublessee").

RECITALS

A. Britannia Pointe Grand Limited Partnership, a Delaware limited partnership ("Master Lessor"), as "Landlord", and MetaXen, LLC, a Delaware limited liability company ("MetaXen") as "Tenant", entered into that certain Build-to-Suit Lease dated May 27, 1997 as amended by the First Amendment to Lease (the "First Amendment"), dated as of April 13, 1998 and the Second Amendment to Lease (the "Second Amendment"), dated as of July 11, 1999, copies of which are attached hereto as Exhibit A (collectively, the "Master Lease") for the following described premises (the "Premises"):

> Approximately 50,195 square feet in Building H located at Britannia Pointe Grand Business Park and commonly known as 280 East Grand Avenue, South San Francisco, California 94080.

B. Pursuant to that certain Sublease Agreement dated May 1, 1998 as amended by the First Amendment to Sublease Agreement dated July 20, 1999 by and between Sublessor, as "Sublessee", and MetaXen, as "Sublessor" (the "MetaXen-Cytokinetics Sublease"), MetaXen leased to Sublessor a portion of the Premises consisting of approximately 13,750 leaseable square feet as more particularly described in the MetaXen-Cytokinetics Sublease.

C. Pursuant to that certain Sublease Agreement dated as of March 1, 1999 by and between MetaXen and Sublessee (the "MetaXen-Exelixis Sublease"), MetaXen leased to Sublessee a portion of the Premises as described more particularly in the MetaXen-Exelixis Sublease.

D. Pursuant to that certain Assignment and Assumption Agreement and Consent dated as of July 11, 1999 among Master Lessor, MetaXen, Sublessee and Xenova Group, PLC (the "Assignment and Assumption Agreement"), MetaXen assigned to Sublessee all of its right, title and interest in and to the Master Lease and Sublessee assumed all of MetaXen's obligations under the Master Lease. Concurrently, with its execution and delivery of the Assignment and Assumption Agreement, by operation of law, Sublessee's estate as sublessee under the MetaXen-Exelixis Sublease merged into its estate as sublessor under the MetaXen-Exelixis Sublease thereby rendering the MetaXen-Exelixis Sublease null, void and of no further force and effect.

E. Pursuant to that certain Agreement and Consent dated as of July 20, 1999 by and among Master Lessor, Sublessor and Sublessee (the "Consent Agreement"), Sublessee agreed to assign its interest as "Tenant" under the Master Lease to Sublessor and Sublessor agreed to assume all obligations of Sublessee as "Tenant" under the Master Lease on the terms and conditions contained therein. Concurrently herewith, Sublessee, as "Assignor," and Sublessor, as

"Assignee", have executed and delivered that certain Assignment and Assumption of Lease (the "Assignment and Assumption") pursuant to which Sublessee has assigned to Sublessor all of Sublessee's interest as "Tenant" under the Master

Lease, and Sublessor has assumed from Sublessee, subject to certain limitations and exceptions set forth therein, all of Sublessee's obligations as "Tenant" under the Master Lease on the terms and conditions contained therein. Sublessee has timely exercised its option to sublease a portion of the Premises from Sublessor, which portion is defined in Paragraph 1 of this Sublease as the "Sublease Premises". Sublessor and Sublessee desire to enter into this Sublease to set forth the terms and conditions pursuant to which Sublessor shall sublease the Sublease Premises to Sublessee.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

AGREEMENT

1. Premises. Sublessor hereby leases to Sublessee, and Sublessee hereby hires from Sublessor, on and subject to the terms and conditions hereinafter set forth, the following premises (the "Sublease Premises"), situated in the City of South San Francisco, County of San Mateo, State of California, commonly known as a portion of Building H (the "Building") in the Britannia Pointe Grand Business Park (the "Center") and consisting of the following: (i) approximately eight hundred sixty-two (862) leasable square feet labeled "Exelixis Space" on Exhibit B, attached hereto, and incorporated herein by this reference (the "Ground Floor Leased Area"); (ii) approximately four thousand three hundred forty-six (4,346) leasable square feet labeled "Shared Space" on the above referenced Exhibit B on a non-exclusive basis (the "Ground Floor Shared Area"); and (iii) approximately twenty-three thousand six hundred eighty (23,680) leaseable square feet comprising all of the leaseable square feet of the second floor of the Building as shown on Exhibit B-1, attached hereto and incorporated herein by this reference (the "Second Floor Leased Area"). The Sublease Premises include the laboratory benches, water systems, fume hoods, laminar flow hoods and other laboratory support space as specified in Exhibit B-2, attached hereto, and incorporated herein by this reference. Sublessee shall have the right to use the Common Areas as described in the Master Lease, subject to the rights of Master Lessor, Sublessor and other tenants of the Center. The right of Sublessee to use the Ground Floor Shared Area is non-exclusive and shall be subject to reasonable rules and requirements of Sublessor. Sublessor and Sublessee shall each have equal access to the Ground Floor Shared Area and shall devise a mutually satisfactory system of sharing the Ground Floor Shared Area, but in the case of a conflict Sublessor shall have the primary right to use the Ground Floor Shared Area. Sublessee acknowledges that it has occupied the Sublease Premises pursuant to the terms of the MetaXen-Exelixis Sublease and the Master Lease through and including the date hereof.

2. Master Lease.

a. Sublease is Subordinate to Master Lease. This Sublease is subject and subordinate to the Master Lease. Sublessee shall not commit or permit to be committed on the Sublease Premises any act or omission which shall violate any terms or condition of the Master

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Lease. If the Master Lease terminates, this Sublease shall terminate. Sublessor shall have no liability to Sublessee, if the Master Lease terminates without fault of Sublessor. Sublessor hereby covenants and agrees that, without the prior written consent of Sublessee, which consent shall not be unreasonably withheld or delayed, Sublessor shall not (i) terminate the Master Lease, (ii) amend or otherwise modify the terms of the Master Lease, unless such modification would apply only to a matter that would take effect only after the Expiration Date (or earlier termination of this Sublease), or (iii) willfully breach the terms of the Sublease or the Master Lease. Sublessor hereby agrees to perform its obligations as tenant under the Master Lease if and to the extent those obligations are not assumed by Sublessee pursuant to the terms of this Sublease.

b. Application of Master Lease Provisions. Except as otherwise expressly provided in this Sublease, Sublessee shall assume and perform, with respect to the Sublease Premises, the obligations of the Sublessor as Lessee under the Master Lease arising after the date of this Sublease. Therefore, except as otherwise provided, for the purpose of this Sublease, wherever in the Master Lease (as incorporated herein) "Landlord" is used, it shall be deemed to mean the Sublessor herein, and wherever in the Master Lease (as incorporated herein) "Tenant" is used, it shall be deemed to mean the Sublessee herein, and wherever in the Master Lease (as incorporated herein) "Lease" is used, it shall be deemed to mean this Sublease.

c. Incorporation of Master Lease, Provisions.

(1) All of the terms and conditions in the Master Lease, as they relate to the Sublease Premises, are incorporated herein except for: Section 1.1 (Premises); Section 1.2 (Landlord's Reserved Rights); Sections 1.3 (First Refusal); 2.1 (Term); 2.2 (Early Possession); 2.3 (Delay in Possession); 2.6 (Option to Extend); 3.1 (Minimum Rent); 4.1 (Stock Warrants); 6.2 (Real Property Taxes); 7 (Operating Expenses); 8.1 (Payment of Utilities); Tenant's obligation for HVAC repair and entry into a service contract under 10.2(a); 12.1(b); 19.1 (Notices), 19.11 (Financial Information); 19.15 (Brokers); 19.16 (Memorandum of Lease), Articles 4 (Stock Warrants), 5 (Construction) and Article 18 (Security Deposit), the First Amendment to Lease as it pertains to warrants, and Exhibit C.

(2) Except as otherwise provided herein, Sublessor is responsible for all financial obligations under the Master Lease.

d. Indemnity. Except to the extent caused by Sublessor, or Sublessor's agents', employees' or invitees' negligence or willful misconduct, Sublessee, shall indemnify and hold Sublessor harmless against and from all liability, judgments, costs, damages, claims or demands, including reasonable attorney's fees, arising out of Sublessee's failure to comply with or perform Sublessee's obligations under this Sublease, including, but not limited to, Sublessee's obligation to immediately disclose any violations of the warranty as set forth in section 2.f, below. Except to the extent caused by Sublessee, or Sublessee's agents', employees' or invitees' negligence or willful misconduct, Sublessor shall indemnify and hold Sublessee harmless against and from all liability, judgments, costs, damages, claims or demands, including reasonable attorney's fees, arising out of Sublessor's failure to comply with or perform Sublessor's obligations under this Sublease.

e. Master Lease in Effect. Sublessee represents to Sublessor that the Master Lease is in full force and effect and that, to Sublessee's knowledge, no default exists on the part of any party to the Master Lease; furthermore Sublessee represents and warrants that it has not received any notification from Master Lessor of any default under the Master Lease or notice of any potential default under the Master Lease. Subject to the terms and provisions of this Sublease, Sublessor agrees to keep the Master Lease in full force and effect during the term of this Sublease, subject, however, to any earlier termination of the Master Lease without the default of Sublessor.

f. Warranty. Section 6.2 of the Master Lease creates a warranty in favor of Sublessor. Sublessee shall provide Sublessor with written notification of any violation of the warranty in Section 6.2, promptly following the discovery by Sublessee of such violation.

g. To the extent that any financial terms contained in this Sublease that are applicable to Sublessor and Sublessee only conflict with similar provisions in the Master Lease, this Sublease shall prevail.

3. Sublease Term; Delivery of Possession.

a. Term. The term of this Sublease shall begin on the

date the Assignment and Assumption shall become effective ("Commencement Date") and end on April 15, 2001.

b. Delivery of Possession.

(1) If Sublessee desires to make any improvements performed in either the Ground Floor Leased Area or the Second Floor Leased Area (Sublessee shall have no right to modify or otherwise alter the Ground Floor Shared Area) and if Sublessee shall fail to deliver to Sublessor a schedule of improvements, along with plans and specifications thereto (including projected costs) reasonably acceptable to Sublessor on or before sixty (60) days following the execution of this Sublease, Sublessor shall be deemed to have disapproved such improvements and Sublessee shall not make any such improvements until such plans and specifications shall have been delivered to and approved by Sublessor.

(2) Sublessor will deliver the Sublease Premises subject to all applicable zoning, municipal, county and state laws, ordinances and regulations governing and regulating the use of the Sublease Premises, and Sublessee accepts the Sublease Premises subject thereto. Other than as set forth herein, Sublessee shall accept the Sublease Premises "as is". Sublessor shall assign its rights or, alternatively, shall itself enforce such rights pursuant to any manufacturer or other warranty covering the Sublease Premises.

4. Rent. Sublessee shall pay to Sublessor no later than the first day of each calendar month of the Term of this Sublease without deduction, set off, prior notice or demand, as rent for the Sublease Premises, monthly rent ("Base Rent") as set forth in the rent schedule below, and subject to the terms and provisions of section 3.2 of the Master Lease. Base Rent shall commence on the date hereof (the "Rent Commencement Date"); provided, however, for the period from the

date hereof through September 30, 2000, Sublessee shall pay Base Rent, prorated for the number of days in such period, on the date hereof.

Rent Schedule

Leased Premises	Base Rent/Month	Rent/Sq.ft./month	Approx. Sq. Feet
Ground Floor Leased Area	$ 3,361.80	$3.90	862
Ground Floor Shared Area	$ 8,474.70	$1.95	4,346
Second Floor Leased Area	$ 92,352.00	$3.90	23,680
Total	$ 104,188.50		

Sublessor and Sublessee each hereby acknowledge and agree that the parties hereto intend this Sublease to be on a "full-service" basis and Sublessee shall only be responsible to pay. Base Rent and no other operating costs or service expenses.

5. Security Deposit. Concurrently herewith, Sublessee shall deposit One Hundred Four Thousand One Hundred Eighty-eight Dollars and Fifty Cents ($104,188.50) with Sublessor as security for Sublessee's performance of its obligations under the terms of this Sublease. Sublessor shall not be required to keep any cash portion of the Security Deposit separate from its general funds, or to pay any interest thereon. The Security Deposit shall be held by Sublessor and may be applied by Sublessor in accordance with the provisions of Article 18 of the Master Lease. If Sublessee defaults with respect to any provision of this Sublease, including, without limitation, the provisions relating to the payment of rental and other sums due hereunder, Sublessor shall have the right, but shall not be required, to use, apply or retain all or any part of the Security Deposit for the payment of rental or any other amount which Sublessor may spend or become obligated to spend by reason of Sublessee's default or to compensate Sublessor for any other loss or damage which Sublessor

may suffer by reason of Sublessee's default. If any portion of the Security Deposit is so used or applied, Sublessee shall, within ten (10) days after written demand therefor, deposit cash with Sublessor in an amount sufficient to restore the Security Deposit to the full amount required hereunder and Sublessee's failure to do so shall be a material breach of this Sublease. If Sublessee fully and faithfully performs every provision of this Sublease to be performed by it, the Security Deposit, or any balance thereof, shall be returned to Sublessee or, at Sublessor's option, to the last assignee of Sublessee's interest hereunder, at the expiration of the term of this Sublease and after Sublessee has vacated the Premises. In the event of termination of Sublessor's interest in this Sublease, Sublessor's shall transfer all deposits then held by Sublessor under this Section to Sublessor's successor in interest, whereupon Sublessee agrees to release Sublessor from all liability for the return of such deposit or the accounting thereof.

6. Use.

a. Permitted Use. The Sublease Premises shall be used and occupied only for office, biotechnology/pharmaceutical research and development, manufacturing, warehousing related to such uses, and other permitted uses under the Master Lease. Sublessee shall use and

occupy the Sublease Premises in accordance with the Master Lease, including, but not limited to Section 11.6, thereof.

b. No Representations or Warranties, Sublessee acknowledges that neither Sublessor nor Sublessor's agents have made any representation or warranty as to the suitability of the Sublease Premises for the conduct of Sublessee's business.

7. Operating Expenses; HVAC Repair. At no time prior to the Expiration Date is Sublessee required to pay as additional rent the amounts for which Sublessor is liable to Master Lessor pursuant to Article 7 (Operating Expenses) of the Master Lease. In addition, until the Expiration Date, Sublessee, shall have no liability for any utilities it consumes in the Premises. In addition, until the Expiration Date, Sublessee, shall have no obligation to maintain or repair the HVAC equipment and related mechanical systems. The parties hereto hereby acknowledge that this Sublease is on a "full service" basis and Sublessee shall not be responsible for any operating costs or expenses, insurance or taxes.

8. Alterations. Notwithstanding the provisions of Article 9 of the Master Lease, any alteration, which requires Master Lessor's approval pursuant to the Master Lease, shall not be commenced by Sublessee unless and until such consent is obtained. Any such alteration shall be at Sublessee's sole cost and expense. At the time Sublessor and Master Lessor consent to any alteration, additions or improvements, Sublessor and Master Lessor shall inform Sublessee in writing whether Sublessee is responsible for the removal of such alterations and improvements at the expiration or earlier termination of the term of this Sublease, provided that Sublessee, in its request for consent to the alteration, addition, or improvement, has expressly requested that Sublessor and Master Lessor specify the nature and extent of any such removal obligation. If such notification is not made, Sublessee shall have no responsibility to remove any such alteration or improvement at the expiration or earlier termination of this Sublease. Any alteration made by Sublessee shall become a part of the Sublease Premises, and at Sublessor's election (and to the extent required, the consent of the Master Lessor), shall be surrendered to Sublessor at the end of the Sublease term. Any alteration made by Sublessee shall, at Sublessor's election, become Sublessor's property throughout the Sublease term except for any specialized improvements installed by Sublessee (which improvements shall be part of Sublessee's Equipment and Alterations, as defined in Exhibit B-2), which improvements shall remain the property of Sublessee and which improvements shall be removed by Sublessee at the expiration or earlier termination hereof. In the event Sublessor is (or becomes) obligated under the Master Lease to remove any of Sublessee's alterations, Sublessee shall be

obligated to remove same at Sublessee's sole cost and expense and to restore the Sublease Premises to its condition prior to the alteration but only to the extent required by Sublessor or Master Lessor in their written consent to any such alteration. In the event that Sublessee removes any items it is permitted to remove under Exhibit B-2, Sublessee, subject to the provisions of the second sentence of this Section 8, at its sole cost and expense, shall restore the Sublease Premises to its condition prior to alteration. Sublessee's obligation to remove any alteration made to any portion of the Sublease Premises prior to the Commencement Date as Tenant under the Master Lease shall be governed by the terms of the Master Lease.

9. Repairs. Pursuant to the Master Lease, Master Lessor is responsible to repair and maintain the roof (structural portions only), exterior walls and other structural portions of the Building and the Common Areas. As to such matters, subject to the terms of the following sentence, Sublessor's sole obligation to Sublessee shall be to request performance of such obligations by Master Lessor. In the event Master Lessor breaches its obligations, Sublessor will assign to Sublessee its right to enforce such obligation and shall otherwise cooperate with Sublessee in connection therewith, provided, however, Sublessee, at its sole cost and expense, shall be responsible for enforcement thereof without reimbursement from Sublessor; provided, further, that if the nature of Sublessor's repair and maintenance obligation is such that both Sublessor and Sublessee shall be benefited by the enforcement thereof, Sublessor and Sublessee shall jointly participate in the enforcement thereof and Sublessor and Sublessee shall share in the cost and expense incurred therewith in the same proportion that their respective premises bears to the total premises. Sublessee, not Master Lessor, shall be responsible for the repair of the roof and structural portions of the Building to the extent the need for maintenance or repair is caused by the gross negligence or willful misconduct of Sublessee, in which case Sublessee shall pay to Sublessor the cost of (including reasonable overhead expense of Sublessor) the maintenance and repairs caused by Sublessee (except (i) to the extent the damage is covered by any insurance maintained by Master Lessor or Sublessor, or, (ii) if Master Lessor fails to maintain the insurance required to be maintained by Master Lessor pursuant to the terms of the Master Lease, to the extent the damage would have been covered by insurance, if Master Lessor had maintained the required insurance). There shall be no abatement of Base Rent and no liability of Master Lessor or Sublessor by reason of any injury to or interference with Sublessee's business arising from the making of any repairs, alterations or improvements in or to the fixtures, appurtenances and equipment therein, provided that Sublessor shall request Master Lessor to use reasonable efforts to minimize the interruption of Sublessee's use and occupancy of the Sublease Premises in connection with its performance of the repairs and maintenance (although nothing contained herein shall be deemed to obligate Master Lessor to pay any overtime costs in order to minimize such interference, or otherwise to perform the repairs or maintenance during hours other than normal business hours). As to all matters that neither Master Lessor nor Sublessee is required to maintain or repair under the Master Lease or this Sublease, as the case may be, Sublessor shall be responsible therefor, and shall promptly and regularly maintain and repair the Sublease Premises. Notwithstanding the foregoing, any damage caused by the negligence or willful misconduct of Sublessee, shall promptly be repaired by Sublessee, at Sublessee's own cost and expense, and in a manner reasonably acceptable to Master Lessor and Sublessor.

10. Insurance.

a. Sublessee shall maintain commercial general liability insurance coverage as required by section 12.1 (a) of the Master Lease which has been incorporated into this Sublease by reference. Each policy of insurance, which Sublessee is required to maintain pursuant to this Lease, shall name both Sublessor and Master Lessor (as well as Master Lessor's general partners and Managing Agent) as additional insureds (including cross-liability endorsements). Sublessee's insurance coverage shall be primary and non-contributory as respects any insurance maintained by Sublessor and/or Master Lessor. Sublessee shall deliver evidence of the coverage

required hereunder (i) on the date hereof and (ii) within ten (10) days of the renewal date for each policy of insurance required hereunder.

b. Pursuant to the terms of the Master Lease as provided in Section 12.1 (b) thereof, Master Lessor is obligated to maintain certain insurance coverage with respect to certain perils. Subject to the terms of the following sentence, Sublessor's sole obligation to Sublessee with respect to Master Lessor's obligations pursuant to said Section 12.1(b) shall be to request performance of such obligations by Master Lessor. In the event Master Lessor breaches its obligations, Sublessor will assign to Sublessee its right to enforce such obligation and shall otherwise cooperate with Sublessee in connection therewith, provided, however, Sublessee, at its sole cost and expense, shall be responsible for enforcement thereof without reimbursement from Sublessor; provided, further, that if the nature of Sublessor's insurance obligation is such that both Sublessor and Sublessee shall be benefited by the enforcement thereof, Sublessor and Sublessee shall jointly participate in the enforcement thereof and Sublessor and Sublessee shall share in the cost and expense incurred therewith in the same proportion that their respective premises bears to the total premises.. In the event Sublessor cannot assign such rights, Sublessor shall diligently enforce its rights as Tenant under the Master Lease.

c. Sublessor shall maintain insurance in the amounts and of the types required pursuant to Section 12 of the Master Lease.

11. Damage or Destruction.

a. Master Lessor Has Obligation to Restore. If the Sublease Premises are damaged or destroyed, Master Lessor has the obligation pursuant to Article 15 of the Master Lease to repair the Sublease Premises unless Master Lessor has the right to terminate. If Master Lessor fails to perform its obligations pursuant to Article 15 of the Master Lease, Sublessor's sole obligation, to Sublessee shall be to request performance of such obligations by Master Lessor. In the event Master Lessor breaches its obligations, Sublessor will assign to Sublessee, its right to enforce such obligation, provided, however, Sublessee, at its sole cost and expense, shall be responsible for enforcement thereof without reimbursement from Sublessor. In the event Sublessor cannot assign its rights, Sublessor shall diligently enforce its rights under the Master Lease.

b. Termination of Master Lease. If the Master Lease terminates pursuant to Article 15 of the Master Lease, this Sublease shall terminate concurrently with the termination of the Master Lease.

c. Sublessee Notice; Right to terminate. Within twenty (20) days following written request from Sublessor, Sublessee shall give notice to Sublessor in writing whether Sublessee agrees to continue this Sublease in effect if Master Lessor reasonably determines that the repair of the Sublease Premises or the Building cannot be completed within three hundred sixty five (365) days after the casualty. If Sublessee does not so agree to continue this Sublease in effect then this Sublease shall terminate. If Sublessee agrees to continue this Sublease in effect as aforesaid, then Sublessor shall have no right to exercise its right (if any) to terminate the

Master Lease or this Sublease. If (i) Master Lessor reasonably determines that the repair of the Sublease Premises or the Building cannot be completed within three hundred sixty five (365) days after the casualty, (ii) neither Master Lessor nor Sublessor has elected to terminate the Master Lease, and (iii) Sublessee agrees to continue this Sublease in effect notwithstanding the time to reconstruct, then this Sublease shall continue in effect, and Sublessee shall fulfill all of the obligations of Sublessor pursuant to the provisions of

Article 15 of the Master Lease, as it pertains to the Sublease Premises.

d. Limited Obligation to Repair. Master Lessor's obligation, should Master Lessor elect or be obligated to repair or rebuild, shall be limited to the terms and conditions of the Master Lease. Master Lessor shall have no obligation to replace or restore the Sublessee Equipment and Alterations (as described in Exhibit B-2) or any other alterations installed by Sublessor or Sublessee, unless specifically required by the Master Lease.

e. Abatement of Rent. Rent under this Sublease shall abate to the same extent as the Rent owing by Sublessor under the Master Lease abates during any casualty repair period.

f. Damage Near End of Term. In addition to the rights to terminate specified in subsection 11.c of this Sublease, either Sublessor or Sublessee shall have the right to cancel and terminate this Sublease as of the date of the occurrence of destruction or damage if the Sublease Premises or the Building is substantially destroyed or damaged (i.e., there is damage or destruction which Sublessor reasonably determines would require more than sixty (60) days to repair) and made untenantable during the last twelve (12) months of the term of the Master Lease. Sublessor or Sublessee, as applicable, shall give written notice of its election to terminate this Sublease under this subsection f. within thirty (30) days after Master Lessor or Sublessor determines that the damage or destruction would require more than sixty (60) days to repair. If either Master Lessor or Sublessor elects to terminate the Master Lease pursuant to Article 15 of the Master Lease, this Sublease shall terminate concurrently with the termination of the Master Lease. If neither Master Lessor nor Sublessor terminates the Master Lease and if neither Sublessor nor Sublessee elects to terminate this Sublease, the repair of the damage shall be governed by Article 15 of the Master Lease.

g. Insurance Proceeds. If this Sublease is terminated, Master Lessor and Sublessor may each keep all their respective insurance proceeds resulting from the damage except for those proceeds, if any, which specifically insured Sublessee's personal property and trade fixtures which Sublessee has a right or obligation to remove upon the expiration of the Sublease term. Sublessor shall be entitled to receive from Sublessee the proceeds of insurance carried by Sublessee with respect to Sublessee Improvements or other alterations installed in the Sublease Premises by Sublessor or at Sublessor's expense. To the extent that Sublessee has paid for any alterations regardless of whether the alterations may become the property of Sublessor upon termination of this Sublease, Sublessee shall receive any portion of the insurance proceeds payable with respect to the then unamortized cost (based on a 2 year life of the alteration on a straight line amortization schedule) for the applicable alterations, reduced by the amounts necessary to pay off any equipment lease or other lien against the applicable alteration, and the balance of the proceeds, if any, will be payable to Sublessor. With respect to those Alterations,

which Sublessee is obligated to remove at the end of the Sublease term which are the property of Sublessee, all proceeds of any insurance, carried by Sublessor or Sublessee shall be paid to Sublessee.

h. Uninsured Casualty. If the Master Lease terminates pursuant to the provisions of Article 15 of the Master Lease, this Sublease shall terminate.

12. Eminent Domain. If all or any part of the Sublease Premises is taken for public or quasi-public use by a governmental authority under the power of eminent domain or is conveyed to a governmental authority in lieu of such taking, and if the taking or conveyance causes the remaining part of the Sublease Premises to be untenantable and inadequate for use by Sublessee for the purpose for which they were leased, then Sublessee, at its option and by giving notice within fifteen (15) days after the taking, may terminate this Sublease as of the date Sublessee is required to surrender possession of the Sublease

Premises. If a part of the Sublease Premises is taken or conveyed but the remaining part is tenantable and adequate for Sublessee's use in Sublessee's reasonable determination, then this Sublease shall be terminated as to the part taken or conveyed as of the date Sublessee surrenders possession. All compensation awarded for the taking or conveyance shall be the property of Master Lessor and Sublessor, as their interests may appear, and Sublessee hereby assigns to Sublessor all its right, title and interest in and to the award, unless the governmental authority makes only one (1) award, and the award contains compensation for the value of moving expenses, Sublessee's personal property, trade fixtures and alterations (including the Sublessee Improvements), Sublessee's Equipment and Alterations, in which case, subject to the rights of any mortgagee or beneficiary of a deed of trust holding a lien on the Property and to Master Lessor's rights under the Master Lease, Sublessee shall be entitled to the compensation paid for Sublessee's moving expenses, trade fixtures, personal property, Sublessee's Equipment and Alterations, and the portion of the award attributable to the then unamortized cost of alterations and improvements constructed at Sublessee's expense (which are to be amortized on a straight line basis over the initial term of this Sublease). Sublessee shall have the right, however, to recover from the governmental authority, but not from Sublessor or Master Lessor, except as provided in the preceding sentence, such compensation as may be awarded to Sublessee on account of the interruption of Sublessee's business, moving and relocation expenses and removal of Sublessee's trade fixtures and personal property.

13. Assignment and Subletting. Notwithstanding any provision of this Sublease to the contrary, if Sublessor consents to a sublet, Sublessee shall pay to Sublessor on a monthly basis as additional Rent, on the date Base Rent is due, an amount equal to fifty percent (50%) of the amount by which the rent payable to Sublessee ("Subrent") under the sublesses exceeds the rent due for the applicable portion of the Sublease Premises after deducting from the Subrent (A) the actual out-of-pocket costs incurred by Sublessee for brokerage commissions and tenant concessions (which concessions are not reflected in the reduced Subrent) and (B) the costs of any additional improvements constructed by Sublessee in connection with the sublease (amortized on a straight line basis over the term of the sublease). Notwithstanding the foregoing, Sublessee may assign this Sublease or sublet any portion of the Sublease Premises without Sublessor's or Master Lessor's consent (but with prior or concurrent notice thereof to Master Lessor and Sublessor) to any of the following (i) any corporation which controls, is controlled by or under

common control with Sublessee; (ii) any corporation resulting from the merger or consolidation of Sublessee; and (iii) any person or entity which acquires all of the assets of Sublessee as a going concern (collectively, "Sublessee Affiliate"), provided that such assignee assumes in full the obligations of Sublessee under the Sublease. Any right of Sublessor or Master Lessor to terminate the Sublease or the Master Lease in response to a requested assignment or subletting shall not apply to an assignment of the Sublease or a subletting of the Sublease Premises to a Sublessee Affiliate. Sublessee shall have the same assignment and sublease rights and limitations as provided in section 13.1 of the Master Lease.

14. Access to Premises. Master Lessor shall have the same right of access to the Sublease Premises as Sublessor which right of access is described in Section 14 of the Master Lease.

15. Surrender at End of Term. Upon expiration or termination of this Sublease, Sublessee shall surrender the Sublease Premises to Sublessor in good and sanitary order, except for any alterations Sublessee is not required to remove, normal wear and tear, acts of God, damage, destruction (except to the extent Sublessee is obligated to restore the same under this Sublease) and eminent domain covered by the provisions of this Sublease. Sublessee shall remove from the Sublease Premises all of Sublessee's personal property and trade fixtures, Sublessee's Equipment and Alterations, and any alterations and improvements Sublessee is required to remove pursuant to Sublessor's or Master

Lessor's written consent to such alterations and improvements, and shall repair all damage caused by the removal. Except to the extent caused by Sublessor's or Master Lessor's or their agents', employees' or invitees', negligence or willful misconduct, Sublessee shall indemnify Sublessor against all loss or liability resulting from delay by Sublessee in so surrendering the Sublease Premises, including without limitation, any claims made by any succeeding tenant, losses to Sublessor due to lost opportunities to lease to a succeeding tenant, and reasonable attorneys' fees and costs.

16. Sublessor Indemnity re: Hazardous Materials.

a. [INTENTIONALLY OMITTED.]

b. Sublessee shall indemnify, defend and hold Sublessor harmless from and against any claim, damage, loss, liability, cost or expense (including reasonable attorneys' fees) arising out of any spill or release of any Hazardous Substance (as defined in Section 11.6 of the Master Lease which has been incorporated by reference into this Sublease) on or about the Sublease Premises or any other portion of the Premises occupied by Sublessee pursuant to the MetaXen-Exelixis Sublease or the Master Lease by Sublessee, its employees, agents or contractors during the period of time Sublessee has occupied the Sublease Premises or such other portion of the Premises. Sublessor shall indemnify, defend and hold Sublessee harmless from and against any claim, damage, loss, liability, cost or expense (including reasonable attorneys' fees) arising out of any spill or release of any Hazardous Substance (as defined in Section 11.6 of the Master Lease which has been incorporated by reference into this Sublease) on or about the Sublease Premises by Sublessor, its employees, agents or contractors during the period of time Sublessee occupies the Sublease Premises.

c. Sublessor is entitled to indemnification from the Master Lessor under certain circumstances as provided in Section 11.6 of the Master Lease. To the extent such indemnification may apply to the benefit of Sublessee, Sublessor agrees to cooperate with Sublessee to enforce such indemnity obligation against Master Lessor; provided, however, Sublessee shall pay any and all costs incurred by Sublessor or Sublessee in connection with the enforcement thereof for the benefit of Sublessee.

17. Signs. Master Lessor shall have the same approval rights with respect to signs as Sublessor; Sublessor shall use its best efforts to obtain Master Lessor's approval of signage rights reasonably satisfactory to Sublessee, so long as such rights do not unreasonably interfere with the rights of Sublessor under the Master Lease.

18. Holding Over. This Sublease shall terminate without further notice at the expiration of the Sublease term. Any holding over by Sublessee after expiration or sooner termination of this Sublease without the consent of Sublessor shall be construed to be a tenancy at sufferance. Base Rent for the Sublease Premises during any tenancy at sufferance, or if Sublessor shall have consented to Sublessee's holding over, shall be at a rate equal to 150% of the Base Rent for the last month of the term, and shall otherwise be on the terms and conditions herein specified insofar as applicable.

19. Brokers. Sublessor and Sublessee each warrants and represents for the benefit of the other that it has had no dealings with any real estate broker or agent in connection with the negotiation of this Sublease, and that it knows of no real estate broker or agent who is or might be entitled to a real estate brokerage, commission or finder's fee in connection with this Sublease. Sublessor and Sublessee warrant and represent that they have dealt with no real estate broker in connection with this Sublease.

a. Broker Disclaimer. Sublessor and Sublessee agree and accept that, except as otherwise expressly stated herein, no broker or agent has made or conducted any investigation, determination, warranty or representation with respect to any of the following: (a) the legality of the present or any

possible future use of the Sublease Premises under any federal, state or local law, (b) the physical condition or square footage of the Sublease Premises; (c) the terms of the Master Lease or any other relevant legal document or agreement; or (d) the presence or location of any hazardous materials on or about the property in which the Sublease Premises are located (including, but not limited to, asbestos, PCB's, other toxic, hazardous or contaminated substances, and underground storage tanks).

b. Acknowledgement. The parties acknowledge that they are not relying on information from any real estate licensee relating to the field of toxic materials, hazardous waste, underground tanks, and asbestos contamination, location of the property within or outside a specific flood zone or special studies seismic area, nor the property's compliance with the guidelines as set forth in the Americans with Disabilities Act (ADA) regarding the determination of the condition of the subject Premises, but rather from their own independently initiated investigations.

20. Notices. All notices or demands of any kind required to be given by Sublessor or Sublessee hereunder shall be in writing and shall be deemed delivered forty-eight (48) hours after depositing the notice or demand in the United States Mail, certified or registered, postage prepaid, or on the next business day after delivering the same with a reputable overnight courier service, in each case addressed to the Sublessor or Sublessee respectively at the addresses set forth after their signatures at the end of this Sublease. Either party may change its address by written notice to the other party in accordance with this Section 20. All Base Rent shall be paid by Sublessee to Sublessor at the same address.

21. Condition To Effectiveness of This Sublease. This Sublease is contingent upon Sublessor obtaining the written consent of the Master Lessor to this Sublease concurrently with the execution of this Sublease, pursuant to the terms of the Consent Agreement. Sublessor and Sublessee acknowledge and agree, that in granting such consent, notwithstanding any other provisions contained in or implied in this Sublease, Master Lessor shall not be deemed or construed (a) to have released Sublessor from any responsibility for the full and timely performance of all obligations of Sublessor as Tenant under the Master Lease accruing from and after the date hereof, nor (b) to have authorized Sublessor to act on Master Lessor's behalf in exercising or waiving any rights, remedies or privileges of Master Lessor as Landlord under the Master Lease as it pertains to the Sublease Premises, nor (c) to have assumed, incurred or undertaken any obligations or liabilities running directly to Sublessee with respect to the Sublease Premises, it being the explicit intention and understanding of the parties that notwithstanding the incorporation by reference of the Master Lease into this Sublease (except as specifically excluded by Section 2 above, and as otherwise specifically excluded in this Sublease), Master Lessor and Sublessor shall look solely to one another for the performance of their respective obligations with respect to the Sublease Premises as Landlord and Tenant under the Master Lease (except to the extent that such obligation arose prior to the date hereof pursuant to the Master Lease, as to which Master Lessor and Sublessee shall look solely to one another for the performance of their respective obligations with respect to the Sublease Premises as Landlord and Tenant under the Master Lease), and that Sublessor and Sublessee shall look solely to one another for the performance of their respective obligations with respect to the Sublease Premises under this Sublease. Nothing in this Section 21 is intended, however, to preclude Sublessee from enforcing, by direct action against Master Lessor, any rights of Sublessor under the Master Lease to the extent such rights are expressly assigned by Sublessor to Sublessee pursuant to this Sublease.

22. Authority. Each person executing this Sublease on behalf of a party hereto represents and warrants that he or she is authorized and empowered to do so and to thereby bind the party on whose behalf he or she is signing.

23. Attorneys Fees. In the event either party shall bring any action or proceeding for damages or for an alleged breach of any provision of

this Sublease to recover rents, or to enforce, protect or establish any right or remedy hereunder, the prevailing party shall be entitled to recover reasonable attorneys' fees and court costs as part of such action or proceeding.

24. Incorporation of Recitals. The recitals set forth above are incorporated herein and made a part hereof.

25. Entire Agreement. This written Sublease, together with the exhibits hereto, contains all the representations and the entire understanding between the parties hereto with respect to the subject matter hereof. Any prior correspondence, memoranda or agreements are replaced in total by this Sublease and the exhibits hereto. This Sublease may be modified only by an agreement in writing signed by each of the parties.

IN WITNESS WHEREOF, the undersigned have executed this Sublease as of the dates set forth below.

SUBLESSOR:

CYTOKINETICS, INC
a Delaware corporation

By: _____
Name: _____
Its: _____ Date September_____, 2000

By: _____
Name: _____
Its: _____ Date September_____, 2000

280 East Grand Avenue
South San Francisco, CA 94080

SUBLESSEE;

EXELIXIS, INC.
a Delaware corporation
formerly known as Exelixis Pharmaceuticals, Inc.

By: _____
Name: _____
Its: _____ Date: September_____, 2000

By: _____
Name: _____
Its: _____ Date: September_____, 2000

170 Harbor Way
South San Francisco, CA 94083

CONSENT BY MASTER LESSOR

Master Lessor hereby consents to the sublease of the Sublease Premises by Sublessor to Sublessee pursuant to the terms of this Sublease. Master Lessor acknowledges and agrees that the obligation of Sublessor to deliver warrants to Master Lessor is governed solely by the terms of Paragraph 1(a) of the Consent Agreement and that Sublessor shall have no additional obligation to deliver additional warrants to Master Lessor whether pursuant to the Master Lease, the First Amendment or otherwise. Master Lessor further acknowledges and agrees that Sublessor has fully discharged its obligation to Master Lessor with respect to

such warrants prior to the date hereof and has fulfilled all other conditions precedent to Master Lessor's consent to the assignment and assumption of the Master Lease as set forth in Paragraph 1(a) or elsewhere in the Consent Agreement Master Lessor represents and warrants to Sublessor that (i) Master Lessor knows of no claims or defenses or circumstances, which with the passage of time, would lead to claims or defenses by Master Lessor against Sublessor as tenant under the Master Lease; (ii) this Sublease does not violate any provision of the Master Lease; (iii) no provision of this Sublease is in violation of the terms of the Master Lease; and (iv) all rent and other charges due under the Master Lease have been paid through and including September 30, 2000.

MASTER LESSOR:

BRITANNIA POINTE GRAND LIMITED
PARTNERSHIP, a Delaware limited partnership

By: Britannia Pointe Grand, LLC,
a California limited liability company,
its general partner

By: _____
Name: T.J.Bristow
Title: Manager

September___, 2000

EXHIBIT A

[attach copies of master Lease and First and Second Amendments to Master Lease]

Exhibit 10.15

SUBLEASE AGREEMENT

This Sublease Agreement (this "Sublease,") dated September 28, 2000, for reference purposes only, is entered into by and between CYTOKINETICS, INC., a Delaware corporation ("Sublessor") and EXELIXIS, INC., a Delaware corporation formerly known as Exelixis Pharmaceuticals, Inc. ("Sublessee").

RECITALS

A. Britannia Pointe Grand Limited Partnership, a Delaware limited partnership ("Master Lessor"), as "Landlord", and MetaXen, LLC, a Delaware limited liability company ("MetaXen") as "Tenant", entered into that certain Build-to-Suit Lease dated May 27,1997 as amended by the First Amendment to Lease (the "First Amendment"), dated as of April 13, 1998 and the Second Amendment to Lease (the "Second Amendment"), dated as of July 11, 1999, copies of which are attached hereto as Exhibit A (collectively, the "Master Lease") for the following described premises (the "Premises"):

> Approximately 50,195 square feet in Building H located at Britannia Pointe Grand Business Park and commonly known as 280 East Grand Avenue, South San Francisco, California 94080.

B. Pursuant to that certain Sublease Agreement dated May 1, 1998 as amended by the First Amendment to Sublease Agreement dated July 20, 1999 by and between Sublessor, as "Sublessee", and MetaXen, as "Sublessor" (the "MetaXen-Cytokinetics Sublease"), MetaXen leased to Sublessor a portion of the Premises consisting of approximately 13,750 leaseable square feet as more particularly described in the MetaXen-Cytokinetics Sublease.

C. Pursuant to that certain Sublease Agreement dated as of March 1, 1999 by and between MetaXen and Sublessee (the "MetaXen-Exelixis Sublease"), MetaXen leased to Sublessee a portion of the Premises as described more particularly in the MetaXen-Exelixis Sublease.

D. Pursuant to that certain Assignment and Assumption Agreement and Consent dated as of July 11, 1999 among Master Lessor, MetaXen, Sublessee and Xenova Group, PLC (the "Assignment and Assumption Agreement"), MetaXen assigned to Sublessee all of its right, title and interest in and to the Master Lease and Sublessee assumed all of MetaXen's obligations under the Master Lease. Concurrently, with its execution and delivery of the Assignment and Assumption Agreement, by operation of law, Sublessee's estate as sublessee under the MetaXen-Exelixis Sublease merged into its estate as sublessor under the MetaXen-Exelixis Sublease thereby rendering the MetaXen-Exelixis Sublease null, void and of no further force and effect.

E. Pursuant to that certain Agreement and Consent dated as of July 20, 1999 by and among Master Lessor, Sublessor and Sublessee (the "Consent Agreement"), Sublessee agreed to assign its interest as "Tenant" under the Master Lease to Sublessor and Sublessor agreed to assume all obligations of Sublessee as "Tenant" under the Master Lease on the terms and conditions contained therein. Concurrently herewith, Sublessee, as "Assignor," and Sublessor, as

"Assignee", have executed and delivered that certain Assignment and Assumption of Lease (the "Assignment and Assumption") pursuant to which Sublessee has assigned to Sublessor all of Sublessee's interest as "Tenant" under the Master Lease, and Sublessor has assumed from Sublessee, subject to certain limitations and exceptions set forth therein, all of Sublessee's obligations as "Tenant" under the Master Lease on the terms and conditions contained therein. Sublessee has timely exercised its option to sublease a portion of the Premises from Sublessor, which portion is defined in Paragraph 1 of this Sublease as the

"Sublease Premises". Sublessor and Sublessee desire to enter into this Sublease to set forth the terms and conditions pursuant to which Sublessor shall sublease the Sublease Premises to Sublessee.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

AGREEMENT

1. Premises. Sublessor hereby leases to Sublessee, and Sublessee hereby hires from Sublessor, on and subject to the terms and conditions hereinafter set forth, the following premises (the "Sublease Premises"), situated in the City of South San Francisco, County of San Mateo, State of California, commonly known as a portion of Building H (the "Building") in the Britannia Pointe Grand Business Park (the "Center") and consisting of the following: (i) approximately eight hundred sixty-two (862) leasable square feet labeled "Exelixis Space" on Exhibit B, attached hereto, and incorporated herein by this reference (the "Ground Floor Leased Area"); (ii) approximately four thousand three hundred forty-six (4,346) leasable square feet labeled "Shared Space" on the above referenced Exhibit B on a non-exclusive basis (the "Ground Floor Shared Area"); and (iii) approximately twenty-three thousand six hundred eighty (23,680) leaseable square feet comprising all of the leaseable square feet of the second floor of the Building as shown on Exhibit B-1, attached hereto and incorporated herein by this reference (the "Second Floor Leased Area"). The Sublease Premises include the laboratory benches, water systems, fume hoods, laminar flow hoods and other laboratory support space as specified in Exhibit B-2, attached hereto, and incorporated herein by this reference. Sublessee shall have the right to use the Common Areas as described in the Master Lease, subject to the rights of Master Lessor, Sublessor and other tenants of the Center. The right of Sublessee to use the Ground Floor Shared Area is non-exclusive and shall be subject to reasonable rules and requirements of Sublessor. Sublessor and Sublessee shall each have equal access to the Ground Floor Shared Area and shall devise a mutually satisfactory system of sharing the Ground Floor Shared Area, but in the case of a conflict Sublessor shall have the primary right to use the Ground Floor Shared Area. Sublessee acknowledges that it has occupied the Sublease Premises pursuant to the terms of the MetaXen-Exelixis Sublease and the Master Lease through and including the date hereof.

2. Master Lease.

a. Sublease is Subordinate to Master Lease. This Sublease is subject and subordinate to the Master Lease. Sublessee shall not commit or permit to be committed, on the Sublease Premises any act or omission which shall violate any terms or condition of the Master

Lease. If the Master Lease terminates, this Sublease shall terminate. Sublessor shall have no liability to Sublessee, if the Master Lease terminates without fault of Sublessor. Sublessor hereby covenants and agrees that, without the prior written consent of Sublessee, which consent shall not be unreasonably withheld or delayed, Sublessor shall not (i) terminate the Master Lease, (ii) amend or otherwise modify the terms of the Master Lease, unless such modification would apply only to a matter that would take effect only after the Expiration Date (or earlier termination of this Sublease), or (iii) willfully breach the terms of the Sublease or the Master Lease. Sublessor hereby agrees to perform its obligations as tenant under the Master Lease if and to the extent those obligations are not assumed by Sublessee pursuant to the terms of this Sublease.

b. Application of Master Lease Provisions. Except as otherwise expressly provided in this Sublease, Sublessee shall assume and perform, with respect to the Sublease Premises, the obligations of the Sublessor as Lessee under the Master Lease arising after the date of this Sublease. Therefore, except as otherwise provided, for the purpose of this Sublease,

wherever in the Master Lease (as incorporated herein) "Landlord" is used, it shall be deemed to mean the Sublessor herein, and wherever in the Master Lease (as incorporated herein) "Tenant" is used, it shall be deemed to mean the Sublessee herein, and wherever in the Master Lease (as incorporated herein) "Lease" is used, it shall be deemed to mean this Sublease.

c. Incorporation of Master Lease, Provisions.

(1) All of the terms and conditions in the Master Lease, as they relate to the Sublease Premises, are incorporated herein except for: Section 1.1 (Premises); Section 1.2 (Landlord's Reserved Rights); Sections 1.3 (First Refusal); 2.1 (Term); 2.2 (Early Possession); 2.3 (Delay in Possession); 2.6 (Option to Extend); 3.1 (Minimum Rent); 4.1 (Stock Warrants); 6.2 (Real Property Taxes); 7 (Operating Expenses); 8.1 (Payment of Utilities); Tenant's obligation for HVAC repair and entry into a service contract under 10.2(a); 12.1(b); 19.1 (Notices), 19.11 (Financial Information); 19.15 (Brokers); 19.16 (Memorandum of Lease), Articles 4 (Stock Warrants), 5 (Construction) and Article 18 (Security Deposit), the First Amendment to Lease as it pertains to warrants, and Exhibit C.

(2) Except as otherwise provided herein, Sublessor is responsible for all financial obligations under the Master Lease.

d. Indemnity. Except to the extent caused by Sublessor, or Sublessor's agents', employees' or invitees' negligence or willful misconduct, Sublessee, shall indemnify and hold Sublessor harmless against and from all liability, judgments, costs, damages, claims or demands, including reasonable attorney's fees, arising out of Sublessee's failure to comply with or perform Sublessee's obligations under this Sublease, including, but not limited to, Sublessee's obligation to immediately disclose any violations of the warranty as set forth in section 2.f, below. Except to the extent caused by Sublessee, or Sublessee's agents', employees' or invitees' negligence or willful misconduct, Sublessor shall indemnify and hold Sublessee harmless against and from all liability, judgments, costs, damages, claims or demands, including reasonable attorney's fees, arising out of Sublessor's failure to comply with or perform Sublessor's obligations under this Sublease.

e. Master Lease in Effect. Sublessee represents to Sublessor that the Master Lease is in full force and effect and that, to Sublessee's knowledge, no default exists on the part of any party to the Master Lease; furthermore Sublessee represents and warrants that it has not received any notification from Master Lessor of any default under the Master Lease or notice of any potential default under the Master Lease. Subject to the terms and provisions of this Sublease, Sublessor agrees to keep the Master Lease in full force and effect during the term of this Sublease, subject, however, to any earlier termination of the Master Lease without the default of Sublessor.

f. Warranty. Section 6.2 of the Master Lease creates a warranty in favor of Sublessor. Sublessee shall provide Sublessor with written notification of any violation of the warranty in Section 6.2, promptly following the discovery by Sublessee of such violation.

g. To the extent that any financial terms contained in this Sublease that are applicable to Sublessor and Sublessee only conflict with similar provisions in the Master Lease, this Sublease shall prevail.

3. Sublease Term; Delivery of Possession.

a. Term. The term of this Sublease shall begin on the date the Assignment and Assumption shall become effective ("Commencement Date") and end on April 15, 2001.

b. Delivery of Possession.

(1) If Sublessee desires to make any improvements performed in either the Ground Floor Leased Area or the Second Floor Leased Area (Sublessee shall have no right to modify or otherwise alter the Ground Floor Shared Area) and if Sublessee shall fail to deliver to Sublessor a schedule of improvements, along with plans and specifications thereto (including projected costs) reasonably acceptable to Sublessor on or before sixty (60) days following the execution of this Sublease, Sublessor shall be deemed to have disapproved such improvements and Sublessee shall not make any such improvements until such plans and specifications shall have been delivered to and approved by Sublessor.

(2) Sublessor will deliver the Sublease Premises subject to all applicable zoning, municipal, county and state laws, ordinances and regulations governing and regulating the use of the Sublease Premises, and Sublessee accepts the Sublease Premises subject thereto. Other than as set forth herein, Sublessee shall accept the Sublease Premises "as is". Sublessor shall assign its rights or, alternatively, shall itself enforce such rights pursuant to any manufacturer or other warranty covering the Sublease Premises.

4. Rent. Sublessee shall pay to Sublessor no later than the first day of each calendar month of the Term of this Sublease without deduction, set off, prior notice or demand, as rent for the Sublease Premises, monthly rent ("Base Rent") as set forth in the rent schedule below, and subject to the terms and provisions of section 3.2 of the Master Lease. Base Rent shall commence on the date hereof (the "Rent Commencement Date"); provided, however, for the period from the

date hereof through September 30, 2000, Sublessee shall pay Base Rent, prorated for the number of days in such period, on the date hereof.

Rent Schedule

Leased Premises	Base Rent/Month	Rent/Sq.ft./month	Approx. Sq. Feet
Ground Floor Leased Area	$ 3,361.80	$3.90	862
Ground Floor Shared Area	$ 8,474.70	$1.95	4,346
Second Floor Leased Area	$ 92,352.00	$3.90	23,680
Total	$ 104,188.50		

Sublessor and Sublessee each hereby acknowledge and agree that the parties hereto intend this Sublease to be on a "full-service" basis and Sublessee shall only be responsible to pay. Base Rent and no other operating costs or service expenses.

5. Security Deposit. Concurrently herewith, Sublessee shall deposit One Hundred Four Thousand One Hundred Eighty-eight Dollars and Fifty Cents ($104,188.50) with Sublessor as security for Sublessee's performance of its obligations under the terms of this Sublease. Sublessor shall not be required to keep any cash portion of the Security Deposit separate from its general funds, or to pay any interest thereon. The Security Deposit shall be held by Sublessor and may be applied by Sublessor in accordance with the provisions of Article 18 of the Master Lease. If Sublessee defaults with respect to any provision of this Sublease, including, without limitation, the provisions relating to the payment of rental and other sums due hereunder, Sublessor shall have the right, but shall not be required, to use, apply or retain all or any part of the Security Deposit for the payment of rental or any other amount which Sublessor may spend or become obligated to spend by reason of Sublessee's default or to compensate Sublessor for any other loss or damage which Sublessor may suffer by reason of Sublessee's default. If any portion of the Security Deposit is so used or applied, Sublessee shall, within ten (10) days after written demand therefor, deposit cash with Sublessor in an amount sufficient to restore the Security Deposit to the full amount required hereunder and

Sublessee's failure to do so shall be a material breach of this Sublease. If Sublessee fully and faithfully performs every provision of this Sublease to be performed by it, the Security Deposit, or any balance thereof, shall be returned to Sublessee or, at Sublessor's option, to the last assignee of Sublessee's interest hereunder, at the expiration of the term of this Sublease and after Sublessee has vacated the Premises. In the event of termination of Sublessor's interest in this Sublease, Sublessor shall transfer all deposits then held by Sublessor under this Section to Sublessor's successor in interest, whereupon Sublessee agrees to release Sublessor from all liability for the return of such deposit or the accounting thereof.

6. Use.

a. Permitted Use. The Sublease Premises shall be used and occupied only for office, biotechnology/pharmaceutical research and development, manufacturing, warehousing related to such uses, and other permitted uses under the Master Lease. Sublessee shall use and

occupy the Sublease Premises in accordance with the Master Lease, including, but not limited to Section 11.6, thereof.

b. No Representations or Warranties, Sublessee acknowledges that neither Sublessor nor Sublessor's agents have made any representation or warranty as to the suitability of the Sublease Premises for the conduct of Sublessee's business.

7. Operating Expenses; HVAC Repair. At no time prior to the Expiration Date is Sublessee required to pay as additional rent the amounts for which Sublessor is liable to Master Lessor pursuant to Article 7 (Operating Expenses) of the Master Lease. In addition, until the Expiration Date, Sublessee, shall have no liability for any utilities it consumes in the Premises. In addition, until the Expiration Date, Sublessee, shall have no obligation to maintain or repair the HVAC equipment and related mechanical systems. The parties hereto hereby acknowledge that this Sublease is on a "full service" basis and Sublessee shall not be responsible for any operating costs or expenses, insurance or taxes.

8. Alterations. Notwithstanding the provisions of Article 9 of the Master Lease, any alteration, which requires Master Lessor's approval pursuant to the Master Lease, shall not be commenced by Sublessee unless and until such consent is obtained. Any such alteration shall be at Sublessee's sole cost and expense. At the time Sublessor and Master Lessor consent to any alteration, additions or improvements, Sublessor and Master Lessor shall inform Sublessee in writing whether Sublessee is responsible for the removal of such alterations and improvements at the expiration or earlier termination of the term of this Sublease, provided that Sublessee, in its request for consent to the alteration, addition, or improvement, has expressly requested that Sublessor and Master Lessor specify the nature and extent of any such removal obligation. If such notification is not made, Sublessee shall have no responsibility to remove any such alteration or improvement at the expiration or earlier termination of this Sublease. Any alteration made by Sublessee shall become a part of the Sublease Premises, and at Sublessor's election (and to the extent required, the consent of the Master Lessor), shall be surrendered to Sublessor at the end of the Sublease term. Any alteration made by Sublessee shall, at Sublessor's election, become Sublessor's property throughout the Sublease term except for any specialized improvements installed by Sublessee (which improvements shall be part of Sublessee's Equipment and Alterations, as defined in Exhibit B-2), which improvements shall remain the property of Sublessee and which improvements shall be removed by Sublessee at the expiration or earlier termination hereof. In the event Sublessor is (or becomes) obligated under the Master Lease to remove any of Sublessee's alterations, Sublessee shall be obligated to remove same at Sublessee's sole cost and expense and to restore the Sublease Premises to its condition prior to the alteration but only to the extent required by Sublessor or Master Lessor in their written consent to any such alteration. In the event that Sublessee removes any items it is permitted

to remove under Exhibit B-2, Sublessee, subject to the provisions of the second sentence of this Section 8, at its sole cost and expense, shall restore the Sublease Premises to its condition prior to alteration. Sublessee's obligation to remove any alteration made to any portion of the Sublease Premises prior to the Commencement Date as Tenant under the Master Lease shall be governed by the terms of the Master Lease.

9. Repairs. Pursuant to the Master Lease, Master Lessor is responsible to repair and maintain the roof (structural portions only), exterior walls and other structural portions of the Building and the Common Areas. As to such matters, subject to the terms of the following sentence, Sublessor's sole obligation to Sublessee shall be to request performance of such obligations by Master Lessor. In the event Master Lessor breaches its obligations, Sublessor will assign to Sublessee its right to enforce such obligation and shall otherwise cooperate with Sublessee in connection therewith, provided, however, Sublessee, at its sole cost and expense, shall be responsible for enforcement thereof without reimbursement from Sublessor; provided, further, that if the nature of Sublessor's repair and maintenance obligation is such that both Sublessor and Sublessee shall be benefited by the enforcement thereof, Sublessor and Sublessee shall jointly participate in the enforcement thereof and Sublessor and Sublessee shall share in the cost and expense incurred therewith in the same proportion that their respective premises bears to the total premises. Sublessee, not Master Lessor, shall be responsible for the repair of the roof and structural portions of the Building to the extent the need for maintenance or repair is caused by the gross negligence or willful misconduct of Sublessee, in which case Sublessee shall pay to Sublessor the cost of (including reasonable overhead expense of Sublessor) the maintenance and repairs caused by Sublessee (except (i) to the extent the damage is covered by any insurance maintained by Master Lessor or Sublessor, or, (ii) if Master Lessor fails to maintain the insurance required to be maintained by Master Lessor pursuant to the terms of the Master Lease, to the extent the damage would have been covered by insurance, if Master Lessor had maintained the required insurance). There shall be no abatement of Base Rent and no liability of Master Lessor or Sublessor by reason of any injury to or interference with Sublessee's business arising from the making of any repairs, alterations or improvements in or to the fixtures, appurtenances and equipment therein, provided that Sublessor shall request Master Lessor to use reasonable efforts to minimize the interruption of Sublessee's use and occupancy of the Sublease Premises in connection with its performance of the repairs and maintenance (although nothing contained herein shall be deemed to obligate Master Lessor to pay any overtime costs in order to minimize such interference, or otherwise to perform the repairs or maintenance during hours other than normal business hours). As to all matters that neither Master Lessor nor Sublessee is required to maintain or repair under the Master Lease or this Sublease, as the case may be, Sublessor shall be responsible therefor, and shall promptly and regularly maintain and repair the Sublease Premises. Notwithstanding the foregoing, any damage caused by the negligence or willful misconduct of Sublessee, shall promptly be repaired by Sublessee, at Sublessee's own cost and expense, and in a manner reasonably acceptable to Master Lessor and Sublessor.

10. Insurance.

a. Sublessee shall maintain commercial general liability insurance coverage as required by section 12.1 (a) of the Master Lease which has been incorporated into this Sublease by reference. Each policy of insurance, which Sublessee is required to maintain pursuant to this Lease, shall name both Sublessor and Master Lessor (as well as Master Lessor's general partners and Managing Agent) as additional insureds (including cross-liability endorsements). Sublessee's insurance coverage shall be primary and non-contributory as respects any insurance maintained by Sublessor and/or Master Lessor. Sublessee shall deliver evidence of the coverage

required hereunder (i) on the date hereof and (ii) within ten (10) days of the

renewal date for each policy of insurance required hereunder.

b. Pursuant to the terms of the Master Lease as provided in Section 12.1(b) thereof, Master Lessor is obligated to maintain certain insurance coverage with respect to certain perils. Subject to the terms of the following sentence, Sublessor's sole obligation to Sublessee with respect to Master Lessor's obligations pursuant to said Section 12.1(b) shall be to request performance of such obligations by Master Lessor. In the event Master Lessor breaches its obligations, Sublessor will assign to Sublessee its right to enforce such obligation and shall otherwise cooperate with Sublessee in connection therewith, provided, however, Sublessee, at its sole cost and expense, shall be responsible for enforcement thereof without reimbursement from Sublessor; provided, further, that if the nature of Sublessor's insurance obligation is such that both Sublessor and Sublessee shall be benefited by the enforcement thereof, Sublessor and Sublessee shall jointly participate in the enforcement thereof and Sublessor and Sublessee shall share in the cost and expense incurred therewith in the same proportion that their respective premises bears to the total premises. In the event Sublessor cannot assign such rights, Sublessor shall diligently enforce its rights as Tenant under the Master Lease.

c. Sublessor shall maintain insurance in the amounts and of the types required pursuant to Section 12 of the Master Lease.

11. Damage or Destruction.

a. Master Lessor Has Obligation to Restore. If the Sublease Premises are damaged or destroyed, Master Lessor has the obligation pursuant to Article 15 of the Master Lease to repair the Sublease Premises unless Master Lessor has the right to terminate. If Master Lessor fails to perform its obligations pursuant to Article 15 of the Master Lease, Sublessor's sole obligation to Sublessee shall be to request performance of such obligations by Master Lessor. In the event Master Lessor breaches its obligations, Sublessor will assign to Sublessee, its right to enforce such obligation, provided, however, Sublessee, at its sole cost and expense, shall be responsible for enforcement thereof without reimbursement from Sublessor. In the event Sublessor cannot assign its rights, Sublessor shall diligently enforce its rights under the Master Lease.

b. Termination of Master Lease. If the Master Lease terminates pursuant to Article 15 of the Master Lease, this Sublease shall terminate concurrently with the termination of the Master Lease.

c. Sublessee Notice; Right to Terminate. Within twenty (20) days following written request from Sublessor, Sublessee shall give notice to Sublessor in writing whether Sublessee agrees to continue this Sublease in effect if Master Lessor reasonably determines that the repair of the Sublease Premises or the Building cannot be completed within three hundred sixty five (365) days after the casualty. If Sublessee does not so agree to continue this Sublease in effect then this Sublease shall terminate. If Sublessee agrees to continue this Sublease in effect as aforesaid, then Sublessor shall have no right to exercise its right (if any) to terminate the

Master Lease or this Sublease. If (i) Master Lessor reasonably determines that the repair of the Sublease Premises or the Building cannot be-completed within three hundred sixty five (365) days after the casualty, (ii) neither Master Lessor nor Sublessor has elected to terminate the Master Lease, and (iii) Sublessee agrees to continue this Sublease in effect notwithstanding the time to reconstruct, then this Sublease shall continue in effect, and Sublessee shall fulfill all of the obligations of Sublessor pursuant to the provisions of Article 15 of the Master Lease, as it pertains to the Sublease Premises.

d. Limited Obligation to Repair. Master Lessor's obligation, should Master Lessor elect or be obligated to repair or rebuild, shall be limited to the terms and conditions of the Master Lease. Master Lessor shall have no obligation to replace or restore the Sublessee Equipment and

Alterations (as described in Exhibit B-2) or any other alterations installed by Sublessor or Sublessee, unless specifically required by the Master Lease.

e. Abatement of Rent. Rent under this Sublease shall abate to the same extent as the Rent owing by Sublessor under the Master Lease abates during any casualty repair period.

f. Damage Near End of Term. In addition to the rights to terminate specified in subsection 11.c of this Sublease, either Sublessor or Sublessee shall have the right to cancel and terminate this Sublease as of the date of the occurrence of destruction or damage if the Sublease Premises or the Building is substantially destroyed or damaged (i.e., there is damage or destruction which Sublessor reasonably determines would require more than sixty (60) days to repair) and made untenantable during the last twelve (12) months of the term of the Master Lease. Sublessor or Sublessee, as applicable, shall give written notice of its election to terminate this Sublease under this subsection f. within thirty (30) days after Master Lessor or Sublessor determines that the damage or destruction would require more than sixty (60) days to repair. If either Master Lessor or Sublessor elects to terminate the Master Lease pursuant to Article 15 of the Master Lease, this Sublease shall terminate concurrently with the termination of the Master Lease. If neither Master Lessor nor Sublessor terminates the Master Lease and if neither Sublessor nor Sublessee elects to terminate this Sublease, the repair of the damage shall be governed by Article 15 of the Master Lease.

g. Insurance Proceeds. If this Sublease is terminated, Master Lessor and Sublessor may each keep all their respective insurance proceeds resulting from the damage except for those proceeds, if any, which specifically insured Sublessee's personal property and trade fixtures which Sublessee has a right or obligation to remove upon the expiration of the Sublease term. Sublessor shall be entitled to receive from Sublessee the proceeds of insurance carried by Sublessee with respect to Sublessee Improvements or other alterations installed in the Sublease Premises by Sublessor or at Sublessor's expense. To the extent that Sublessee has paid for any alterations regardless of whether the alterations may become the property of Sublessor upon termination of this Sublease, Sublessee shall receive any portion of the insurance proceeds payable with respect to the then unamortized cost (based on a 2 year life of the alteration on a straight line amortization schedule) for the applicable alterations, reduced by the amounts necessary to pay off any equipment lease or other lien against the applicable alteration, and the balance of the proceeds, if any, will be payable to Sublessor. With respect to those Alterations,

which Sublessee is obligated to remove at the end of the Sublease term which are the property of Sublessee, all proceeds of any insurance, carried by Sublessor or Sublessee shall be paid to Sublessee.

h. Uninsured Casualty. If the Master Lease terminates pursuant to the provisions of Article 15 of the Master Lease, this Sublease shall terminate.

12. Eminent Domain. If all or any part of the Sublease Premises is taken for public or quasi-public use by a governmental authority under the power of eminent domain or is conveyed to a governmental authority in lieu of such taking, and if the taking or conveyance causes the remaining part of the Sublease Premises to be untenantable and inadequate for use by Sublessee for the purpose for which they were leased, then Sublessee, at its option and by giving notice within fifteen (15) days after the taking, may terminate this Sublease as of the date Sublessee is required to surrender possession of the Sublease Premises. If a part of the Sublease Premises is taken or conveyed but the remaining part is tenantable and adequate for Sublessee's use in Sublessee's reasonable determination, then this Sublease shall be terminated as to the part taken or conveyed as of the date Sublessee surrenders possession. All compensation awarded for the taking or conveyance shall be the property of Master Lessor and Sublessor, as their interests may appear, and Sublessee

hereby assigns to Sublessor all its right, title and interest in and to the award, unless the governmental authority makes only one (1) award, and the award contains compensation for the value of moving expenses, Sublessee's personal property, trade fixtures and alterations (including the Sublessee Improvements), Sublessee's Equipment and Alterations, in which case, subject to the rights of any mortgagee or beneficiary of a deed of trust holding a lien on the Property and to Master Lessor's rights under the Master Lease, Sublessee shall be entitled to the compensation paid for Sublessee's moving expenses, trade fixtures, personal property, Sublessee's Equipment and Alterations, and the portion of the award attributable to the then unamortized cost of alterations and improvements constructed at Sublessee's expense (which are to be amortized on a straight line basis over the initial term of this Sublease). Sublessee shall have the right, however, to recover from the governmental authority, but not from Sublessor or Master Lessor, except as provided in the preceding sentence, such compensation as may be awarded to Sublessee on account of the interruption of Sublessee's business, moving and relocation expenses and removal of Sublessee's trade fixtures and personal property.

13. Assignment and Subletting. Notwithstanding any provision of this Sublease to the contrary, if Sublessor consents to a sublet, Sublessee shall pay to Sublessor on a monthly basis as additional Rent, on the date Base Rent is due, an amount equal to fifty percent (50%) of the amount by which the rent payable to Sublessee ("Subrent") under the sublease exceeds the rent due for the applicable portion of the Sublease Premises after deducting from the Subrent (A) the actual out-of-pocket costs incurred by Sublessee for brokerage commissions and tenant concessions (which concessions are not reflected in the reduced Subrent) and (B) the costs of any additional improvements constructed by Sublessee in connection with the sublease (amortized on a straight line basis over the term of the sublease). Notwithstanding the foregoing, Sublessee may assign this Sublease or sublet any portion of the Sublease Premises without Sublessor's or Master Lessor's consent (but with prior or concurrent notice thereof to Master Lessor and Sublessor) to any of the following (i) any corporation which controls, is controlled by or under

common control with Sublessee; (ii) any corporation resulting from the merger or consolidation of Sublessee; and (iii) any person or entity which acquires all of the assets of Sublessee as a going concern (collectively, "Sublessee Affiliate"), provided that such assignee assumes in full the obligations of Sublessee under the Sublease. Any right of Sublessor or Master Lessor to terminate the Sublease or the Master Lease in response to a requested assignment or subletting shall not apply to an assignment of the Sublease or a subletting of the Sublease Premises to a Sublessee Affiliate. Sublessee shall have the same assignment and sublease rights and limitations as provided in section 13.1 of the Master Lease.

14. Access to Premises. Master Lessor shall have the same right of access to the Sublease Premises as Sublessor which right of access is described in Section 14 of the Master Lease.

15. Surrender at End of Term. Upon expiration or termination of this Sublease, Sublessee shall surrender the Sublease Premises to Sublessor in good and sanitary order, except for any alterations Sublessee is not required to remove, normal wear and tear, acts of God, damage, destruction (except to the extent Sublessee is obligated to restore the same under this Sublease) and eminent domain covered by the provisions of this Sublease. Sublessee shall remove from the Sublease Premises all of Sublessee's personal property and trade fixtures, Sublessee's Equipment and Alterations, and any alterations and improvements Sublessee is required to remove pursuant to Sublessor's or Master Lessor's written consent to such alterations and improvements, and shall repair all damage caused by the removal. Except to the extent caused by Sublessor's or Master Lessor's or their agents', employees' or invitees', negligence or willful misconduct, Sublessee shall indemnify Sublessor against all loss or liability resulting from delay by Sublessee in so surrendering the Sublease Premises, including without limitation, any claims made by any succeeding tenant, losses to Sublessor due to lost opportunities to lease to a succeeding tenant, and

reasonable attorneys' fees and costs.

16. Sublessor Indemnity re: Hazardous Materials.

a. [INTENTIONALLY OMITTED.]

b. Sublessee shall indemnify, defend and hold Sublessor harmless from and against any claim, damage, loss, liability, cost or expense (including reasonable attorneys' fees) arising out of any spill or release of any Hazardous Substance (as defined in Section 11.6 of the Master Lease which has been incorporated by reference into this Sublease) on or about the Sublease Premises or any other portion of the Premises occupied by Sublessee pursuant to the MetaXen-Exelixis Sublease or the Master Lease by Sublessee, its employees, agents or contractors during the period of time Sublessee has occupied the Sublease Premises or such other portion of the Premises. Sublessor shall indemnify, defend and hold Sublessee harmless from and against any claim, damage, loss, liability, cost or expense (including reasonable attorneys' fees) arising out of any spill or release of any Hazardous Substance (as defined in Section 11.6 of the Master Lease which has been incorporated by reference into this Sublease) on or about the Sublease Premises by Sublessor, its employees, agents or contractors during the period of time Sublessee occupies the Sublease Premises.

c. Sublessor is entitled to indemnification from the Master Lessor under certain circumstances as provided in Section 11.6 of the Master Lease. To the extent such indemnification may apply to the benefit of Sublessee, Sublessor agrees to cooperate with Sublessee to enforce such indemnity obligation against Master Lessor; provided, however, Sublessee shall pay any and all costs incurred by Sublessor or Sublessee in connection with the enforcement thereof for the benefit of Sublessee.

17. Signs. Master Lessor shall have the same approval rights with respect to signs as Sublessor; Sublessor shall use its best efforts to obtain Master Lessor's approval of signage rights reasonably satisfactory to Sublessee, so long as such rights do not unreasonably interfere with the rights of Sublessor under the Master Lease.

18. Holding Over. This Sublease shall terminate without further notice at the expiration of the Sublease term. Any holding over by Sublessee after expiration or sooner termination of this Sublease without the consent of Sublessor shall be construed to be a tenancy at sufferance. Base Rent for the Sublease Premises during any tenancy at sufferance, or if Sublessor shall have consented to Sublessee's holding over, shall be at a rate equal to 150% of the Base Rent for the last month of the term, and shall otherwise be on the terms and conditions herein specified insofar as applicable.

19. Brokers. Sublessor and Sublessee each warrants and represents for the benefit of the other that it has had no dealings with any real estate broker or agent in connection with the negotiation of this Sublease, and that it knows of no real estate broker or agent who is or might be entitled to a real estate brokerage, commission or finder's fee in connection with this Sublease. Sublessor and Sublessee warrant and represent that they have dealt with no real estate broker in connection with this Sublease.

a. Broker Disclaimer. Sublessor and Sublessee agree and accept that, except as otherwise expressly stated herein, no broker or agent has made or conducted any investigation, determination, warranty or representation with respect to any of the following: (a) the legality of the present or any possible future use of the Sublease Premises under any federal, state or local law; (b) the physical condition or square footage of the Sublease Premises; (c) the terms of the Master Lease or any other relevant legal document or agreement; or (d) the presence or location of any hazardous materials on or about the property in which the Sublease Premises are located (including, but not limited to, asbestos, PCB's, other toxic, hazardous or contaminated substances, and underground storage tanks).

b. Acknowledgement. The parties acknowledge that they are not relying on information from any real estate licensee relating to the field of toxic materials, hazardous waste, underground tanks, and asbestos contamination, location of the property within or outside a specific flood zone or special studies seismic area, nor the property's compliance with the guidelines as set forth in the Americans with Disabilities Act (ADA) regarding the determination of the condition of the subject Premises, but rather from their own independently initiated investigations.

20. Notices. All notices or demands of any kind required to be given by Sublessor or Sublessee hereunder shall be in writing and shall be deemed delivered forty-eight (48) hours after depositing the notice or demand in the United States Mail, certified or registered, postage prepaid, or on the next business day after delivering the same with a reputable overnight courier service, in each case addressed to the Sublessor or Sublessee respectively at the addresses set forth after their signatures at the end of this Sublease. Either party may change its address by written notice to the other party in accordance with this Section 20. All Base Rent shall be paid by Sublessee to Sublessor at the same address.

21. Condition To Effectiveness of This Sublease. This Sublease is contingent upon Sublessor obtaining the written consent of the Master Lessor to this Sublease concurrently with the execution of this Sublease, pursuant to the terms of the Consent Agreement. Sublessor and Sublessee acknowledge and agree, that in granting such consent, notwithstanding any other provisions contained in or implied in this Sublease, Master Lessor shall not be deemed or construed (a) to have released Sublessor from any responsibility for the full and timely performance of all obligations of Sublessor as Tenant under the Master Lease accruing from and after the date hereof, nor (b) to have authorized Sublessor to act on Master Lessor's behalf in exercising or waiving any rights, remedies or privileges of Master Lessor as Landlord under the Master Lease as it pertains to the Sublease Premises, nor (c) to have assumed, incurred or undertaken any obligations or liabilities running directly to Sublessee with respect to the Sublease Premises, it being the explicit intention and understanding of the parties that notwithstanding the incorporation by reference of the Master Lease into this Sublease (except as specifically excluded by Section 2 above, and as otherwise specifically excluded in this Sublease), Master Lessor and Sublessor shall look solely to one another for the performance of their respective obligations with respect to the Sublease Premises as Landlord and Tenant under the Master Lease (except to the extent that such obligation arose prior to the date hereof pursuant to the Master Lease, as to which Master Lessor and Sublessee shall look solely to one another for the performance of their respective obligations with respect to the Sublease Premises as Landlord and Tenant under the Master Lease), and that Sublessor and Sublessee shall look solely to one another for the performance of their respective obligations with respect to the Sublease Premises under this Sublease. Nothing in this Section 21 is intended, however, to preclude Sublessee from enforcing, by direct action against Master Lessor, any rights of Sublessor under the Master Lease to the extent such rights are expressly assigned by Sublessor to Sublessee pursuant to this Sublease.

22. Authority. Each person executing this Sublease on behalf of a party hereto represents and warrants that he or she is authorized and empowered to do so and to thereby bind the party on whose behalf he or she is signing.

23. Attorneys Fees. In the event either party shall bring any action or proceeding for damages or for an alleged breach of any provision of this Sublease to recover rents, or to enforce, protect or establish any right or remedy hereunder, the prevailing party shall be entitled to recover reasonable attorneys' fees and court costs as part of such action or proceeding.

24. Incorporation of Recitals. The recitals set forth above are incorporated herein and made a part hereof.

25. Entire Agreement. This written Sublease, together with the exhibits hereto, contains all the representations and the entire understanding between the parties hereto with respect to the subject matter hereof. Any prior correspondence, memoranda or agreements are replaced in total by this Sublease and the exhibits hereto. This Sublease may be modified only by an agreement in writing signed by each of the parties.

IN WITNESS WHEREOF, the undersigned have executed this Sublease as of the dates set forth below.

SUBLESSOR:

CYTOKINETICS, INC
a Delaware corporation

By: /s/ James Sabiy

Name: JAMES SABIY Date September 28, 2000
Its: CEO

By: /s/ Robert I Blum

Name: ROBERT I BLUM Date September 28, 2000
Its: VP, BUSINESS DEVELOPMENT

280 East Grand Avenue
South San Francisco, CA 94080

SUBLESSEE:

EXELIXIS, INC.
a Delaware corporation
formerly known as Exelixis Pharmaceuticals, Inc.

By: ---
Name: --- Date: September --, 2000
Its: ---

By: ---
Name: --- Date: September --, 2000
Its: ---

170 Harbor Way
South San Francisco, CA 94083

IN WITNESS WHEREOF, the undersigned have executed this Sublease as of the dates set forth below.

SUBLESSOR:

CYTOKINETICS, INC
a Delaware corporation

By: ---
Name: --- Date: September --, 2000
Its: ---

By: ---
Name: --- Date: September --, 2000
Its: ---

280 East Grand Avenue
South San Francisco, CA 94080

SUBLESSEE;

EXELIXIS, INC.
a Delaware corporation
formerly known as Exelixis Pharmaceuticals, Inc.

By: /s/ Colen Sato

Name: COLEN SATO Date September 28, 2000
Its: CFO

By: /s/ [ILLEGIBLE]

Name: [ILLEGIBLE] Date September 28, 2000
Its: [ILLEGIBLE]

170 Harbor Way
South San Francisco, CA 94083

CONSENT BY MASTER LESSOR

Master Lessor hereby consents to the sublease of the Sublease Premises by Sublessor to Sublessee pursuant to the terms of this Sublease. Master Lessor acknowledges and agrees that the obligation of Sublessor to deliver warrants to Master Lessor is governed solely by the terms of Paragraph l(a) of the Consent Agreement and that Sublessor shall have no additional obligation to deliver additional warrants to Master Lessor whether pursuant to the Master Lease, the First Amendment or otherwise. Master Lessor further acknowledges and agrees that Sublessor has fully discharged its obligation to Master Lessor with respect to such warrants prior to the date hereof and has fulfilled all other conditions precedent to Master Lessor's consent to the assignment and assumption of the Master Lease as set forth in Paragraph l(a) or elsewhere in the Consent Agreement. Master Lessor represents and warrants to Sublessor that (i) Master Lessor knows of no claims or defenses or circumstances, which with the passage of time, would lead to claims or defenses by Master Lessor against Sublessor as tenant under the Master Lease; (ii) this Sublease does not violate any provision of the Master Lease; (iii) no provision of this Sublease is in violation of the terms of the Master Lease; and (iv) all rent and other charges due under the Master Lease have been paid through and including September 30, 2000.

MASTER LESSOR:

BRITANNIA POINTE GRAND LIMITED
PARTNERSHIP, a Delaware limited partnership

By: Britannia Pointe Grand, LLC,
a California limited liability company,
its general partner

By: /s/ T.J. Bristow

Name: T.J. Bristow
Title: Manager

September 29, 2000

EXHIBIT A

[attach copies of master Lease and First and Second Amendments to Master Lease]

Exhibit 10.16

[CB RICHARD ELLIS LOGO]

SUBLEASE
CB RICHARD ELLIS, INC
BROKERAGE AND MANAGEMENT
LICENSED REAL ESTATE BROKER

1. PARTIES.

This Sublease, dated December 29, 1999, 1999, is made between COR Therapeutics, Inc., a Delaware Corporation ("Sublessor"). and Cytokinetics (Sublessee").

2. MASTER LEASE.

Sublessor is the lessee under a written lease dated September 23, 1988, wherein Brittania Pointe Grand Limited Partnership, a Delaware limited partnership ("Lessor") leased to Sublessor the real property located in the City of South San Francisco, County of San Mateo, State of California described as +/- 125,545 square feet of office and laboratory space within the larger project of Brittania Pointe Grand. ("Master Premises"). Said lease has been amended by the following amendments One through eleven; said lease and amendments are herein collectively referred to as the "Master Lease" and are attached hereto as Exhibit "A."

3. PREMISES.

Sublessor hereby subleases to Sublessee on the terms and conditions set forth in this Sublease the following portion of the Master Premises ("Premises"): Initial premises : +/- 3,213 sq. ft. as shown on Exhibit A attached Additional premises: +/- 6,900 sq. ft. as shown in Exhibit A attached.

4. WARRANTY BY SUBLESSOR.

Sublessor warrants and represents to Sublessee that the Master Lease has not been amended or modified except as expressly set forth herein, that Sublessor is not now, and as of the commencement of the Term hereof will not be, in default or breach of any of the provisions of the Master Lease, and that Sublessor has no knowledge of any claim by Lessor that Sublessor is in default or breach of any of the provisions of the Master Lease.

5. TERM.

The Term of this Sublease shall commence * for the initial premises on January 1, 2000 * ("Commencement Date"), or when Lessor consents to this Sublease (if such consent is required under the Master Lease), whichever shall last occur, and end on December 31, 2000 ("Termination Date"), unless otherwise sooner terminated in accordance with the provisions of this Sublease. In the event the Term commences on a date other than the Commencement Date, Sublessor and Sublessee shall execute a memorandum setting forth the actual date of commencement of the Term. Possession of the Premises ("Possession") shall be delivered to Sublessee on the commencement of the Term. If for any reason Sublessor does not deliver Possession to Sublessee on the commencement of the Term, Sublessor shall not be subject to any liability for such failure, the Termination Date shall not be extended by the delay, and the validity of this Sublease shall not be impaired, but rent shall abate until delivery of Possession. Notwithstanding the foregoing, if Sublessor has not delivered Possession to Sublessee within thirty (30) days after the Commencement Date, then at any time thereafter and before delivery of Possession, Sublessee may give written notice to Sublessor of Sublessee's intention to cancel this Sublease. Said notice shall set forth an effective date for such cancellation which shall be

at least ten (10) days after delivery of said notice to Sublessor. If Sublessor delivers Possession to Sublessee on or before such effective date, this Sublease shall remain in full force and effect. If Sublessor fails to deliver Possession to Sublessee on or before such effective date, this Sublease shall be cancelled, in which case all consideration previously paid by Sublessee to Sublessor on account of this Sublease shall be returned to Sublessee, this Sublease shall thereafter be of no further force or effect, and Sublessor shall have no further liability to Sublessee on account of such delay or cancellation. If Sublessor permits Sublessee to take Possession prior to the commencement of the Term, such early Possession shall not advance the Termination Date and shall be subject to the provisions of this Sublease, including without limitation the payment of rent.

* and April 1, 2000 for the additional premises.

6. RENT.

6.1 Minimum Rent.* Sublessee shall pay to Sublessor as minimum rent, without deduction, setoff, notice, or demand, at 256 E. Grand Avenue, South San Francisco, CA 94080 or at such other place as Sublessor shall designate from time to time by notice to Sublessee, the sum of _____ Dollars ($_____) per month, in advance on the first day of each month of the Term. Sublessee shall pay to Sublessor upon execution of this Sublease the sum of Six thousand five hundred ninety-four and 55/100 Dollars ($ 6594.55) as rent for the first month of the lease term. If the Term begins or ends on a day other than the first or last day of a month, the rent for the partial months shall be prorated on a per diem basis. Additional provisions:
See addendum attached.

6.2 Operating Costs. If the Master Lease requires Sublessor to pay to Lessor all or a portion of the expenses of operating the building and/or project of which the Premises are a part ("Operating Costs"), including but not limited to taxes, utilities, or insurance, then Sublessee shall pay to Sublessor as additional rent two and seven tenths percent (2.7 %) of the amounts payable by Sublessor for Operating Costs incurred during the Term. Such

* based on the initial premises, and 8.1% (eight and one tenth percent) beginning April 1, 2000 inclusive of the initial and additional premises.

additional rent shall be payable as and when Operating Costs are payable by Sublessor to Lessor. If the Master Lease provides for the payment by Sublessor of Operating Costs on the basis of an estimate thereof, then as and when adjustments between estimated and actual Operating Costs are made under the Master Lease, the obligations of Sublessor and Sublessee hereunder shall be adjusted in a like manner; and if any such adjustment shall occur after the expiration or earlier termination of the Term, then the obligations of Sublessor and Sublessee under this Subsection 6.2 shall survive such expiration or termination. Sublessor shall, upon request by Sublessee, furnish Sublessee with copies of all statements submitted by Lessor of actual or estimated Operating Costs during the Term.

7. SECURITY DEPOSIT.

Sublessee shall deposit with Sublessor upon execution of this Sublease the sum of twenty thousand and 00/100 dollars Dollars ($ 20,000,00) as security for Sublessee's faithful performance of Sublessee's obligations hereunder ("Security Deposit"). If Sublessee fails to pay

rent or other charges when due under this Sublease, or fails to perform any of its other obligations hereunder, Sublessor may use or apply all or any portion of the Security Deposit for the payment of any rent or other amount then due hereunder and unpaid, for the payment of any other sum for which Sublessor may become obligated by reason of Sublessee's default or breach, or for any loss or damage sustained by Sublessor as a result of Sublessee's default or breach. If Sublessor so uses any portion of the Security Deposit, Sublessee shall, within ten (10) days after written demand by Sublessor, restore the Security Deposit to the full amount originally deposited, and Sublessee's failure to do so shall constitute a default under this Sublease. Sublessor shall not be required to keep the Security Deposit separate from its general accounts, and shall have no obligation or liability for payment of interest on the Security Deposit. In the event Sublessor assigns its interest in this Sublease, Sublessor shall deliver to its assignee so much of the Security Deposit as is then held by Sublessor. Within ten (10) days after the Term has expired, or Sublessee has vacated the Premises, or any final adjustment pursuant to Subsection 6.2 hereof has been made, whichever shall last occur, and provided Sublessee is not then in default of any of its obligations hereunder, the Security Deposit, or so much thereof as had not theretofore been applied by Sublessor, shall be returned to Sublessee or to the last assignee, if any, of Sublessee's interest hereunder.

8. USE OF PREMISES.

The Premises shall be used and occupied only for general office, administrative, and related legal uses., _____and for no other use or purpose.

9. ASSIGNMENT AND SUBLETTING.

Sublessee shall not assign this Sublease or further sublet all or any part of the Premises without the prior written consent of Sublessor (and the consent of Lessor, if such is required under the terms of the Master Lease).

10. OTHER PROVISIONS OF SUBLEASE.

All applicable terms and conditions of the Master Lease are incorporated into and made a part of this Sublease as if Sublessor were the lessor thereunder, Sublessee the lessee thereunder, and the Premises the Master Premises, except for the following:

_____
_____
_____.

Sublessee assumes and agrees to perform the lessee's obligations under the Master Lease during the Term to the extent that such obligations are applicable to the Premises, except that the obligation to pay rent to Lessor under the Master Lease shall be considered performed by Sublessee to the extent and in the amount rent is paid to Sublessor in accordance with Section 6 of this Sublease. Sublessee shall not commit or suffer any act or omission that will violate any of the provisions of the Master Lease. Sublessor shall exercise due diligence in attempting to cause Lessor to peform its obligations under the Master Lease for the benefit of Sublessee. If the Master Lease terminates, this Sublease shall terminate and the parties shall be relieved of any further liability or obligation under this Sublease, provided however, that if the Master Lease terminates as a result of a default or breach by Sublessor or Sublessee under this Sublease and/or the Master Lease, then the defaulting party shall be liable to the nondefaulting party for the damage suffered as a result of such termination. Notwithstanding the foregoing, if the Master Lease gives Sublessor any right to terminate the Master Lease in the event of the partial or total damage, destruction, or condemnation of the Master Premises or the building or project of which the Master Premises are a part, the

exercise of such right by Sublessor shall not constitute a default or breach hereunder.

11. ATTORNEYS' FEES.

If Sublessor, Sublessee, or Broker shall commence an action against the other arising out of or in connection with this Sublease, the prevailing party shall be entitled to recover its costs of suit and reasonable attorney's fees.

14. NOTICES.

All notices and demands which may or are to be required or permitted to be given by either party on the other hereunder shall be in writing. All notices and demands by the Sublessor to Sublessee shall be sent by United States Mail, postage prepaid, addressed to the Sublessee at the Premises, and to the address hereinbelow, or to such other place as Sublessee may from

time to time designate in a notice to the Sublessor. All notices and demands by the Sublessee to Sublessor shall be sent by United States Mail, postage prepaid, addressed to the Sublessor at the address set forth herein, and to such other person or place as the Sublessor may from time to time designate in a notice to the Sublessee.

To Sublessor: 256 E. Grand Avenue, South San Francisco, CA 94080

To Sublessor: 280 E. Grand Avenue, South San Francisco, CA 94080

15. CONSENT BY LESSOR.

THIS SUBLEASE SHALL BE OF NO FORCE OR EFFECT UNLESS CONSENTED TO BY LESSOR WITHIN 10 DAYS AFTER EXECUTION HEREOF, IF SUCH CONSENT IS REQUIRED UNDER THE TERMS OF THE MASTER LEASE.

16. COMPLIANCE.

The parties hereto agree to comply with all applicable federal, state and local laws, regulations, codes, ordinances and administrative orders having jurisdiction over the parties, property or the subject matter of this Agreement, including, but not limited to, the 1964 Civil Rights Act and all amendments thereto, the Foreign Investment In Real Property Tax Act, the Comprehensive Environmental Response Compensation and Liability Act, and The Americans With Disabilities Act.

Sublessor: COR Therapeutics, Inc.	Sublessee: Cytokinetics, Inc.
By: /s/ Peter S. Roddy	By: /s/ Robert J. Blum
Title: VP Finance	Title: VP Business Development
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

LESSOR'S CONSENT TO SUBLEASE

The undersigned ("Lessor"), lessor under the Master Lease, hereby consents to the foregoing Sublease without waiver of any restriction in the Master Lease concerning further assignment or subletting. Lessor certifies that, as of the date of Lessor's execution hereof, Sublessor is not in default or breach of any

of the provisions of the Master Lease, and that the Master Lease has not been amended or modified except as expressly set forth in the foregoing Sublease.

Lessor:_____

By:_____

Title: _____

By: _____

Title: _____

Date: _____

CONSULT YOUR ADVISORS - This document has been prepared for approval by your attorney. No representation or recommendation is made by Broker as to the legal sufficiency or tax consequences of this document or the transaction to which it relates. These are questions for your attorney.

In any real estate transaction, it is recommended that you consult with a professional, such as a civil engineer, industrial hygienist or other person, with experience in evaluating the condition of the property, including the possible presence of asbestos, hazardous materials and underground storage tanks.

ADDENDUM TO SUBLEASE
BETWEEN COR THERAPEUTICS, INC., A DELAWARE CORPORATION AND
CYTOKINETICS, INC.
DATED DECEMBER 29, 1999

17. MINIMUM RENT SCHEDULE:

January 1, 2000 to March 31, 2000:	$ 6594.55 per month
April 1, 2000 to October 31, 2000:	$ 17,979.55 per month
November 1, 2000 to December 30, 2000:	$ 18,698.73 per month

18. EXTENSION OPTION

Sublessee shall have the right to extend the sublease term by an additional six (6) months provided Sublessee has not been in default of any of the terms and conditions of this Sublease. The extension option shall be exercised in writing to Sublessor no later than September 30, 2000. Sublessee's occupancy of the premises after June 30, 2001 shall be considered a month-to-month tenancy and subject to the right of either party to terminate this Sublease with ninety (90) days written notice.

19. CONDITION OF PREMISES

Sublessee agrees to accept the premises in as-is condition. Sublessor shall not be responsible for any maintenance, repairs, or improvements to the premises.

Initials:

_____

_____

[*] CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 406 OF THE SECURITIES EXCHANGE ACT OF 1933, AS AMENDED.

COLLABORATION AND LICENSE AGREEMENT

THIS COLLABORATION AND LICENSE AGREEMENT (the "Agreement") is made effective as of the 20th day of June, 2001 ("Effective Date") by and between Cytokinetics, Inc., a Delaware corporation ("CK") and Glaxo Group Limited, a GlaxoSmithKline company, a United Kingdom corporation ("GSK"). CK and GSK are each referred to herein by name or as a "Party" or, collectively, as "Parties".

RECITALS

A. CK has developed certain proprietary technology related to KSP (as defined below) and other human mitotic kinesins, which are potential targets for the discovery and development of pharmaceutical products for the treatment, prophylaxis and diagnosis of cancer and other diseases and conditions in humans. As a result of its on-going research, CK has established a leadership position in the field of human mitotic kinesins.

B. CK is the owner of all right, title and interest in, or otherwise controls, certain CK Patents (as defined below) hereto, and CK Know-How (as defined below) relating to KSP and certain novel targets and compounds having activity against human mitotic kinesins.

C. GSK possesses pharmaceutical research, development, manufacturing and commercialization capabilities, as well as proprietary technology in a broad range of therapeutic fields. GSK desires to engage in collaborative research with CK to discover, develop, make, market and sell worldwide pharmaceutical products directed to human mitotic kinesins.

D. In addition, CK has identified certain novel, proprietary compounds having activity against human mitotic kinesins, including that certain compound designated as [*], which CK is pursuing as a development compound for cancer and for which CK has commenced preclinical development activities. GSK is interested, subject to Section 2.5 below, in developing certain of the compounds identified by CK, and, subject to Section 3.1.1 below, intends to consider [*] as a potential Development Compound (as defined below) after the Effective Date.

E. CK desires to grant to GSK, and GSK desires to obtain, an exclusive license throughout the world under this Agreement to discover, develop, make, have made, market and sell certain Licensed Products (as defined below) throughout the world under the aforesaid CK Patents and CK Know-How.

F. Contemporaneously with the execution of this Agreement, the Parties have executed a Stock Purchase Agreement under which GSK shall purchase preferred stock of CK at the Closing of the transactions (as defined below).

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Now, therefore, in consideration of the premises and mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

ARTICLE I - DEFINITIONS

The following terms shall have the following meanings as used in this

Agreement:

1.1 " [*] " shall have the meaning ascribed to it in Section [*] .

1.2 "AFFILIATE" shall mean any corporation or other entity which is directly or indirectly controlling, controlled by or under common control of a Party hereto for so long as such control exists. For the purposes of this Section 1.2, "control" shall mean the direct or indirect ownership of at least fifty percent (50%) of the outstanding shares or other voting rights of the subject entity having the power to vote on or direct the affairs of the entity, or if not meeting the preceding, the maximum voting right that may be held by the particular Party under the laws of the country where such entity exists.

1.3 "CK" shall mean CK and any Affiliate of CK.

1.4 "CK EXISTING TECHNOLOGY" shall mean, subject to Sections 5.2.2(a) and 5.5 below, CK Patents and CK Know-How, other than Collaboration Technology and Post-Collaboration Technology, Controlled by CK, and created, prior to the Effective Date or prior to the end of the Exclusivity Period that are [*] or [*] for the Parties to conduct their respective activities under the Research Program and for GSK to develop, make, have made, use, import, offer to sell and sell Compounds, Development Compounds or Licensed Products in the Field. Notwithstanding the foregoing, a CK Library Compound and CK Patents and CK Know-How with respect thereto shall be deemed to be CK Existing Technology only to the extent provided in Section 5.2.2 below.

1.5 "CK COMPOUND" shall mean, except as otherwise provided herein, a chemical entity that meets the Compound Criteria for a CK Target, which is identified by CK using CK Existing Technology, GSK Existing Technology, Collaboration Technology, and/or Post-Collaboration Technology prior to or during the Exclusivity Period. Any such chemical entity shall not be subject to development as a Compound in accordance with Section 2.7 of this Agreement, and GSK is not obligated to conduct any research or development activities with respect thereto. Notwithstanding the foregoing:

(a) A chemical entity that meets the Compound Criteria for a CK Target and which is identified by CK after the end of the Exclusivity Period shall also be a CK Compound, if such chemical entity was derived from a compound within the GSK Existing Technology, Collaboration Technology or Post-Collaboration Technology or from a GSK Library Compound licensed to CK under Section 5.3.2 below.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

(b) Except as provided in Section 5.6, in the event that a Mitotic Kinesin Target becomes a CK Target (i.e., in the events provided in this Agreement), any chemical entity that had been identified as a Compound with respect to such Mitotic Kinesin Target prior to the time such Mitotic Kinesin Target becomes a CK Target shall be deemed a CK Compound, except as provided in Section 1.5(c) below.

(c) A GSK Library Compound shall be deemed a CK Compound only to the extent that it is GSK Existing Technology, as provided in Section 5.3.2 below.

1.6 "CK KNOW-HOW" shall mean Information that (a) CK discloses to GSK under this Agreement or under the Non-Disclosure Agreement executed by CK and GSK dated [*] , as amended and (b) is within the Control of CK. Notwithstanding anything herein to the contrary, CK Know-How excludes published CK Patents.

1.7 "CK LIBRARY COMPOUND" shall mean a chemical entity (i) that is Controlled by CK as of the Effective Date, but which CK has not identified as meeting the Compound Criteria or criteria similar to the Compound Criteria for a Mitotic Kinesin Target as of the Effective Date, or (ii) which is developed or acquired by CK outside of the Research Program with no use of GSK Existing Technology or GSK Library Compounds, Collaboration Technology or Post-Collaboration Technology, and, during the Exclusivity Period or any Extension Period, in activities not directed to the discovery, development, manufacture or use of Mitotic Kinesin Targets or inhibitors of such Mitotic Kinesin Targets. It is understood that the term CK Library Compound shall include both chemical entities that have actually been synthesized as well as those that have not been synthesized but that are claimed in a CK Patent, so long as the conception and reduction to practice of such chemical entity were made in the manner described in clause (ii) above.

1.8 "CK PATENTS" shall mean all Patents in the Territory owned or Controlled by CK, including, without limitation, those provided to GSK under the Non-Disclosure Agreement executed by CK and GSK dated [*] , as amended. CK shall update GSK regarding any CK Patents within the Licensed Technology (i) on an annual basis commencing after the Effective Date in accordance with Section 2.4 below, and (ii) upon request by GSK after the end of the Research Term, with respect to CK Patents to which GSK retains a license hereunder.

1.9 "CK PRODUCT" shall mean pharmaceutical preparations for human use, incorporating a CK Compound as one of or its main active ingredient.

1.10 "CK TARGET" shall mean those Mitotic Kinesin Targets designated as CK Targets in accordance with Section 2.7 or another provision of this Agreement.

1.11 "CO-FUNDING OPTION" shall mean the option of CK to fund a portion of the Later Stage Development Costs of a Licensed Product as provided in Section 3.4.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

1.12 "COLLABORATION TARGET" shall mean those Mitotic Kinesin Targets that are selected as Collaboration Targets in accordance with Section 2.7 or Section 2.8, except as otherwise provided in this Agreement.

1.13 "COLLABORATION TECHNOLOGY" shall mean, subject to Sections 5.2.2, 5.3.2 and 5.5 below, all inventions and Information, invented, conceived or created solely or jointly by employees, agents or consultants of GSK and/or CK in the course of performing their respective activities in connection with the Research Program, or their activities specifically directed to the research, development, manufacture or use of Compounds, Development Compounds or Licensed Products, in each case during the Research Term. Collaboration Technology shall include all CK Patents and GSK Patents in and to any inventions described in this Section 1.13.

1.14 "COMBINATION PRODUCT" shall mean a Licensed Product that is a pharmaceutical preparation for human use incorporating two or more therapeutically active ingredients, including a Development Compound, as its main active ingredients. Notwithstanding the foregoing, drug delivery vehicles, adjuvants, and excipients shall not be deemed to be "therapeutically active ingredients," and their presence shall not be deemed to create a Combination Product under this Section 1.14.

1.15 "COMPLETION OF SCREENING" shall mean the date on which the screenings described in Section 2.7.1 have been completed, in accordance with the criteria set forth in Section 2.7.4.

1.16 "COMPOUND" shall mean, except as otherwise provided herein, a chemical entity that meets the Compound Criteria for a Mitotic Kinesin Target, which chemical entity (i) is discovered, synthesized or identified by CK or GSK using CK Existing Technology, GSK Existing Technology, Collaboration Technology, and/or Post-Collaboration Technology prior to, during, or, in the case of GSK (subject to (a) below), after the Exclusivity Period or any Extension Period, and which, (ii) at GSK's discretion, may be subject to development as a Development Compound under Section 2.5 of this Agreement. Notwithstanding the foregoing:

(a) A chemical entity that is first identified by GSK after the end of the Exclusivity Period, or after any Extension Period under Section 4.2.2 below (whichever is later), shall not be deemed a Compound unless such chemical entity was discovered, synthesized or identified using CK Existing Technology, Collaboration Technology or Post-Collaboration Technology.

(b) Those chemical entities Controlled by a Party prior to the Effective Date, which such Party identified as meeting the Compound Criteria (or criteria substantially similar to the Compound Criteria) as of the Effective Date, shall also be deemed Compounds for all purposes of this Agreement. In the case of CK, these compounds shall include certain of those compounds that are referred to by CK as the "Series [*] Compounds," as well as certain other compounds, that CK has so identified as meeting the Compound Criteria (or such substantially similar criteria) prior to the Effective Date.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

(c) Notwithstanding (b) above, at such time as a chemical entity becomes a CK Compound, the same shall be deemed excluded from the definition of Compounds under this Section 1.16 for all purposes (including, without limitation, for purposes of Sections 1.21 and 1.44).

(d) For purposes of clarity, a compound developed by either Party outside the Research Plan and provided for screening or other use under this Agreement shall not be deemed a Compound unless and until such compound is shown to meet the Compound Criteria.

1.17 "COMPOUND CRITERIA" shall mean (i) those criteria set forth in Exhibit 1.17, and (ii) such other criteria as are approved by the JRC and agreed in writing by the Parties. No criteria shall be deemed Compound Criteria under (ii) unless such criteria are formally approved by the JRC and agreed in writing by the Parties, regardless of whether such criteria are used informally or discussed by the Parties in the course of the Research Program.

1.18 "CONTRACT YEAR" shall mean a year of 365 days (or 366 days in a leap year) beginning on the Effective Date and ending one (1) year thereafter and so on year-by-year. "CONTRACT YEAR ONE" shall mean the first such year; "CONTRACT YEAR TWO" shall mean the second such year, and so on, year-by-year.

1.19 "CONTROL," "CONTROLS," "CONTROLLED" or "CONTROLLING" shall mean possession of the ability to grant the licenses or sublicenses as provided herein without violating the terms of any agreement or other arrangements with any Third Party.

1.20 "CYTOMETRIX(TM) TECHNOLOGY" shall mean that certain subject matter as further described in CK publication "Cytometrix(TM) Cellular Phenotyping Technologies Version 0.5 Development Partner Program" (publication February 2001), and modifications, improvements, extensions or derivatives to such automated cell biology platform.

1.21 "DEVELOPMENT COMPOUND" shall mean a Compound that is designated for product development, in accordance with Section 2.5 below.

1.22 "DEVELOPMENT MILESTONE" shall mean a milestone described in Section 6.4.

1.23 "DEVELOPMENT PLAN" shall mean the workplan with respect to the development of a Development Compound as set forth in Section 3.2.

1.24 "EFFECTIVE DATE" shall mean the date first written above.

1.25 "EXCLUSIVITY PERIOD" shall mean the period of time commencing with the Effective Date and ending upon the [*] anniversary of the end of the Research Term and any extensions thereto under Section 2.8.

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1.26 "EXTENSION PERIOD" shall mean a [*] period during which GSK has extended its exclusivity with respect to a particular Collaboration Target or Extendable Unselected Target, in accordance with Section 4.2.2.

1.27 "EXTENDED TARGET" and "EXTENDABLE UNSELECTED TARGET" shall have the meanings set forth in 4.2.2.

1.28 "FDA" shall mean, with respect to the United States, the U.S. Food and Drug Administration, any successor entity thereto, or any equivalent foreign regulatory authority(ies) in the particular country of the Territory.

1.29 "FIELD" shall mean, subject to Section 2.6.4, (i) the [*] or [*] treatment of cancer and other diseases and conditions in humans through the use of a Licensed Product; and (ii) [*] of the [*] or [*] of a patient, including the [*] of the [*] (e.g., [*] or [*] or [*]) to [*] of a Licensed Product, for the [*] of a Licensed Product(s) [*] for the [*] or [*] treatment of cancer and other diseases and conditions in a human patient. All other uses not specifically set forth in (i) or (ii) above are excluded from the Field.

1.30 "FTE" shall mean a full-time person employed by CK, or by a Third Party pursuant to Section 6.2.2, dedicated full-time to the Research Program, or in the case of less than a full-time dedicated person, a full-time, equivalent person year, based upon a total of one thousand eight hundred eighty (1,880) hours per year of work on the Research Program.

1.31 "GSK" shall mean GSK and any Affiliate of GSK.

1.32 "GSK EXISTING TECHNOLOGY" shall mean, subject to Section 5.3.2 below, GSK Patents and GSK Know-How, other than Collaboration Technology and Post-Collaboration Technology, Controlled by GSK, and created, prior to the end of the Exclusivity Period or any Extension Period under Section 4.2.2 below, that: (i) are [*] for the discovery, development, manufacture, use or sale of Compounds, Development Compounds, Licensed Products, or (ii) GSK has [*] or [*] in connection with its activities under the Research Program or the development, manufacture, use or sale of Compounds, Development Compounds or Licensed Products. In addition, GSK Existing Technology shall be subject to the following:

(a) Notwithstanding (i) and (ii) above, a GSK Library Compound and GSK Patents and GSK Know-How with respect thereto shall be deemed GSK Existing Technology only to the extent provided in Section 5.3.2 below.

(b) Notwithstanding (i) above, in the event a Compound, Development Compound or Licensed Product becomes a CK Compound or CK Product, or a Mitotic Kinesin Target is designated a CK Target, then with respect to such CK Compound, CK Product or CK Target (and any other CK Compounds and CK Products directed to such CK Target), the GSK Existing Technology within

(i) and (ii) above shall include only subject matter that was (x) identified

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as [*] for the discovery, development, manufacture, use or sale of such CK Compound or CK Product, or (y) [*] or [*] at least in part to such CK Compound, CK Product or CK Target, each prior to its being designated as such. Accordingly, for example, a drug delivery technology that had not been [*] to a Compound prior to its becoming a [*] shall not [*] become GSK Existing Technology with respect to such [*] (or a [*] incorporating [*]) regardless of whether such GSK drug delivery technology is [*] to commercialize such CK Compound.

1.33 "GSK KNOW-HOW" shall mean Information which (a) GSK discloses to CK under this Agreement or under the Non-Disclosure Agreement executed by CK and GSK dated [*] , as amended and (b) is within the Control of GSK. Notwithstanding anything herein to the contrary, GSK Know-How excludes published GSK Patents.

1.34 "GSK LIBRARY COMPOUND" shall mean a chemical entity (i) that is Controlled by GSK as of the Effective Date, or (ii) which is developed or acquired by GSK outside of the Research Program with no use of CK Existing Technology or CK Library Compounds, Collaboration Technology or Post-Collaboration Technology, and, during the Exclusivity Period or any Extension Period, in activities not directed to the discovery, development, manufacture or use of Mitotic Kinesin Targets or inhibitors of such Mitotic Kinesin Targets. It is understood that the term "GSK Library Compound" shall include both chemical entities that have actually been synthesized as well as those that have not been synthesized but that are claimed in a GSK Patent, so long as the conception and reduction to practice of such chemical entity were made in the manner described in clause (ii) above.

1.35 "GSK PATENTS" shall mean all Patents in the Territory owned or Controlled by GSK. GSK shall update CK regarding any GSK Patents within the Licensed Technology (i) on an annual basis commencing after the Effective Date in accordance with Section 2.4 below, and (ii) upon request by CK after the end of the Research Term, with respect to GSK Patents to which CK retains a license hereunder.

1.36 "IND" shall mean any investigational new drug application filed with the FDA as more fully defined in 21 C.F.R. Section 312.3 or its equivalent in any country.

1.37 "IND ENABLING STUDIES" shall mean studies which are specifically required for an IND, including without limitation, ADME and GLP toxicology studies, or studies required for the preparation of the CMC section of an IND including studies relating to analytical methods and purity analysis, and formulation and manufacturing development studies, all as necessary to obtain the permission of regulatory authorities to begin human clinical testing.

1.38 "INFORMATION" shall mean information and materials relating to the subject matter of this Agreement and including (i) techniques and data, including, but not limited to, screens, models, inventions, methods, test data, including but not limited to, pharmacological, lexicological and clinical test data, analytical and quality control data, marketing, pricing, distribution, costs, and sales data, manufacturing information, and patent and legal data or descriptions (to the extent that

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disclosure thereof would not result in loss or waiver of privilege or similar protection) and (ii) compositions of matter, including but not limited to compounds, biological materials and assays. As used herein, "clinical test data" shall be deemed to include all information related to the clinical or preclinical testing of a Compound, Development Compound, CK Compound, Licensed Product or CK Product, including without limitation, patient report forms, investigators'reports, biostatistical, pharmaco-economic and other related analyses, regulatory filings and communications, and the like.

1.39 "JOINT RESEARCH COMMITTEE" (or"JRC"), "JOINT DEVELOPMENT COMMITTEE" (or "JDC"), "JOINT COMMERCIALIZATION COMMITTEE" (or "JCC") and "JOINT STEERING COMMITTEE" (or "JSC") shall mean the committees established under Sections 2.2, 3.5, 7.2 and 12.2, respectively.

1.40 "KSP" shall mean any protein expressed by the human gene located at the locus [*] .

1.41 "LATER STAGE DEVELOPMENT" and "LATER STAGE DEVELOPMENT COSTS" shall have the meanings defined in Sections 3.4.3(a) and 3.4.3(c), respectively.

1.42 "LEAD TARGET" shall mean a Mitotic Kinesin Target identified in accordance with the procedures set forth in Section 2.7.

1.43 "LEAD TARGET SELECTION DATE" shall mean the date set forth in Section 2.7.1.

1.44 "LICENSED PRODUCT" shall mean a pharmaceutical preparation for human use incorporating a Development Compound as one of or its main active ingredient or designated as such under Section 4.5.2.

1.45 "LICENSED TECHNOLOGY" shall mean CK Existing Technology; GSK Existing Technology; Collaboration Technology; and Post-Collaboration Technology.

1.46 "MAJOR EUROPEAN COUNTRY" shall mean France, Germany, Italy, Spain, or the United Kingdom.

1.47 "MARKETING APPROVAL" shall mean all approvals, licenses, registrations or authorizations of any federal, state or local regulatory agency, department, bureau or other governmental entity, necessary for the manufacturing, use, storage, import, transport and sale of Licensed Products in a regulatory jurisdiction. Marketing Approval shall be deemed to occur upon first receipt of notice from the FDA, EMEA or similar agency that sale of a Licensed Product has been approved. For countries where governmental approval is required for pricing or reimbursement for the Licensed Product to be reimbursed by national health insurance (i.e., other than the United States), "Marketing Approval" shall not be deemed to occur until such pricing or reimbursement approval is obtained; provided, that if a Party has not accepted the pricing or reimbursement offered by the governmental authority of a particular country within eighteen (18) months after the date the first MAA is approved in such country, then the Party shall continue to use diligent efforts to obtain such pricing or reimbursement. Marketing Approval shall be deemed to have occurred in such

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country where government approval of pricing has not been obtained if, at any time, the Party begins the commercial sale of such Licensed Product in the

country without obtaining pricing approval, with the date of MAA approval to occur on the date of the first commercial sale of the Licensed Product in the country.

1.48 "MARKETING APPROVAL APPLICATION" or "MAA" shall mean a New Drug Application (as defined in 21 C.F.R. Section 314.50 et. seq.), or a comparable filing for Marketing Approval (not including pricing or reimbursement approval) in a country, in each case with respect to a Licensed Product in the Territory.

1.49 "MITOTIC KINESIN TARGET" shall mean (i) the human kinesin motor proteins KSP [*] ; and (ii) those other human proteins which are kinesin motor proteins which are discovered or acquired by either Party prior to the [*] anniversary of the end of the Research Term, excluding any extension thereof under Section 2.8, and which meet the criteria set forth in a separate written memorandum signed by both Parties expressly referencing this Section 1.49.

1.50 "Net SALES" shall mean the gross invoice price by GSK or its Affiliates or Sublicensees, as the case may be, for all Licensed Products sold by GSK, its Affiliates or Sublicensees ("Selling Party"), in finished product form, packaged and labeled for sale, under this Agreement in arm's length sales to Third Parties less deductions allowed to the Third Party customer by the Selling Party, to the extent actually taken by such Third Party customer, on such sales for:

(a) trade, quantity, and cash discounts;

(b) credits, rebates and chargebacks (including those to managed-care entities and government agencies), and allowances or credits to customers on account of rejection or returns (including, but not limited to, wholesaler and retailer returns) or on account of retroactive price reductions affecting such Licensed Product;

(c) freight, postage and duties, and transportation charges relating to Licensed Product, including handling and insurance thereto; and

(d) sales (such as VAT or its equivalent) and excise taxes, other consumption taxes, customs duties and compulsory payments to governmental authorities and any other governmental charges imposed upon the importation, use or sale of such Licensed Product to Third Parties.

Sales between GSK and its Affiliates or Sublicensees shall be excluded from the computation of Net Sales and no payments will be payable on such sales except where such Affiliates or Sublicensees are end users. In addition, the Selling Party may exclude from Net Sales a reasonable provision for uncollectible accounts, to the extent such reserve is determined in accordance with U.S. generally accepted accounting standards, consistently applied across all product lines of the particular Party, until such amounts are actually collected.

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In the event a Licensed Product is sold which is a Combination Product under Section 1.14, for purposes of determining payments due CK under Section 4.5.2(b) and (d) or Section 6.6, Net Sales of Combination Products shall be calculated by multiplying the Net Sales of the Combination Product by the fraction A over A+B, in which A is the Gross Selling Price of the Licensed Product when such Product is sold in substantial quantities comprising a Development Compound as the sole therapeutically active ingredient during the applicable accounting period in which the sales of the Licensed Product were

made, and B is the Gross Selling Price of the other therapeutically active ingredients contained in the Combination Product sold separately in substantial quantities during the accounting period in question. All Gross Selling Prices of the therapeutically active ingredients of the Licensed and Combination Products shall be calculated as the average Gross Selling Price of the therapeutically active ingredients in such Products during the applicable accounting period for which the Net Sales are being calculated. In the event that no separate sale of either the Licensed Product comprising a single Development Compound as the sole therapeutically active ingredient or the other therapeutically active ingredients of the Combination Product are made during the accounting period in which the sale was made or if the Gross Selling Price for a particular therapeutically active ingredient cannot be determined for an accounting period, Net Sales allocable to the Licensed Product and Combination Product shall be determined by mutual agreement reached in good faith by the Parties prior to the end of the accounting period in question based on an equitable method of determining same that takes into account, in the Territory, variations in potency, the relative contribution of each therapeutically active ingredient in the Combination Product, and relative value to the end user of each therapeutically active ingredient. For purposes of this Section 1.50, "Gross Selling Price" shall mean the gross price at which an active ingredient is sold to a Third Party, before discounts, deductions, credits, taxes or allowances.

1.51 "PATENT" shall mean (i) issued and unexpired Letters Patent, including any extension, registration, confirmation, reissue, continuation, SPC, divisional, continuation-in-part, re-examination or renewal thereof, (ii) pending applications for Letters Patents, and (iii) foreign counterparts of any of the foregoing; in each case to the extent the same has not been held, by a court or governmental agency of competent jurisdiction, to be invalid or unenforceable in a decision from which no appeal can be taken.

1.52 "PHASE I," "PHASE II," "PHASE III" and "PHASE IV" shall have the following meanings:

(a) "PHASE I" shall mean, subject to Section 6.4.3(c), the first clinical trial in which a particular Licensed Product is administered to either a patient or healthy volunteer.

(b) "PHASE II" with respect to cancer indications shall mean a clinical trial, the purpose of which is to investigate the activity of a Licensed Product in cancer using a dose studied in a Phase I clinical trial for such Licensed Product. "Phase II" with respect to non-cancer indications shall mean a dose-ranging study or a study exploring efficacy in a disease other than cancer.

(c) "PHASE III" shall mean a pivotal efficacy trial required to demonstrate substantial evidence of the efficacy and safety of a Licensed Product for submission of an MAA.

(d) "PHASE IV" shall mean a clinical trial conducted for a Licensed Product under an IND in a particular country after the Licensed Product has received Marketing Approval and has been marketed and commercially sold in that country, which is conducted primarily to continue testing the Licensed Product to collect information about its safety and/or efficacy in broader or various populations, long-term safety and side effects associated with long- term use, and its use in additional indications other than that for which Marketing Approval was initially granted.

1.53 "POST-COLLABORATION TECHNOLOGY" shall mean, subject to Sections 5.2.2, 5.3.2, 5.5 and 12.5.2 below, all inventions and Information invented or created solely or jointly by employees, agents or consultants of GSK and/or CK during the [*] ([*]) year period immediately following the end of the Research Term or during any Extension Period, and which in each case are invented or created in the course of performing activities specifically directed to the research, discovery, characterization, optimization or development of

Compounds, Collaboration Targets or Unselected Targets, or to the development, manufacture, use or sale of Compounds, Development Compounds or Licensed Products. Notwithstanding the foregoing, Post-Collaboration Technology shall also include all inventions and Information invented or created by or under authority of GSK, which are created or invented in the course of performing such activities after such period and during the term of this Agreement. Post-Collaboration Technology shall include all CK Patents and GSK Patents in and to any inventions described in this Section 1.53.

1.54 "PRE-PROGRAM FTEs" and "[*] PROGRAM FTEs" shall have the meanings ascribed to them in Section 2.6.1 and 2.6.2.

1.55 "[*] PROGRAM" shall mean a formal research program established in the discretion of [*] with respect to a particular Mitotic Kinesin Target for the commitment of resources at GSK and at CK under the Research Program, which program has undergone the detailed review of the [*] or [*]. At a minimum, a [*] Program shall comprise those activities set forth in Exhibit 1.55.

1.56 "PROJECT TEAM" shall mean the team of [*] personnel and [*]([*])[*] formed in accordance with Section 3.2 to manage the development of a Development Compound.

1.57 "RESEARCH PERFORMANCE MILESTONE" shall mean the milestones set forth in Section 6.3.1.

1.58 "RESEARCH PLAN" shall mean the written workplan for the Research Program to be conducted under this Agreement established in accordance with Section 2.3 hereof.

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1.59 "RESEARCH PROGRAM" shall mean the research, discovery, characterization, optimization and pre-clinical development of inhibitors of Mitotic Kinesin Targets, and the discovery and characterization of Mitotic Kinesin Targets, conducted by CK and/or GSK which are undertaken during the Research Term; provided that the Research Program shall not include any such activities performed by CK with respect to a CK Compound or CK Target after such Compound or Target becomes a CK Compound or CK Target, respectively.

1.60 "RESEARCH TERM" shall mean the period commencing on the Effective Date and ending on the first to occur of (i) termination of this Agreement by either Party under Article XI below; or (ii) five (5) years after the Effective Date, or if the Research Term is extended under Section 2.8 below, the end of such extended Research Term.

1.61 "SALES AND MARKETING PLAN" shall mean the plan and budget for the marketing, promotion, sale and distribution of a Licensed Product established by the JCC in accordance with Section 7.2.

1.62 "SUBLICENSEE" shall mean, with respect to a particular Licensed Product or CK Product, a Third Party to whom GSK or CK, respectively, has granted a license or sublicense under any Licensed Technology to make and sell such Licensed Product or CK Product. As used in this Agreement, "Sublicensee" shall also include a Third Party to whom GSK or CK has granted the right to distribute a Licensed Product or CK Product, respectively, provided that such Third Party is responsible for marketing and promotion of such Licensed Product or CK Product within its distribution territory.

1.63 "TERRITORY" shall mean the entire world.

1.64 "THIRD PARTY" shall mean any entity other than CK or GSK.

1.65 "TRACTABLE COMPOUND" shall mean a Compound that, in the

reasonable determination of the JRC during the Research Term, or, with respect to Compounds directed to Extendable Unselected Targets identified during any Extension Period, in the reasonable determination of GSK, meets the criteria in Exhibit 1.65.

1.66 "UNSELECTED TARGET" shall mean any Mitotic Kinesin Target that has not been identified as a Lead Target (i) by the end of Contract Year Five or (ii) in the event GSK extends the Research Term in accordance with Section 2.8.2, by the end of the Research Term, subject in each case to Section 2.7.3 below.

1.67 "CLOSING" AND "CLOSING DATE" shall mean the date specified in Section 13.1.

ARTICLE II - COLLABORATION RESEARCH PROGRAM

2.1 Research Program.

(a) CK and GSK agree to conduct a research program on a collaborative basis with the principal goal of identifying, developing, and commercializing Compounds, Development Compounds and Licensed Products within the Field, the mechanism of action of which is to inhibit Mitotic Kinesin Targets. The Research Program shall be conducted solely in accordance with the Research Plan, unless otherwise agreed by the Parties in writing. Each Party agrees to keep the other Party informed of its progress and activities within the Research Program.

(b) Each Patty shall contribute to the Research Program the Mitotic Kinesin Targets and Compounds identified by such Party prior to the Effective Date, as well as those Mitotic Kinesin Targets, Compounds, Development Compounds and Licensed Products identified during the Research Term. This Section 2.1(b) shall not be deemed to limit CK's rights with respect to CK Compounds, CK Targets or CK Products.

2.2 The JRC. Promptly after the Effective Date, the Parties shall establish a Joint Research Committee ("JRC"). The JRC shall have responsibility to (i) oversee, review and coordinate the Research Program and to expedite the progress of work being done under the Research Plan, and (ii) to make such other decisions as are expressly allocated to the JRC under this Agreement. The JRC shall exist until the end of the Research Term. Each Party agrees to keep the JRC informed of its progress and activities within the Research Program.

(a) Membership. The JRC shall be comprised of an equal number of representatives from each of GSK and CK. The exact number of such representatives shall be three (3) for each of GSK and CK, or such other number as the Parties may agree. The initial members of the JRC shall be [*] from GSK, and [*] from CK. Either Party may replace its respective JRC representatives at any time, with prior written notice to the other Party. Unless otherwise agreed, the JRC shall at all times include the CK officer overseeing all research and the following GSK representatives: the senior Center of Excellence for Drug Discovery ("CEDD") representatives responsible for biology, chemistry and clinical activities of the collaboration, any of whom may be replaced by the head of the CEDD. From time to time, the JRC may establish subcommittees to oversee particular projects or activities, and such subcommittees will be constituted as the JRC approves.

(b) Meetings, The JRC shall meet monthly, or as more or less often as otherwise agreed by the Parties, at such locations as the Parties agree. It is understood that such meetings shall be held at least quarterly in person, otherwise by telephone.

(c) Decision Making. Decisions of the JRC shall be made by majority vote of the members present in person or by other means (e.g., teleconference) at any meeting; provided that, if there is not an equal number of representatives of each Party present at such

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meeting, then only an equal number of representatives of each Party shall be entitled to vote at such meeting. In the event that the votes required to approve a decision cannot be reached, then either Party may, by written notice to the other, have such issue referred to the Chief Executive Officer of CK and the Chairman, Research and Development, Pharmaceuticals of GSK, for attempted resolution by good faith negotiations within thirty (30) days after such notice is received. Minutes of the JRC meetings shall be taken, and shall, at a minimum, record all decisions made. Such minutes shall be approved by both Parties.

(d) Responsibilities. The JRC shall be responsible for preparing the Research Plan for each Contract Year, other than the initial Research Plan, monitoring and adapting the Research Plan based on the results and progress of the Research Program, establishing objectives for the Research Program and evaluating the progress of the Research Program, including without limitation:

(i) Deciding the direction and objectives of the Research Program;

(ii) Approving FTE requirements (subject to Section 2.6);

(iii) Recommending Mitotic Kinesin Targets to be submitted for approval by [*] as [*] Programs;

(iv) Recommending Compounds to be submitted for [*] approval as Development Compounds in accordance with Section 2.5; and

(v) Providing a forum for the exchange of scientific information among the scientists participating in the Research Program.

2.3 Research Plan.

2.3.1 Responsibilities. The Research Program shall be carried out in accordance with the Research Plan. Each Party will be responsible for conducting those activities within the Research Program as are allocated to such Party under the Research Plan. The Research Plan shall be based on priorities with respect to Compounds and Mitotic Kinesin Targets other than CK Targets, taking into account GSK's and CK's views as to the feasibility of the scope and timing of research activities and objectives.

2.3.2 Establishment of Research Plan. The initial Research Plan shall be established by the mutual agreement of the Parties immediately upon the execution of this Agreement (the "Initial Research Plan") and shall cover the period from the Effective Date through December 31, 2001 in detail and includes general plans for the following two (2) years. By December 1 of each year during the Research Term, the JRC shall establish and approve the detailed Research Plan for the next succeeding year, including a general plan for the following two (2) years or the period remaining in the Research Term, whichever is shorter. The JRC shall review the

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Research Plan on an ongoing basis and may make changes thereto as the JRC approves in writing or as reflected in agreed and approved minutes of JRC meetings.

2.4 Information and Reports. GSK and CK will use diligent efforts to make available and disclose to each other all Collaboration Technology and Post-Collaboration Technology pertaining to Mitotic Kinesin Targets (other than CK Targets, which are addressed in Section 4.4 below) including all Patents and Information within such Technology regarding compounds synthesized or discovered, initial leads, activities of leads, derivatives, and results of in vitro and in vivo studies, assay techniques and new assays immediately after the Effective Date and continuing throughout the Research Term, with significant discoveries or advances being communicated as soon as reasonably practical after such Information is obtained or its significance is appreciated; provided, however, that with respect to tangible research material, the Parties shall exchange such material as determined by the JRC. The Parties will exchange, during the Research Term, at least once quarterly, a written summary of such research and results. Within [*] ([*]) days after the [*] anniversary of the expiration of the Research Term, and of the end of each Extension Period, each Party shall provide to the other such a written report directed to results obtained, and Post-Collaboration Technology developed, during the [*] period following the end of the Research Term. Within [*] ([*]) days after the end of each Extension Period under Section 4.2.2, each Party will provide the other with raw data within the Collaboration Technology and Post-Collaboration Technology to the extent reasonably requested by the other Party. Each Party shall use diligent efforts to inform the other Party of any of its respective Existing Technology used or incorporated in connection with the Research Program or any Extended Target. In addition, each Party will disclose its respective Existing Technology to the extent reasonably necessary for the other Party to perform activities under the Research Plan.

2.5 Designation of Development Compounds. The Parties have established guidelines, set forth in Exhibit 2.5, for the designation of Compounds as Development Compounds. From time to time, either Party may suggest that the JRC consider a particular Compound to be recommended to [*] for consideration as a Development Compound. Based upon the guidelines and the results of the Research Program, the JRC shall designate from time to time Compounds for consideration by [*] as Development Compounds, and upon approval by [*], the Compounds shall be deemed Development Compounds. [*] may approve, or withhold its approval of, the designation of any Compound as a Development Compound in [*], whether or not such Compound [*] the [*], and a Compound shall not be deemed a Development Compound unless so approved by [*]. Unless the JRC otherwise approves, however, [*] agrees not to undertake IND Enabling Studies with respect to a particular Compound, until such Compound has been designated as a Development Compound in accordance with this Section 2.5.

2.6 FTE Requirements; Funding. To advance the Research Program, GSK agrees to fund CK FTEs performing research under the Research Plan in accordance with Section 6.2 below and this Section 2.6. In addition:

2.6.1 Generally. Unless otherwise agreed by the Parties or as otherwise provided in this Section 2.6, the Research Plan shall provide for, and GSK agrees to fund, [*] ([*]) CK

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FTEs in Contract Year One; [*] ([*]) CK FTEs in Contract Year Two; [*] ([*]) CK FTEs in Contract Year Three; [*] ([*]) CK FTEs in Contract Year Four; and [*] ([*]) CK FTEs in Contract Year Five (the "Pre-Program FTEs"). The Pre-Program FTEs shall be funded at the rate set forth in Section 6.2.1. The Pre-Program FTEs shall engage in research activities supporting Mitotic Kinesin Target efforts that have not yet reached [*] Program status, in accordance with the

Research Plan. No activities funded by GSK under Section 6.2 shall be directed to research on CK Targets, CK Compounds or CK Products once they have been designated as such.

2.6.2 [*] Program Activities.

(a) From time to time, [*] may establish a formal [*] Program to be conducted on a collaborative basis by CK and GSK to focus resources on a particular Mitotic Kinesin Target. Should [*] establish such a [*] Program with respect to a Mitotic Kinesin Target, it shall notify the JRC of the establishment of the [*] Program, and shall keep the JRC fully informed of its activities under the [*] Program. In such event, the JRC will decide upon the division between GSK and CK of responsibilities pertaining to such [*] Program. Upon the establishment of such a [*] Program, the Research Plan shall be modified to reflect such division, and the additional resources to be added, which shall include additional FTEs at CK (i.e., in addition to the Pre-Program FTEs) (such additional FTEs being referred to as "[*] Program FTEs"); provided that, except as provided in Section 2.6.2(b) for KSP, the additional [*] Program FTEs for any particular [*] Program shall not exceed [*] ([*]) FTEs unless otherwise agreed by GSK and CK. The decision of whether to establish a [*] Program with respect to a particular Mitotic Kinesin Target shall be in the [*] of [*] (except with respect to KSP in Contract Year One, as described in Section 2.6.2(b) below); provided, however, if at any point in time GSK assigns medicinal chemistry personnel (other than CK FTEs) at the rate (i.e., a running rate) of [*] ([*]) full-time equivalents, to perform activities relating to such Target, a [*] Program shall be deemed to have been established with respect to such Target. It is anticipated that, if the Research Program is successful and [*] establishes multiple [*] Programs, then the number of CK FTEs will increase above the minimum CK FTEs required under 2.6.1 above.

(b) Notwithstanding the foregoing, the Parties agree that a [*] Program has been established with respect to KSP, which shall continue through at least the end of Contract Year One. The Research Plan for Contract Year One shall, unless otherwise agreed, provide for [*] ([*]) CK [*] Program FTEs dedicated to KSP (i.e., in addition to the [*] CK FTEs described above, for a total of [*] CK FTEs in Contract Year One). Following Contract Year One, the JRC shall determine the appropriate level of [*] Program FTEs, not to exceed [*] FTEs, to be dedicated to KSP in subsequent periods, based on the activities remaining and the capabilities of CK to perform those activities.

2.6.3 Maximum FTEs. Notwithstanding Sections 2.6.2(a) and (b) above, in no event will GSK's aggregate funding obligations for [*] Program FTEs and Pre-Program FTEs at CK, added together, exceed [*] ([*]) FTEs at CK in any year of the Research Term, unless mutually agreed. Notwithstanding any of the foregoing, unless otherwise agreed by CK and

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GSK, the Research Plan may not at any time require more than [*] ([*]) CK FTEs performing synthetic and analytical chemistry.

2.6.4 [*]; [*]. During Contract Year [*], CK and GSK shall discuss a broadening of the Research Plan to include activities specifically directed at the discovery and development of [*] and/or [*] as inhibitors of Mitotic Kinesin Targets. The JRC shall include the broadening of the Research Plan as a priority for discussions at its initial meetings after the Effective Date. The Parties shall negotiate in good faith, using commercially reasonable efforts to reach agreement on the terms of such broadening of the Research Plan. The agreement between the Parties to broaden the Research Plan under this Section shall take into consideration the research funding, milestones and royalty payments already agreed to by the Parties under this Agreement. If the Parties mutually agree in writing on such a modification of the Research Plan

prior to the [*] of the Effective Date, then the Research Plan shall be modified as so agreed, [*] and [*] shall remain within the Field, and the Parties shall negotiate additional collaboration terms for such area. Agreement on such an expanded Research Plan and collaboration may be conditioned upon a commitment by GSK to include, throughout the Research Term, sufficient resources to diligently pursue such discovery and development activities. If by the [*] of the Effective Date the Parties have not agreed in writing on such a modification of the Research Plan and Agreement, then (notwithstanding Section 1.29 above) for all purposes of this Agreement the Field shall exclude the use of [*] and [*] for any therapeutic purpose, and shall also exclude any [*] for use in connection with such [*] or [*].

(a) If the parties fail to reach agreement on such broadening of the Research Plan and Agreement by the end of Contract Year [*], CK may enter into a collaboration and license or other agreement with one or more Third Parties for [*] and/or [*], alone or in combination, after Contract Year [*], subject to Section 2.6.4(b) below, but GSK shall receive a royalty under Section 4.7 based on CK's use, or that of its licensees, if any, of [*] generated under the Research Program.

(b) At least [*] ([*]) days prior to CK's first grant to a Third Party of a right to develop, manufacture, sell and distribute (i) both at least [*] ([*]) [*] and at least [*] ([*]) [*], or (ii) at least [*] ([*]) [*], but no [*], or (iii) at least [*] ([*]) [*], but no [*], CK will notify GSK in writing of its intent to grant such rights and a summary of the terms upon which it then wishes to grant such rights ("Initial Notice"). A grant described in (i) above is referred to as a "Combination License," and a grant referred to in either (ii) or (iii) is referred to as a "Field-Specific License." CK shall provide one (1) Initial Notice with respect to a proposed Combination License or one (1) Initial Notice each for each of the two categories of Field Specific License. It is understood and agreed that CK shall not be required to submit more than one (1) Initial Notice to GSK with respect to [*] collectively on the one hand, or more than one (1) Initial Notice to GSK with respect to [*] collectively on the other hand.

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(A) Upon request by GSK within [*]([*]) days after receiving an Initial Notice, CK and GSK will, during the [*]([*]) day period following the date of the Initial Notice (the "Negotiation Period"), negotiate the granting of rights to GSK under the Combination License or Field Specific License, as applicable. It is understood that any such grant of rights to GSK is subject to agreement between the Parties on the financial terms and other conditions of such grant. If CK provides an Initial Notice to GSK (x) with respect to a Field Specific License, GSK shall have the right to negotiate with CK for a Combination License or (y) with respect to one product within [*] or [*], as applicable, GSK shall have the right to negotiate with CK for a Field-Specific License to [*] or [*], as applicable, or to a Combination License. In the event GSK requests to negotiate a category of License as described in (x) or (y), then the Initial Notice shall be deemed to have been for that category of License (i.e., Combination License, Field-Specific License for [*] or Field-Specific License for [*], as the case may be).

(B) If for any reason the Parties do not agree upon and enter into an agreement for the grant of rights to GSK by the end of the Negotiation Period, CK shall have no further obligations to GSK under this Section 2.6.4 to provide an Initial Notice (x) with respect to any [*] or [*] in the case of an Initial Notice regarding a Combination License, (y) with respect to any [*] in the case of a Field-Specific Licensed described in Section 2.6.4(b)(ii) above, or (z) with respect to any [*] in the case of a Field-Specific License described in Section 2.6.4(b)(iii) above; except in each case for CK's royalty obligations under Section 4.7 (as they may apply to [*]

and [*] as if the resultant product were a CK Product).

(c) At such time as (i) CK has delivered an Initial Notice for either (y) one (1) Combination License or (z) one (1) Field-Specific License for [*] and one (1) Field-Specific License for [*], whichever occurs first, and (ii) the Negotiation Period, if any, corresponding to each Initial Notice described above has expired (or the Parties have agreed upon and entered into an agreement concerning the subject matter of such Initial Notice), then all obligations of CK under this Section 2.6.4 shall terminate. It is understood that the Parties' obligations under this Section 2.6.4 are limited to those expressly stated herein, and neither GSK nor CK shall have any further obligation, implied or otherwise, other than the obligations expressly stated herein.

(d) For such purposes, (i) "[*]" shall mean [*] for the treatment or [*] of a disease [*], via [*] or [*] methods, of compositions comprising a [*] that [*] and [*] a moiety, wherein such moiety serves a material function in the treatment or [*] of such disease; and (ii) "[*]" shall mean [*] for the treatment or [*] of a disease comprising [*] which modulates [*] by [*]; in each of cases (i) and (ii) where such [*], as known by CK at the time of the grant of rights subject to this Section 2.6.4, is to inhibit the function of a Mitotic Kinesin Target.

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2.7 Collaboration Targets. The Parties acknowledge that CK's technology with respect to the Mitotic Kinesin Targets and the research conducted under the Research Program could potentially provide a large number of Mitotic Kinesin Targets and Compounds on which to focus further research and development activities, and that, under the collaboration, the Parties will focus their resources on particular Mitotic Kinesin Targets to be selected by GSK as Collaboration Targets in accordance with this Section 2.7. Those Mitotic Kinesin Targets designated as CK Targets in accordance with this Section may be pursued independently by CK, subject to GSK's rights under Section 4.5 below, it being understood that GSK will perform no additional research or development on or commit additional resources to such CK Targets (unless GSK exercises its right with respect to a CK Product under Section 4.5 below).

2.7.1 Initial Selection of Collaboration Targets. Upon the later to occur of (i) the Completion of Screening for [*] ([*]) Mitotic Kinesin Targets or (ii) [*] days after the end of Contract Year [*] (the "Lead Target Selection Date"), the JRC will reasonably determine the number of Mitotic Kinesin Targets, other than [*], for which at least one Tractable Compound has been identified (a "Lead Target"); provided, however, if [*] establishes a [*] Program with respect to a particular Mitotic Kinesin Target, such Target shall be deemed a Lead Target. If the number of such Lead Targets is [*] or less, then all such Lead Targets shall be Collaboration Targets. If the number of Lead Targets is [*] or greater, then the Parties shall make the initial selection of Collaboration Targets and CK Targets, as set forth in Sections 2.7.1(a) and (b) below (with all of the Lead Targets that have been identified as of the Lead Target Selection Date identified above being referred to as the "Initial Lead Target Pool").

(a) On the Lead Target Selection Date, the Parties shall select as Collaboration Targets and CK Targets that number of Lead Targets corresponding to the total number of Lead Targets in the Initial Lead Target Pool as set forth in the following table, with such selection proceeding in the manner described in Section 2.7.1(b) and (c) below.

Total Lead Targets	Collaboration Targets	CK Targets
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]

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(b) In applying the foregoing table on the Lead Target Selection Date, [*] shall be entitled to select the first [*] ([*]) [*]. After [*] has made such selection, [*] may select [*] ([*]) Lead Target as [*]. This initial selection shall progress sequentially through the table, Lead-Target-by-Lead-Target, until all Lead Targets in the Initial Lead Target Pool have been selected by GSK and CK based on the number of Collaboration Targets and CK Targets assigned to each under the table. For example, if there are [*] ([*]) Lead Targets in the Initial Lead Target Pool, [*] shall first select [*] ([*]) [*], [*] shall then select [*] ([*]) [*], [*] shall then select [*] ([*]) [*] more [*], and [*] shall then select [*] ([*]) additional [*].

(c) [*] shall notify [*] of its first selection no later than [*] ([*]) [*] days after the Lead Target Selection Date, and thereafter each Party shall make its next selections sequentially, as described in paragraph (b) above, within [*] ([*]) [*] business days after the other Party completes its selection. In the event that a Party (the "Selecting Party") fails to make such selection within such [*]-day or [*]-business day period, as applicable, and again fails to make such selection within [*] ([*]) [*] business days of a further written request to do so, the other Party shall have the right to make such selection on behalf of the Selecting Party by so notifying the Selecting Party of such selection, and such selection shall be deemed the selection of the Selecting Party for purposes of this Section 2.7.

(d) Upon each selection in accordance with this Section 2.7, the particular Lead Target shall be deemed a Collaboration Target or a CK Target, as the case may be.

(e) [*]. For purposes of clarity, it is understood that [*] shall not be included in the total Lead Targets or the Initial Lead Target Pool, nor shall [*] be subject to the selection mechanism of these Sections 2.7.1 and 2.7.2. [*] shall be deemed a Collaboration Target as of the Effective Date, except to the extent otherwise provided in this Agreement.

(f) If the total number of Lead Targets in the Initial Lead Target Pool or thereafter exceeds [*] ([*]), then for all purposes of this Section 2.7, the table above shall be deemed to be extended in the same pattern as such table progressed from [*] ([*]) Lead Targets to [*] ([*]) Lead Targets. For example, if there are [*]([*]) Lead Targets, [*] would be entitled to [*] ([*]) [*] and [*] would be entitled to [*] ([*]) [*].

2.7.2 Subsequent Selections.

(a) After all of the Lead Targets have been selected from the Initial Lead Target Pool, then within [*] ([*]) days after

each subsequent point in time as the JRC has identified [*] ([*]) additional Lead Targets (i.e., other than [*] and the Lead Targets previously selected in accordance with this Section 2.7), and in any event at the end of Contract Year Five, the Parties shall make further selections of Collaboration Targets and CK Targets, with [*] selecting [*] ([*]) [*], and with the [*] being designated as [*] (subject to paragraphs (b) and (c) below). For example, if [*] ([*]) Lead Targets were in the Initial Lead Target

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Pool, when [*]([*]) additional Lead Targets are identified, [*] shall first select [*]([*]) Lead Target as [*], and the [*] Lead Target shall be [*].

(b) Notwithstanding the foregoing, until such time as a total of at least [*]([*]) Lead Targets have been identified, then the selection of such Lead Targets shall proceed in accordance with Section 2.7.1 above as if such Lead Targets had been in the Initial Lead Target Pool (i.e., so that [*] will have the right to select the first [*] Lead Targets as [*], and [*] shall have the right to select the [*] Lead Target as [*]).

(c) If there is only one (1) unselected Lead Target at the end of Contract Year Five, then that Lead Target shall be designated as a Collaboration Target or a [*], depending on which Party is then due a Lead Target, based on the table above.

2.7.3 Reversion of Unselected Targets; Selection during Section 2.8.2 Extension.

(a) It is understood that any Unselected Target shall be deemed a CK Target at the end of Contract Year Five, unless the Research Term is extended with respect to Unselected Targets under Section 2.8.2 below, or, if the Unselected Target is an Extendable Unselected Target and such Target becomes an Extended Target under Section 4.2.2 below.

(b) If the Research Term is extended with respect to Unselected Targets in accordance with Section 2.8.2 below, and a particular Unselected Target is identified as a Lead Target during the period of such extension, such Lead Target shall be selected as a Collaboration Target or CK Target in accordance with the table in Section 2.7.1 above, taking into account all of the Lead Targets previously so selected under Section 2.7.1 or 2.7.2 above, or under this Section 2.7.3. Such selections shall be made in a sequential fashion, progressing through the table Lead Target-by-Lead Target, as each such Lead Target is identified (i.e., such selection shall not progress on the basis of each [*] Lead Targets in the manner described in Section 2.7.2 above). Any Unselected Target that has not been identified as a Lead Target by the end of the extended Research Term under Section 2.8.2 shall be deemed a CK Target, unless such Unselected Target becomes an Extended Target under Section 4.2.2 below.

(c) If an Extendable Unselected Target becomes an Extended Target under Section 4.2.2 below, and such Extended Target is identified as a Lead Target during the Extension Period for such Target, the same shall automatically be deemed a Collaboration Target. Otherwise, such Unselected Target shall become a CK Target as of the end of the last Extension Period for such Target.

2.7.4 Completion of Screening. Promptly following the Effective Date, CK shall disclose to GSK the number of screens against particular Mitotic Kinesin Targets that it has conducted as of the Effective Date, including those chemical entities so screened by CK prior to the Effective Date. It is anticipated that, by the end of Contract Year [*], CK will generate up to [*] Data Points with respect to each of [*]([*]) Mitotic Kinesin Targets, unless the JRC determines and agrees that such Data Points are better allocated otherwise. The JRC shall specify

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the number of chemical entities to be screened with respect to specific Mitotic Kinesin Targets, on a Target-by-Target basis. GSK shall supply to CK such number of chemical entities and in such quantities as required by the Initial Research Plan (as defined in Section 2.3.2) in time for the scheduled screening against a particular Mitotic Kinesin Target prior to the end of Contract Year [*]. CK shall give priority to screening chemical entities provided by GSK rather than to chemical entities provided by CK. The screening requirements outlined in the Initial Research Plan shall be sufficient to satisfy the Completion of Screening requirement under this Section 2.7 and screening of such Targets shall be deemed complete for purposes of clause (i) of Section 2.7.1 above when CK has generated that number of Data Points specified by the Initial Research Plan for Contract Years [*] through [*], including those Data Points generated by CK prior to the Effective Date, or such lesser number as the JRC may agree. It is understood that the JRC may provide for further screening beyond that level of screening required for Completion of Screening under this Section 2.7.4, but completion of such further screening shall not be required to satisfy the requirements of Section 2.7.1(i) above. For purposes of this Section 2.7.4, a "Data Point" shall be deemed generated when CK has screened a single, unique chemical entity against a single Mitotic Kinesin Target (it being understood that such chemical entity may be used to generate a Data Point for each Mitotic Kinesin Target).

2.8 Extension of Research Term.

2.8.1 Collaboration Targets. GSK shall have the right to extend the Research Term on an annual basis for up to [*]([*]) additional [*] periods beyond Contract Year Five. To exercise such option, GSK shall so notify CK in writing at least [*]([*]) months prior to the expiration of the Research Term (including any extensions thereof in accordance with this Section 2.8.1). During any extension of the Research Term under this Section 2.8.1, the Research Plan shall provide for [*]([*]) CK FTEs, or a higher number if mutually agreed, performing activities with respect to Collaboration Targets under the Research Program, funded by GSK at the FTE rate established under Section 6.2.1 below. It is understood that, during any extension under this Section 2.8, the Research Program shall be limited to research and development activities directed to Collaboration Targets, except as provided under Section 2.8.2 below. In the event that the Research Term ends at any point in time, then from and after such time GSK shall have no further right to extend the Research Term under this Section 2.8.1.

2.8.2 Unselected Targets.

(a) Except as provided in this Section 2.8.2, or as provided in Section 4.2.2 below, all Mitotic Kinesin Targets that have not been designated Collaboration Targets by the end of Contract Year Five shall at that time become CK Targets.

(b) Notwithstanding (a) above, if GSK has extended the Research Term for a particular Contract Year in accordance with Section 2.8.1 above, GSK may also extend the Research Term with respect to all Unselected Targets for such Contract Year, to the extent provided in this Section 2.8.2. GSK shall have the right to extend the Research Term under this Section 2.8.2 for up to [*]([*]) additional [*] periods beyond Contract Year Five, provided GSK has

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extended the Research Term under Section 2.8.1. To exercise such option, GSK shall so notify CK in writing at least [*]([*]) months prior to the expiration of the Research Term (including any extensions thereof in accordance with this Section 2.8.2(b)). During any extension of the Research Term under this Section 2.8.2, the Research Plan shall provide for [*]([*]) CK FTEs, or a higher number if mutually agreed, performing activities with respect to Unselected Targets under the Research Program, funded by GSK at the FTE rate established under Section 6.2.1 below (i.e., [*] additional FTEs beyond those required by Section 2.8.1 above, for a combined total of at least [*] CK FTEs being funded by GSK under both Sections 2.8.1 and 2.8.2). In the event that GSK does not extend the Research Term for any Contract Year with respect to all Unselected Targets in accordance with this Section 2.8.2, then from and after such time GSK shall have no further right to extend the Research Term under this Section 2.8.2.

(c) In the event GSK extends the Research Term in accordance with this Section 2.8.2, then any Unselected Targets that have not been designated Collaboration Targets prior to the end of the last extension of the Research Term under this Section 2.8.2 shall at that time become CK Targets, unless GSK selects such Unselected Target as an Extended Target in accordance with Section 4.2.2 below.

(d) Once an Unselected Target is selected as either a Collaboration Target or a CK Target, the same shall cease to be an Unselected Target.

ARTICLE III - PRODUCT DEVELOPMENT

3.1 GSK's Right to Pursue Development.

(a) Following the selection of a Development Compound in accordance with Section 2.5 above, GSK shall be responsible for undertaking a development program to obtain Marketing Approval for one or more Licensed Products incorporating such Development Compound. The development program undertaken by GSK shall include all preclinical, clinical, manufacturing and other activities, beyond those to be undertaken pursuant to the Research Program, as are [*] or [*] in [*] and [*] to bring such Licensed Products to market. Except as provided in Section 3.1(b), and subject to any other provisions of this Agreement (including without limitation Sections 3.2, 3.3, 4.2.1, 7.3 and 11.3.3), GSK shall have the right to make all decisions relating to the development, marketing and commercialization activities with respect to any particular Development Compound or Licensed Product, including whether to continue with the development program with respect to any Development Compound or Licensed Product or to seek Marketing Approval of a Licensed Product in a particular country in the Territory.

(b) Upon CK's exercise of its Co-Funding Option or GSK's exercise of the CK Product Option, the JDC shall have the right to make all decisions relating to the development, marketing and commercialization activities with respect to any particular Development Compound or Licensed Product as to which CK has exercised its Co-Funding Option, including whether to continue with the development program with respect to the Development Compound or Licensed

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Product or to seek Marketing Approval of the Licensed Product in a particular country in the Territory. The JDC shall make decisions in accordance with the Co-Development Plan and Budget (as described in Section 3.4.2), as such may be modified by the JDC and all development of Co-Funded Products shall be performed in accordance with such Co-Development Plan and Budget. All MAAs and Marketing Approvals for the Licensed Products (other than those for which GSK acquires rights under Section 4.5 below) [*], unless otherwise agreed or provided herein.

3.1.1 Review of [*] as Potential Development Compound. The

Parties acknowledge that CK has identified and developed certain Compounds, and that the Compound referred to by CK as [*] may potentially meet the Development Compound Criteria guidelines set forth in Exhibit 2.5. In addition, the Parties acknowledge that CK has commenced and is continuing product development activities with respect to [*], and the Parties have discussed CK's continuing development program, including the costs thereof, for such Compound. Promptly after the Effective Date, the JRC shall determine whether and when to recommend [*] as a Development Compound, and, if the JRC so recommends, [*] shall determine whether or not to approve [*] as a Development Compound in accordance with Section 2.5 above, and will notify [*] of its decision, including the reasons for such decision, it being understood that [*] retains the absolute right to approve or not approve [*] as a Development Compound.

3.1.2 Cost of [*] Preclinical Development Prior to Decision. It is understood that, prior to the Effective Date, CK has been proceeding with development activities with respect to [*], including activities directed to compiling data necessary for [*] to consider [*] as a potential Development Compound. GSK shall have no obligation to reimburse CK for any costs incurred by CK prior to the Effective Date relating to [*] or other research and development activities of CK. Notwithstanding the foregoing, GSK agrees to reimburse CK for the following costs related to [*]: (a) costs associated with [*] incurred after the Effective Date as set forth in the Research Plan; (b) costs incurred by CK in accordance with the termination of activities ongoing as of the Effective Date with those Third Party vendors identified with an asterisk in the Initial Research Plan, [*]; and (c) if [*] is not approved by [*] as a Development Compound, [*] percent ([*]%) of costs incurred by CK in accordance with the termination of activities with those Third Party vendors identified with an asterisk in the Initial Research Plan. GSK shall have no obligation to reimburse CK for costs associated with [*]or other research costs other than as set forth above or as otherwise agreed by the JRC. In establishing the objectives and activities in the Research Plan with respect to [*], the JRC shall determine which Third Party agreements relating to [*] to continue or to terminate. In the event that [*] approves [*] as a Development Compound, the Parties shall cooperate to ensure a seamless and rapid transition of further development of [*] in accordance with the general timelines set forth in the Initial Research Plan.

3.2 Project Team. Promptly after approval of each Development Compound, GSK shall form a project team comprised of GSK personnel that will manage the conduct and progress of the further development and regulatory affairs with respect to that Development Compound (each a

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"Project Team"). Such Project Team shall meet at least monthly. CK shall be notified at least two weeks in advance of the date of each Project Team meeting and shall have the opportunity to send, at CK's cost, [*] to such meeting, who shall be designated as [*] of the Project Team. GSK shall provide such [*] with schedules for all Project Team meetings and all other information distributed to GSK members of the Project Team. The Project Team shall have the responsibility for establishing the plan for the development of the subject Development Compound (each, a "Development Plan"), and in so doing shall consider all reasonable suggestions and comments of CK in formulating such Development Plan. Such Development Plan shall be comprehensive and shall fully describe at least the proposed activities related to ongoing preclinical studies, formulation, process development, clinical studies and regulatory plans, and other activities and timelines directed to obtaining Marketing Approval in each applicable country. In any event, GSK agrees to keep CK fully informed as to the material progress and activities relating to the further development and regulatory matters pertaining to each Development Compound and Licensed Product. In addition, GSK shall provide CK with such material information as CK may reasonably request from time to time. It is understood that such information will include, without limitation, copies of all proposed trial protocols and

material correspondence with regulatory authorities with respect to each Licensed Product.

3.3 Manufacturing. Except as provided in Section 3.1.2, GSK shall have the right and responsibility to arrange for manufacturing of the Licensed Products, including both clinical materials and commercial product, consistent with GSK's reasonable internal practices and industry standards. GSK shall make reasonable commercial efforts to ensure adequate manufacturing capacity to meet forecast demand for Licensed Products, including, if deemed necessary by GSK, the establishment of an alternative supply source. GSK shall also make reasonable commercial efforts to ensure an adequate clinical and commercial supply of such Licensed Products. GSK will keep the Project Team, the JDC and the JCC, as applicable, advised of its manufacturing plans and activities.

3.4 Co-Development Option. CK shall have the right, on a Licensed Product-by- Licensed Product basis, to elect to fund a portion of the Later Stage Development Costs of such Licensed Product, all in accordance with this Section 3.4 (the "Co-Funding Option").

3.4.1 Election. GSK shall notify CK at least [*]([*]) months, but not more than [*]([*]) months, prior to initiation of the first [*] for each Licensed Product (each, a "[*]"). Such [*] shall include the date by which such [*] will start (the "Projected Start Date"), and shall include a description in detail of the indication for which such [*] will be directed, together with a comprehensive, detailed plan and budget, prepared and provided in good faith, for the conduct of the Later Stage Development of such Licensed Product, to the extent such information is not included in or is at variance with the Development Plan or otherwise has not been communicated previously to CK. At least [*]([*]) days prior to the Projected Start Date, CK may elect, by so notifying GSK in writing, to participate in the further development of such Licensed Product, to the extent described in this Section 3.4 below (such notice, the "Election Notice"). Following the [*], GSK shall cooperate

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fully with CK, and shall promptly provide CK with such material information (including without limitation underlying clinical data), to the extent such information is not included in the Development Plan or otherwise has not been communicated previously to CK, as CK may reasonably request to enable CK to make an informed decision whether to exercise its Co-Funding Option under this Section 3.4 with respect to such Licensed Product. In the event CK exercises its Co-Funding Option with respect to a particular Licensed Product (such Licensed Product, a "Co-Funded Product"), the provisions of Sections 3.4.2 through 3.4.4 below shall apply with respect to such Co-Funded Product.

3.4.2 Co-Funding Obligation. In the event CK exercises its Co-Funding Option with respect to a Licensed Product, CK shall specify in the Election Notice whether CK elects to fund either [*] ([*]) or [*] ([*]) of the Later Stage Development Costs for such Licensed Product. The percentage so specified by CK is referred to as the "CK Percentage" for such Licensed Product. Following such election, CK shall be obligated to reimburse GSK for the CK Percentage of such Later Stage Development Costs for such Licensed Product, subject to the provisions of this Section 3.4.

(a) The comprehensive development plan and budget provided with the [*], as modified in accordance with this Section 3.4.2(a), is referred to as the "Co-Development Plan and Budget." By October 1 of each year during the Later Stage Development for a particular Co-Funded Product or such other date as is mutually agreed by the Parties (which will be established under Section 3.5 below), the JDC shall update and amend the Co-Development Plan and Budget for such Co-Funded Product for the next succeeding year. Unless otherwise specified in the Co-Development Plan and Budget, any amounts projected for a full year shall be considered budgeted in

four equal quarterly amounts.

(b) Within sixty (60) days after CK exercises its Co-Funding Option with respect to a Licensed Product, but in any event prior to the initiation of the first [*] for such Licensed Product, CK and GSK shall establish specific reasonable Later Stage Development Costs invoicing and payment procedures. Such procedures shall include the form of invoice, overall documentation requirements and accounting methodologies for Later Stage Development Costs, and specific documentation of costs required with each invoice. Within sixty (60) days after the end of each calendar [*], GSK shall provide to CK a statement reflecting the total Later Stage Development Costs incurred by GSK during such calendar [*] with respect to the particular Co-Funded Product. Within sixty (60) days after CK's receipt of such statement, CK shall reimburse GSK for the CK Percentage of Later Stage Development Costs incurred by GSK during such [*] period in accordance with the Co-Development Plan and Budget for such Co-Funded Product. CK may elect to defer payment, in whole or in part, of any amount due under this Section 3.4.2(b) for up to an additional [*] ([*]) months after such payment would otherwise have been due, by providing notice to GSK of the amount for which payment is to be deferred and the period of the deferment. Any payment amount so deferred shall bear interest at a rate of [*] percent ([*]%) per annum, calculated on the number of days from the end of the [*] day period after the calendar [*] in which such Later Stage Development Costs were incurred, until

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the date paid by CK. GSK agrees to keep CK informed on an ongoing basis as to the actual Later Stage Development Costs incurred to date as compared to the Later Stage Development Costs reflected in the Co-Development Plan and Budget.

(c) Notwithstanding the foregoing, CK shall not be obligated to reimburse GSK for amounts [*] percent ([*]%) in excess of the Later Stage Development Costs provided in (i) the then-current Co-Development Plan and Budget, or (ii) the Development Plan and Budget provided with the [*], whichever is lower (the CK Percentage of such excess amounts being referred to as the "Deferred Excess Amount") in accordance with the time periods and schedule set forth in Section 3.4.2(b). In the event that CK elects not to reimburse such Deferred Excess Amount in accordance with the time periods and schedule set forth in Section 3.4.2(b), then, at GSK's option either (i) CK shall repay such Deferred Excess Amount on the [*] anniversary of the date such Deferred Excess Amount would otherwise have been payable under paragraph (b) above, together with interest thereon at the rate of [*] percent ([*]%) per annum, calculated from the date such Deferred Excess Amount would have been so due under paragraph (b); or (ii) GSK shall be entitled to credit such excess costs, plus interest at a rate of [*] percent ([*]%) per annum, calculated from the date such costs would have otherwise been due, against royalties payable under Section 6.6.2 with respect to such Co-Funded Product. GSK shall make such election with respect to all Deferred Excess Amounts for a particular Co-Funded Product by so notifying CK within sixty (60) days after the date CK first elects to defer a Deferred Excess Amount under this Section 3.4.2(c) for such Co-Funded Product. In the event of (i), CK may repay such Deferred Excess Amount earlier than the date it would be payable under (i) above, without penalty, and with interest only accruing until the date so paid by CK.

(d) In the event CK assigns this Agreement to [*] US Dollars ($[*]), or in the event that CK merges or consolidates or concludes a similar transaction with such a pharmaceutical or biotechnology entity, in which such entity becomes an Affiliate of CK, CK's ability to defer any payments due under Section 3.4.2(b) or (c) shall terminate, and CK shall reimburse GSK for all past payments due, including applicable interest thereon, within ninety (90) days after the closing of such acquisition, merger or consolidation.

(e) Upon [*]([*]) months written notice to GSK, CK may terminate its Co-Funding Option for a particular Co-Funded Product. In such event, CK's funding obligation under Section 3.4.2(b) above shall apply only with respect to Later Stage Development Costs of activities conducted with respect to such Co-Funded Product prior to the date of such termination. Should CK terminate its Co-Funding Option under this Section, any royalties payable to CK on the Licensed Product shall be paid in accordance with Section 6.6.2(c). If CK terminates its Co-Funding Option under this Section, it shall relinquish any right to its Co-Promotion Option under Section 7.4 with respect to such Co-Funded Product.

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3.4.3 Certain Terms. As used in this Section 3.4, the following terms shall have the meaning set forth below:

(a) "Later Stage Development" shall mean [*] and [*] and other development activities described below, specifically directed to the development of a Co-Funded Product, which are directed specifically towards achieving [*] or maintaining [*] of a Co-Funded Product or achieving an [*] or [*] for a Co-Funded Product, whether such studies are conducted by [*] or by an [*]; provided, however, that [*] focusing on [*] not included in the [*] for the Co-Funded Product and not used for submission of an [*] or [*] for the Co-Funded Product shall also be included in Later Stage Development if the results of such study are published in a peer-reviewed journal. Later Stage Development shall also include (i) the [*] of [*] and [*] for such [*] and [*]; provided, however, that if the amounts of [*] for [*] are used for [*] of the [*], [*] shall be [*] for the cost of any amounts [*]; (ii) [*] and [*] development activities commenced after the initiation of the [*] for the [*] specifically directed to the Co-Funded Product, including [*] or clinical [*] or [*] studies, [*] and other clinical testing, for such purpose; provided, however, that the costs of activities described in this item (ii) to be included within Later Stage Development Costs (other than [*] tests required to [*] a [*] clinical trial), shall be limited to [*]% of the total Later Stage Development Costs for such Co-Funded Product in a given [*] period; and (iii) that portion of [*] development directed specifically towards achieving [*] of a Co-Funded Product or achieving an [*] or [*] for a Co-Funded Product; and (iv) the preparation and filing of [*] and all associated [*] activities to achieve [*], maintain [*] or achieve an [*] or [*] for a Co-Funded Product, including the [*]. "Later Stage Development" shall exclude (i) [*] development not included in (iii) above; and (ii) any activities of the [*] and [*] of GSK and associated [*]. As used herein, "[*]" shall mean the [*]- approved [*] required to [*] the Licensed Product that contains [*].

(b) "[*]" clinical trials shall mean any [*] clinical trials of a Co-Funded Product conducted after [*] of such Co-Funded Product, by GSK or a Third Party, to the extent GSK collects or receives the data generated in such trials, performs statistical analysis with respect to such data, with the intention of using the data to determine [*] or [*] for the Co-Funded Product or supporting the [*] and [*] of such Co-Funded Product. [*] clinical trials shall specifically exclude [*] programs sponsored by GSK, [*] programs and grants (other than those grants extended by GSK to investigators to support [*] clinical trials).

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(c) "Later Stage Development Costs" with respect to a particular Co-Funded Product shall mean, to the extent incurred in

accordance with the Co-Development Plan and Budget then in effect and to the extent not reimbursed by a Third Party: (i) amounts paid to Third Parties for their performance of Later Stage Development of the particular Co-Funded Product; [*] (ii) [*] conducting such Later Stage Development, plus [*] for such [*], [*] directly attributable to such Later Stage Development; and (iii) [*] to the conduct of Later Stage Development, including [*] of [*] for [*] in Later Stage Development; plus in each of cases (i), (ii) and (iii), a reasonable allocation of [*] costs attributable to the particular Co-Funded Product (subject to paragraph (d) below). [*] costs attributable to a Co-Funded Product may include a reasonable allocation of [*] labor, a reasonable allocation of [*] costs, and a reasonable allocation of [*] cost including [*] cost, [*], and [*] over the [*] of [*] and [*], and such allocations shall be in accordance with reasonable cost accounting methods, consistently applied by GSK for its own internal accounting. [*] shall not include corporate [*] or [*] costs not otherwise allocable to the [*] of the Co-Funded Product or costs associated with [*] not incorporated into [*] costs, and [*] costs shall exclude costs associated with [*] and [*]. It is understood that Later Stage Development Costs shall not include any cost of activities undertaken prior to CK's exercise of its Co-Funding Option, and shall not include any costs incurred with respect to activities directed to [*] of a Co-Funded Product, or to [*], or to activities not specifically directed to achieving [*], maintaining [*] or achieving an [*] or [*] for a Co-Funded Product in an attempt to enhance Net Sales of the Co-Funded Product and the resulting royalties to CK.

(d) In no event, however, shall the total [*] included within Later Stage Development Costs exceed [*] percent ([*]%) of the costs described in (i), (ii) and (iii) of Section 3.4.3(c) above.

(e) For purposes of this Section 3.4, a particular "Co-Funded Product" shall include all dosages of any formulation of the same active ingredient for all indications within the Field. Licensed Products having a different or additional active ingredient shall be deemed a separate Licensed Product (or a separate Co-Funded Product, as the case may be).

3.4.4 Certain Disputes. The Parties shall attempt to timely resolve any dispute with respect to whether a cost or expense should be included within Later Stage Development Costs for a particular Co-Funded Product or is otherwise obligated to be reimbursed under this Section 3.4. If the Parties are unable to resolve such dispute, the matter shall be referred to the Chairman, GSK R&D, and President, CK, for resolution. If such individuals are unable to resolve such dispute within thirty (30) days after the matter is referred to them, the matter shall be subject to arbitration under Section 12.3.1 below. Failure by CK to pay any disputed amount under this Section 3.4 shall not be deemed a breach of this Agreement unless and until it has been determined in an arbitration

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proceeding under Section 12.3.1 below that CK is obligated to pay such disputed amount, provided that (i) CK makes such payment within thirty (30) days after such determination or (ii) within such thirty (30) day period CK elects to terminate its Co-Funding Option for the particular Co-Funded Product in accordance with Section 3.4.2(e) above, in which case (notwithstanding Section 3.4.2(e)), CK shall have no obligation to reimburse any Later Stage Development Costs not previously paid by CK.

3.5 Joint Development Committee. Promptly following CK's exercise of its Co-Funding Option for a Co-Funded Product, or an exercise by GSK of the CK Product Option with respect to a CK Product under Section 4.5 below, the Parties shall establish a Joint Development Committee ("JDC") with respect to such Licensed Product. It is understood that the Project Team for such Licensed Product shall continue after establishment of a JDC and shall report thereto. The JDC shall have responsibility to oversee the Later Stage Development of the

Co-Funded Product, and all further development of the Licensed Product for which GSK exercises its CK Product Option under Section 4.5, and to make such decisions as are expressly provided in this Article III. The JDC shall be comprised of an equal number of representatives from each of GSK and CK; and unless otherwise agreed, the JDC shall at all times include CK's head of development and GSK's head of clinical operations for the CEDD or Therapeutic Area Strategic Team ("TAST"), as appropriate, and GSK's CEDD head of biology, unless otherwise agreed, and shall have at least one representative from each Party at the level of Vice President or above. Either Party may replace its respective JDC representatives at any time, with prior written notice to the other Party. From time to time, the JDC may establish subcommittees to oversee particular projects or activities, and such subcommittees will be constituted as the JDC approves. The JDC shall meet at least quarterly according to an agreed schedule, and the Parties shall keep the JDC fully informed as to all aspects of the Later Stage Development and other ongoing activities pertaining to the Co-Funded Product and all further development of the Licensed Product for which GSK exercises its CK Product Option under Section 4.5. Decisions of the JDC shall be by majority vote; provided that if there is not an equal number of representatives of each Party present at such meeting, then only an equal number of representatives of each Party shall be entitled to vote. In the event the required vote to approve a particular action cannot be obtained, then either Party may request that the issue be referred for resolution through good faith negotiations between the Chief Executive Officer of CK and the Chairman, Research and Development for GSK, who shall promptly meet to resolve the issue. In the event they are unable to reach agreement on the matter, the [*] shall have the right to [*] on the matter, which [*] shall become the decision of the JDC. Notwithstanding the foregoing, [*] shall not have the right to [*] with respect to matters relating to Licensed Products for which [*].

3.6 Regulatory Matters. Subject to Section 4.4.2, [*] shall file and be the owner for all regulatory filings for Compounds and/or Licensed Products developed pursuant to this Agreement, including all MAAs and Marketing Approvals. Notwithstanding the foregoing, the parties shall agree on which Party shall file and own regulatory filings for Licensed Products for which [*].

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ARTICLE IV - EXCLUSIVITY

4.1 Exclusivity of Efforts.

4.1.1 Compounds. Except as set forth herein or Exhibit 10.1, during the Exclusivity Period, neither Party shall conduct, participate in, or fund, directly or indirectly, alone or with a Third Party, research or development with respect to, or commercialize a product comprising, a Development Compound, Compound or Licensed Product within the Field, except pursuant to this Agreement. In addition, neither Party shall, during the Exclusivity Period, without the consent of the JRC or the other Party, hold any discussion with any Third Party relating to any of the foregoing activities, regardless of whether such activities would take place during or after the Exclusivity Period, except as permitted under this Agreement.

4.1.2 Activities Directed to Mitotic Kinesin Targets. Except as set forth herein or Exhibit 10.1, during the Exclusivity Period, neither Party shall conduct, participate in, or fund, directly or indirectly, either alone or with a Third Party, any research, development, or commercialization activities in the Field with respect to the Mitotic Kinesin Targets, including Collaboration Targets, except pursuant to the Agreement. In addition, during the Exclusivity Period, neither Party shall disclose to a Third Party any CK Existing Technology, GSK Existing Technology, Collaboration Technology or Post-Collaboration Technology relating to Mitotic Kinesin Targets to the extent prohibited under Section 9.5. Subject to the foregoing and the

confidentiality obligations set forth in Article IX, (i) CK shall have the right to use Mitotic Kinesin Targets, and information relating thereto other than Compounds, for general technology development purposes, including but not limited to the development of assay, informatics, and expression technologies, and (ii) either Party shall have the right to use Mitotic Kinesin Targets, including CK Targets and Collaboration Targets, and information relating thereto, for the generation of negative control information outside the Research Program.

4.1.3 Retention of Rights.

(a) For avoidance of doubt, it is understood that this Section 4.1 shall not limit CK's activities relating to CK Targets, CK Compounds, and CK Products.

(b) Notwithstanding Section 4.1.1, each Party retains the right to conduct, participate in, or fund, directly or indirectly, alone or with a Third Party, research or development with respect to, or to commercialize a product comprising (i) with respect to GSK, a GSK Library Compound, and (ii) with respect to CK, a CK Library Compound, in each case where the primary mode of pharmacological action of such compound is not through inhibition of one or more Mitotic Kinesin Targets, and without use of Licensed Technology owned (or Controlled) solely by the other Party; provided, however, that (1) if CK has progressed a GSK Library Compound to the equivalent stage to a Development Compound hereunder prior to GSK progressing such GSK Library Compound to a Development Compound-equivalent stage under this Section 4.1.3(b), the retained right of GSK under this Section 4.1.3 with respect to such GSK Library Compound will no longer apply; and (2) if GSK has progressed a CK Library Compound to the equivalent stage to a

Development Compound prior to CK progressing such CK Library Compound to a Development Compound-equivalent stage under this Section 4.1.3(b), the retained right of CK under this Section 4.1.3 with respect to such CK Library Compound will no longer apply. Each Party shall notify the other of their efforts with respect to a GSK Library Compound or CK Library Compound upon the designation of the compound as a Compound or as a Development Compound equivalent as described in (i) and (ii) above. This Section 4.1.3 shall not be deemed to limit in any way any license expressly granted under this Agreement.

(c) GSK acknowledges that CK has ongoing research programs related to non-human mitotic kinesins and the development of pharmaceutical products for the treatment of human diseases, the mechanism of action of which is to modulate such non-human proteins. GSK further acknowledges that such ongoing research programs as well as similar future CK research programs related to non-human mitotic kinesins are outside the scope of this Agreement and such activities of CK are not prohibited by this Article IV. Notwithstanding the foregoing, except for the licenses granted under Section 5.4.2, nothing in this Agreement shall be construed as a grant to CK of any licenses from GSK under Licensed Technology for research, development or commercialization of any products directed to non-human mitotic kinesins; and provided further, that nothing in this Section shall be construed as a limitation on CK's confidentiality obligations pursuant to Article IX of this Agreement.

4.2 Exclusivity Extension.

4.2.1 [*] Programs. Subject to the provisions of this Section 4.2, for those Collaboration Targets for which a [*] Program has been designated during the Exclusivity Period or if such Collaboration Target was an Extended Target (as defined in 4.2.2(a) below), prior to the end of the Extension Period for such Target, CK's obligations under Section 4.2.3 below with respect to each such Collaboration Target shall automatically extend with respect to such Collaboration Target for so long as GSK is diligently pursuing such [*] Program, Development Compound or Licensed Product directed to such

Collaboration Target; provided, however, if after the Exclusivity Period or any Extension Period, as applicable (i) GSK ceases at any time diligent research, development or marketing of all Compounds and Licensed Products for such Collaboration Target, or (ii) GSK fails to identify a Compound meeting the guidelines set forth in Exhibit 2.5 and designate such Compound as a Development Compound for such Collaboration Target before the [*] anniversary of the expiration of the Exclusivity Period, or in the case of a Collaboration Target that was an Extended Target, before the [*] anniversary of the end of the Extension Period for such Target, then CK's obligations under Section 4.2.3 shall terminate with respect to such Target. GSK shall keep CK informed of its progress and activities pertaining to all Collaboration Targets, Extended Targets and Extendable Unselected Targets, and any Compounds, Development Compounds or Licensed Products directed thereto.

4.2.2 Option to Extend Exclusivity; Exercise.

(a) Subject to paragraph (d) below, GSK has the option to extend CK's obligations under Section 4.2.3 below with respect to a particular Collaboration Target or

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Extendable Unselected Target (as described in paragraph (e) below), on a Target-by-Target basis for up to an additional [*] ([*]) years, all to the extent set forth in Section 4.2.3 below. The option fee shall be [*] U.S. Dollars (U.S. $[*]) per annum per Collaboration Target or Extendable Unselected Target, as applicable. To exercise such right:

(i) with respect to a Collaboration Target that was selected as a Collaboration Target prior to the end of the initial five-year Research Term or any extension thereto under Section 2.8.1, GSK shall so notify CK in writing at least ninety (90) days prior to the end of the Exclusivity Period; and

(ii) with respect to an Extendable Unselected Target, GSK shall so notify CK in writing at least ninety (90) days prior to the end of the initial five-year Research Term or any extension thereto under Section 2.8.2. In the event that an Extendable Unselected Target becomes a Collaboration Target during an Extension Period for such Target, it is understood that clause (i) above shall not apply (i.e., because such Extendable Unselected Target was not a Collaboration Target at the end of the Research Term).

(iii) Each such notice shall specify the Collaboration Target(s) or Extendable Unselected Target(s) for which GSK elects to exercise its right under this Section 4.2.2, and include payment in the amount of [*] U.S. Dollars (U.S. $[*]) for each Collaboration Target(s) or Extendable Unselected Target(s) for which GSK exercises its rights under this Section 4.2. Upon such exercise, such Collaboration Target(s) or Extendable Unselected Target(s) shall be deemed an "Extended Target" for a period of [*] from such anniversary date.

(b) After the first [*] -year extension for a particular Extended Target under (a) above, subject to paragraph (d) below, GSK may maintain such Extended Target as an Extended Target for one additional [*] ([*]) year period beginning at the end of the first Extension Period, by so notifying CK in writing, and paying to CK the amount of [*] U.S. Dollars (U.S. $[*]) for each Extended Target for which GSK seeks such a continued extension, at least ninety (90) days prior to the end of the first Extension Period.

(c) In the event that the Extension Period lapses at any time with respect to a particular Collaboration Target or

Extendable Unselected Target, then GSK shall have no further rights, and CK shall have no further obligations, under this Section 4.2 with respect to such Collaboration Target or Extendable Unselected Target, and such Collaboration Target or Unselected Target shall not be deemed an Extended Target for any period thereafter and shall be deemed a CK Target. If GSK establishes, prior to the end of the Extension Period for an Extended Target, a [*] Program, then Section 4.2.1 shall apply; provided that, in the case of an Extended Target that is an Extendable Unselected Target, such Extended Target has first been designated as a Collaboration Target in accordance with Section 2.7.3 above.

(d) Notwithstanding the foregoing provisions of this Section 4.2.2, if GSK extends the Research Term for [*] ([*]) years under Section 2.8.1 above, GSK may only extend its rights under Section 4.2.3 below with respect to Collaboration Targets and Extendable Unselected

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Targets for a single [*] Extension Period under this Section 4.2.2 (i.e., so that in such event GSK shall not have the right to an additional extension under paragraph (b) above); and if GSK extends the Research Term for [*] ([*]) years under Section 2.8.1 above, GSK shall not have any right to extend its rights with respect to any Collaboration Target or Extendable Unselected Target.

(e) The Unselected Targets for which GSK may extend its rights under Section 4.2.3 below ("Extendable Unselected Targets"), in accordance with this Section 4.2.2 shall be determined as follows: Prior to the time specified in paragraph (a)(ii) above for GSK to so extend such rights, GSK and CK shall allocate the Unselected Targets then remaining (the "Unselected Target Pool") into Extendable Unselected Targets and CK Targets, in the same manner as the Parties selected Collaboration Targets and CK Targets from Lead Targets under Section 2.7.3 above, progressing sequentially through the table in Section 2.7.1, as if such Extendable Unselected Targets were Collaboration Targets and as if such Unselected Targets were Lead Targets. It is understood that such selection shall begin at the point in the table where the last selection of a Collaboration Target or CK Target, as the case may be, was made under Section 2.7. For example, if there had been [*] ([*]) Lead Targets during the Research Term (including any extension thereto), and there remain [*] ([*]) Unselected Targets in the Unselected Target Pool, then [*] shall have the right to make the first selection of [*] from such Unselected Target Pool, then [*] would have the right to select [*]([*])[*] as a [*] , [*] would then have the right to select [*]([*]) additional [*] from the Unselected Target Pool, and [*] would have the right to select the [*] and [*] Unselected Target as [*] . Upon such selection by GSK the Unselected Target so selected by GSK shall become an "Extendable Unselected Target," and upon such selection by CK the Unselected Target shall become a CK Target.

(f) GSK shall not be required to continue, but upon mutual agreement of the Parties may elect, to [*] during the Extension Period.

4.2.3 CK Obligations for Extended Targets. For so long as GSK's exclusivity with respect to a particular Collaboration Target or Extended Target is extended under Section 4.2.1 or Section 4.2.2 above, CK shall not conduct, participate in, or fund, directly or indirectly, alone or with a Third Party, any research, development, or commercialization activities in the Field with respect to such Collaboration Target or Extended Target, as applicable.

4.3 Certain Other Matters Pertaining to Exclusivity.

4.3.1 Target Reversion. After the end of the Exclusivity Period or Extension Period, as applicable, any Collaboration Target or Extended

Target with respect to which CK's activities are no longer restricted under Section 4.2.3 shall cease to be a Collaboration Target, and shall cease to be an Extended Target, for all purposes of this Agreement, and any such Target shall be deemed a CK Target at the conclusion of such Period or such later time as specified in Section 4.2.1, as applicable, except pursuant to the Agreement.

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4.3.2 GSK Activities. Subject to Section 4.4.2 below, after a Mitotic Kinesin Target becomes a CK Target, GSK shall not conduct, participate in, or fund, directly or indirectly, alone or with a Third Party, any research, development, or commercialization activities in the Field with respect to such CK Target.

4.4 Commercialization of CK Targets and Compounds.

4.4.1 Generally. It is understood that, as provided in this Agreement, [*] will have control over the selection, development and commercialization of Development Compounds and Licensed Products. Accordingly, GSK and CK have agreed that CK has the right to continue, on its own (outside the Research Program) research, development and other activities relating to CK Targets, including the identification of CK Compounds and development of CK Products for commercialization, in accordance with a workplan established by CK. During the Research Term, CK shall provide quarterly updates to the JRC of the progress of its activities on CK Targets. Notwithstanding the foregoing, for so long as GSK's CK Product Option under Section 4.5 below remains in effect with respect to a CK Compound or CK Product, CK shall retain exclusive rights to such CK Compound or CK Product sufficient to grant to GSK the rights that GSK is entitled to receive under Section 4.5 upon GSK's exercise of such CK Product Option with respect to such CK Compound or CK Product.

4.4.2 Transition.

(a) At such time as a Mitotic Kinesin Target becomes a CK Target, a compound becomes a CK Compound or a Licensed Product becomes a CK Product, then from and after such time, GSK shall cooperate fully with CK to provide CK with all Licensed Technology and Information to which CK has a right or license under this Agreement and which is necessary or useful for CK to further research, develop, produce or otherwise exploit such CK Target, CK Compound or CK Product. Such cooperation shall include (i) the [*] disclosure of all such Information, to the extent such information is not within the possession or control of CK (including, without limitation: [*] with respect to the CK Compound or CK Product and [*] with respect to CK Products, CK Compounds or CK Targets, and (ii) [*] and [*] or [*] in connection with the CK Product, CK Compound or CK Target, transfer of [*] all to the extent that such material is not in the possession of CK, and such other [*] as are reasonably necessary or useful for CK to exercise its full rights with respect to such CK Target, CK Compound, or CK Product granted to CK under this Agreement. From and after such time, all such Information specifically pertaining to the CK

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Compounds, CK Products and CK Targets shall be deemed Confidential Information of CK for purposes (i.e., to the same extent as such information had been first

disclosed to GSK by CK under this Agreement), subject to the exceptions described in Section 9.1(ii), (iii) or (iv) (but not subject to the exception in Section 9.1(i)) below. Notwithstanding the foregoing, GSK shall not be considered to be in breach of this Section 4.4.2 for failure to disclose information, if, despite [*] efforts, the identification of such information is impractical or such information is not material. Without limiting the foregoing, GSK shall use [*] efforts with respect to those activities for which it is responsible to ensure orderly transition and uninterrupted research and development of CK Targets, CK Compounds or CK Products. CK shall promptly reimburse [*] with respect to activities and [*] under this Section 4.4.2.

(b) In addition, GSK shall cooperate fully to transition to CK upon CK's request any arrangement with any [*] from which GSK had arranged to [*] of Compounds, Development Compounds or Licensed Products that became a CK Compound or CK Product hereunder. In the event that such [*] , and the CK Compound has reached a stage equivalent to Development Compound at the time of its transition, then GSK shall continue to provide CK [*] until the conclusion of any [*] , and shall also [*] a final, reasonable [*] as ordered by CK within [*] ([*]) days after the date of transition. GSK shall be obligated to [*] ordered by CK, but only to the extent that GSK, prior to the date of transition, was [*] at a [*] which would permit [*] run, consistent with GSK's past practices with respect to such Compound, Development Compound or Licensed Product that became a CK Compound or CK Product hereunder.

(c) In the event that a Mitotic Kinesin Target later becomes a CK Target, a Compound later becomes a CK Compound, or a Development Compound or a Licensed Product later becomes a CK Product, for clarity it is understood that:

(i) Any subject matter that would have been within the GSK Existing Technology, Collaboration Technology or Post-Collaboration Technology at the time the Mitotic Kinesin Target becomes a CK Target, the Compound becomes a CK Compound, or the Development Compound or a Licensed Product becomes a CK Product, but for such event, shall nonetheless continue to be within the Collaboration Technology, Post-Collaboration Technology or GSK Existing Technology, respectively, for all purposes of this Agreement. For example, if GSK makes an invention with respect to a Collaboration Target after the Exclusivity Period, and then such Collaboration Target becomes a CK Target, such invention shall continue to be within the Post-Collaboration Technology, with respect to such CK Target, and with respect to CK Compounds and CK Products directed to such CK Targets. It is understood that this Section 4.4.2(c)(i) shall be subject in all respects to paragraph (b) of Section 1.32 above.

(ii) The licenses to GSK under Section 5.2 below shall terminate (A) with respect to any Compound, Development Compound or Licensed Product that became a CK

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Compound or CK Product, and (B) with respect to any Collaboration Target that became a CK Target.

4.5 GSK Option. For the period commencing on the Effective Date and ending on the [*] anniversary thereof, for those CK Targets selected by CK under Section 2.7.1 or 2.7.2, and for those CK Targets that become CK Targets as a result of GSK's failure to designate a Development Compound for such Targets within the time period specified in clause (ii) of Section 4.2.1, GSK shall have an option to acquire a worldwide license to CK Compounds and CK Products, all as described in this Section 4.5 below (the "CK Product Option").

Such Option shall be exercisable on a CK Product-by-CK Product basis as follows.

4.5.1 Exercise. At such time as CK has completed [*] ([*]) clinical trials of a particular CK Product, CK shall notify GSK of such event (the "CK [*] Notice"), and shall provide to GSK a complete copy of the IND filed with the FDA for such CK Product, the completed clinical trial report in the form and including the information requested on Exhibit 4.5.1 hereto for the clinical trials of such CK Product as of the date of the CK [*] Notice, and a statement in detail of the research and development costs subject to reimbursement under Section 4.5.2 below of the date of such [*] Notice. Within [*] ([*]) days after receipt of the CK [*] Notice, GSK shall have the right to exercise the CK Product Option with respect to such CK Product, by so notifying CK in writing. For purposes of this Section 4.5.1, "completion" of a [*] trial shall be deemed to have occurred upon the later to occur of (i) thirty (30) days after the last patient to be treated in such trial has been dosed, and (ii) receipt by CK of the completed clinical trial report for such clinical trial in the form and including the information requested on Exhibit 4.5.1 hereto. Following delivery of the CK [*] Notice to GSK, CK shall cooperate fully with GSK, and shall promptly provide GSK with such material information (including without limitation underlying clinical data), to the extent such information has not been communicated previously to GSK, as GSK may reasonably request to enable GSK to make an informed decision whether to exercise its CK Product Option under this Section 4.5. In any case, such cooperation shall include providing to GSK within [*] ([*]) days after the CK [*] Notice, a comprehensive, detailed plan and budget for development activities to be undertaken by CK with respect to such CK Product during the one (1) year period following the date of the [*] Notice, together with such formal plans as CK then has produced, if any, for the conduct of [*] trials of such CK Product. Within [*] ([*]) days after GSK exercises its CK Product Option with respect to a CK Product, CK shall provide GSK with a statement of the Early Stage R&D Costs that would be required to be reimbursed by GSK under Section 4.5.2(a) below. In the event GSK exercises its CK Product Option with respect to a particular CK Product, the provisions of Sections 4.5.2 through 4.7 below shall apply with respect to such CK Product.

4.5.2 Terms of License Upon Exercise of CK Product Option. In the event that GSK so exercises the CK Product Option with respect to a particular CK Product, such CK Product shall, upon such exercise, cease to be a CK Product and shall thereafter be deemed a Licensed Product. In such event:

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(a) Within [*] ([*]) days after GSK's exercise of the CK Product Option, GSK shall pay to CK an amount equal to [*] percent ([*] %) of the research and development costs incurred by CK with respect to such CK Product outside of the Research Program up to the date of GSK's exercise of the CK Product Option, as defined in Section 4.5.2(a)(i) and (ii) below (such activities, the "Early Stage R&D" and such costs, the "Early Stage R&D Costs").

(i) The Early Stage R&D Costs incurred by CK for which CK shall receive reimbursement from GSK under this Section 4.5.2(a) shall only include those specifically directed to research and development of the CK Product, to the extent not reimbursed by a Third Party, including the following costs: (1) costs for the conduct of activities related to [*] of the CK Product or the CK Compound incorporated in the CK Product; (2) cost for the conduct of [*] and other [*] for a CK Product; (3) costs specifically related to those activities intended to [*] and/or [*] or [*] or a CK Compound incorporated in the CK Product, or to [*] ; (4) studies related to [*], and other [*] of, or [*] or [*] of, a CK Product; (5) amounts paid to Third Parties for their performance of Early Stage R&D of the particular CK Product; (6) [*] conducting such Early Stage R&D (to the extent [*] under this Agreement), plus [*] for such [*], [*] directly attributable to such Early Stage R&D; and (7) [*] that are attributable to the conduct of Early Stage R&D,

including [*] specifically related to the CK Product; plus (subject to paragraph (ii) below), for such items other than those in (5) above, a reasonable allocation of [*] costs attributable to the particular CK Product. [*] costs attributable to a CK Product may include a reasonable allocation of [*] labor, a reasonable allocation of [*] costs, and a reasonable allocation of [*] costs including [*] cost, [*] , and [*] over the [*] of [*] and [*] , and such allocations shall be in accordance with reasonable cost accounting methods, consistently applied by CK for its own internal accounting. [*] shall not include: (a) corporate [*] or [*] costs not otherwise allocable to the [*] of the CK Product; or (b) costs associated with [*] not attributable to the Early Stage R&D. The Parties shall attempt to timely resolve any dispute with respect to whether an item of cost or expense should be included within Early Stage R&D Costs for a particular CK Product under this Section 4.5. If the Parties are unable to resolve such dispute, the matter shall be referred to the [*] , and [*] , for resolution. If such individuals are unable to resolve such dispute within thirty (30) days after the matter is referred to them, the matter shall be subject to arbitration under Section 12.3.1 below. In such event, GSK may withhold [*] percent ([*] %) of the disputed amount (i.e., [*] % times [*] % of the disputed Early Stage R&D Costs), and failure by GSK to pay such portion of the disputed amount under this Section 4.5 shall not be deemed a breach of this Agreement unless and until it has been determined in an arbitration proceeding under Section 12.3.1 below that GSK is obligated to pay such disputed amount, and GSK fails to make such payment within thirty (30) days after such determination.

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(ii) In no event, however, shall the total [*] costs included within Early Stage R&D Costs exceed (a) [*] percent ([*] %) with respect to research and preclinical development costs, or (b) [*] percent ([*] %) with respect to clinical development costs, in each case that are described in (1) through (7) of Section 4.5.2 (a)(i) above.

(iii) Notwithstanding the foregoing, Early Stage R&D Costs shall not include costs for which GSK previously has reimbursed CK under Section 6.2 or pursuant to this Section 4.5.2(a) (i.e., to the extent such costs were included within the Early Stage R&D Costs for a Licensed Product for which GSK previously exercised the CK Product Option).

(b) The base royalties payable to CK with respect to such Licensed Product shall equal [*] percent ([*] %) of the royalty rates specified in Section 6.6.2(a)(i) below (subject to paragraph (d) below). It is understood, however, that for purposes of determining the applicable royalty rate, the total annual Net Sales ranges shall be exactly the same as specified in Section 6.6.2(a)(i) below; so that for example, if the Net Sales of the Licensed Product for the particular calendar year equal $ [*], then the royalty payable for such Licensed Product shall equal [*] percent ([*] %).

(c) For purposes of determining the milestone payments under Section 6.4 below, such Licensed Product shall be deemed a Licensed Product [*] for [*] (i.e., so that the milestone payments will equal the amounts specified in Section 6.4.1). The milestone payments due with respect to such Licensed Products under such Section 6.3.1 for Milestone 5 ([*]) and Section 6.4.1 for Milestone 1 and Milestone 2 ([*] , respectively) shall be due within forty-five (45) days after GSK exercises the CK Product Option with respect to such Licensed Product; provided, however, that a payment for a particular Milestone shall not be so due if GSK has previously made a payment under Section 6.3.1 below for such Milestone with respect to a Development Compound directed to the same Mitotic Kinesin Target or under Section 6.4.1 for such Milestone with respect to the same Licensed Product (i.e., before such Mitotic Kinesin Target or Licensed Product became a CK Target or CK Product, respectively); and provided, further, that for purposes of this Section

4.5.2(c), the amount due with respect to Milestone 5 under Section 6.3.1 shall be [*] US Dollars ($ [*]) rather than [*] US Dollars ($ [*]). Notwithstanding the foregoing, GSK shall have no obligation to make either such milestone payment to CK if GSK previously made a milestone payment to CK with respect to such Product for such milestone under Section 6.3 or 6.4 below before the Licensed Product became a CK Product.

(d) CK's Co-Funding Option under Section 3.4 above shall apply to such Licensed Product and CK shall exercise it, and the royalties payable with respect to such Licensed Product shall equal the royalties described in Section 4.5.2(b) above, plus X percentage points, where "X" equals the difference in [*] between the [*] and the [*] , [*] , or [*] , as the case maybe, in each case if such royalties had not been adjusted under Section 4.5.2(b) above.

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(e) From and after the time that GSK exercises the CK Product Option with respect to a CK Product (which will then become a Licensed Product), CK and GSK shall cooperate with respect to the further development activities of such Licensed Product, pursuant to a Development Plan approved by the JDC. Immediately following GSK's exercise of the CK Product Option, CK shall exercise the Co-Funding Option with respect to the Licensed Product, and within [*] ([*]) days shall notify GSK of the CK Percentage, as set forth in Section 3.4. Promptly following GSK's exercise of the CK Product Option and CK's notification of the CK Percentage, the JDC shall establish such a Development Plan for the Licensed Product. The Development Plan for the Licensed Product shall reflect CK's exercise of its Co-Funding Option. In reviewing and approving the Development Plan, the JDC shall take into consideration which Party is more appropriate to conduct activities reflected in the Development Plan, taking into consideration, among other factors, the scope and scale to which CK had been conducting certain activities prior to GSK's exercise of the CK Product Option. GSK and CK shall each assume those development activities agreed by the JDC.

(f) CK shall continue performing further activities related to the development of such Licensed Product in accordance with CK's own development plans for a period of one (1) year after GSK's exercise of the CK Product Option, or until such earlier time as the JDC establishes such a Development Plan, and thereafter the further development of the Licensed Product shall be conducted in accordance with such Development Plan, as modified by the JDC from time to time; provided, that during such interim period CK shall not initiate a [*] trial, or make any major commitments with respect to a [*] trial of such Licensed Product, including [*] , except as approved by the JDC. Any activities that are to be transferred by CK to GSK under the Development Plan shall be transferred as quickly as possible, and CK shall take [*] to ensure such speedy transfer. All costs incurred by CK in performing such activities (i.e., those after GSK's exercise of the CK Product Option but prior to the JDC's establishment of a Development Plan), and those conducted pursuant to the Development Plan so established, shall be reimbursed by GSK to the extent they exceed the CK Percentage elected by CK under the Co-Funding Option with respect to the Licensed Product. All such reimbursements shall be made in the same manner as is provided in Section 6.2 below for funding under the Research Plan (including the provisions for interim periods, as contemplated in Section 6.2.4). CK and GSK shall establish specific reasonable invoicing and payment procedures for reimbursements under this Section 4.5.2(f), including the form of invoice, overall documentation requirements and accounting methodologies.

(g) Transition. Subject to paragraph (e) above, and incident to the extent reasonably necessary for GSK to perform activities assigned to it under the Development Plan approved by the JDC:

(i) From and after the time that GSK exercises the CK Product Option with respect to a CK Product (which will then become a Licensed Product), CK shall cooperate fully with GSK to provide GSK with all Licensed Technology and Information to which

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GSK has a right or license under this Agreement and which is necessary or useful for GSK to perform such activities. Such cooperation shall include the [*] disclosure of all Information, to the extent such information is not within the possession or control of GSK, (including, without limitation, [*] , all to the extent that such material is not in the possession of GSK, and such other [*] and [*] as are reasonably necessary or useful for GSK to exercise its full rights and perform such activities with respect to such CK Product. Notwithstanding the foregoing, CK shall not be considered to be in breach of this Section 4.5.2(g) for failure to disclose information, if, despite [*] efforts, the identification of such information is impractical or such information is not material. Without limiting the foregoing, CK shall use [*] efforts to ensure orderly transition and uninterrupted research and development of CK Products under this Section. GSK shall promptly reimburse CK's [*] costs with respect to activities and materials provided by CK under this Section 4.5.2(g).

(ii) In addition, the JDC shall meet and discuss how best to proceed with the [*] of such CK Product in the best interest of such CK Product and its commercial profile, taking into consideration the relative capabilities of each Party, including CK's [*] or arrangements prior to GSK's exercise of its CK Product Option. In the event that the JDC determines that [*] such CK Product, CK shall cooperate fully to [*] related to the CK Product as reflected in the Development Plan approved by the IDC.

(h) For purposes of this Section 4.5.2, all dosage forms, and all formulations, of the same active ingredient shall be deemed a single Licensed Product. Licensed Products having a different or additional active ingredient shall be deemed a separate Licensed Product if such different or additional active ingredient is a different or additional CK Compound or CK Product or another active ingredient in which CK has proprietary rights (other than a Licensed Product otherwise licensed to GSK hereunder).

4.5.3 Termination. In the event that GSK does not elect to exercise its CK Product Option on a CK Product, in accordance with Section 4.5.1 above, then the CK Product Option, and all of CK's obligations under this Section 4.5 with respect to such CK Product, as well as with respect to all CK Compounds and CK Products for the same CK Target shall terminate. CK shall thereafter be free to develop such CK Products, CK Compounds and CK Targets, alone or in connection with Third Parties.

4.5.4 [*] Products. It is understood that this Section 4.5 and the rights and obligations of GSK and CK under this Section 4.5 shall not apply to any [*] Products. For such purposes, " [*] Products" shall mean those CK Compounds and CK Products that are directed to Mitotic Kinesin Targets designated as CK Targets under any Section of this Agreement

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other than (i) [*] or (ii) by reason of [*] failure to [*] a Development

Compound for such Target within the time period specified in [*] above.

4.5.5 No Implied Obligations. The only obligations of GSK and CK under this Section 4.5 are as expressly stated herein, and there are no further implied obligations relating to the matters contemplated therein. Without limiting the foregoing, it is further understood and agreed that the subject CK Product(s) may or may not be discovered or reduced to practice at all, or that further modification and/or variations of a product may be developed after the date CK provides notice under Section 4.5.1 above. It is understood that modifications and/or variations of a Licensed Product as described in Section 4.5.2(h) that are developed after the date CK provides notice under Section 4.5.1 above shall be included within the Licensed Product for which GSK exercised its CK Product Option.

4.6 CK Efforts. For as long as GSK retains an option on CK Products as set forth in Section 4.5 above, CK shall use [*] efforts to develop at least one CK Compound or CK Product, consistent with the practice of CK in pursuing the development of pharmaceutical products of its own development and of similar commercial potential value within the relevant product line.

4.7 Royalties to GSK.

4.7.1 Royalty Obligation. In the event that CK commercializes a CK Product independently of GSK (i.e., in the case where GSK does not exercise the CK Product Option), then in such case CK shall pay to GSK a royalty on sales of such CK Product by CK, its Affiliates and Sublicensees, in an amount to be reasonably established by the Parties, based on the extent to which GSK has [*] under this Agreement, and/or has provided [*] to [*], that [*] the research, development or commercialization of such CK Product. In the event the Parties are not able to agree upon such royalty, then upon request by either Party, such amount shall be determined in accordance with Section 12.3.1 below. It is understood that, in connection with establishing the applicable royalty, the ancillary terms of such royalty, such as the term for which such royalties are due, the definition of CK's net sales, royalty reporting, audit rights, [*] (such as those in Section [*] below) and the like will also be established, which terms will be no less favorable to CK than the corresponding terms of this Agreement. Notwithstanding the foregoing, in no event shall the royalty to be paid to GSK exceed the following amounts, based on the stage of the CK Product at the time the relevant Mitotic Kinesin Target became a CK Target (the "Reversion Stage"), as reflected in the table below:

REVERSION STAGE	[*] ROYALTY
[*]	[*]%
[*]	[*]%
[*]	[*]%
[*]	[*]%
[*]	[*]%

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4.7.2 [*]; [*]. For purposes of the foregoing table, the

Reversion Stage for all [*] and [*] shall be deemed the [*] stage.

4.7.3 Other Considerations. It is understood that the royalty rates specified in 4.7.1 above are [*] . The actual royalty rate to be applied in any given situation shall be [*] and [*] under the circumstances and shall take into account [*] to Mitotic Kinesin Targets prior to or outside of this Agreement, the actual contribution of [*] to the effort in terms of [*] , the possible need for [*] (and in such case the possibility that [*]), and other similar factors.

4.8 Other Formulations; Dosage Forms. For purposes of this Article 4, all dosage forms, and all formulations, of the same active ingredient shall be deemed a single CK Product. CK Products having a different active ingredient shall be deemed a separate CK Product.

ARTICLE V - LICENSE GRANTS

5.1 Research Licenses to CK and GSK. GSK hereby grants CK a non-exclusive, worldwide license to make and use subject matter within the GSK Existing Technology and Collaboration Technology, to conduct activities assigned to CK under the Research Plan, during the Research Term. CK hereby grants GSK a non-exclusive, worldwide license to make and use subject matter within the CK Existing Technology and Collaboration Technology, to conduct activities assigned to GSK under the Research Plan, during the Exclusivity Period and Extension Period, if any. The licenses granted under this Section 5.1 shall not include the right to grant or authorize sublicenses; provided, however, that the use by GSK or CK of subcontractors approved by the JRC shall not be construed as a sublicense.

5.2 Commercial Licenses to GSK.

5.2.1 Compounds. Development Compounds and Licensed Products. Subject to the terms and conditions of this Agreement, CK hereby grants GSK an exclusive license, under CK Existing Technology and CK's interest in Collaboration Technology and Post-Collaboration Technology, (a) to make, have made, use, sell, offer for sale and import Compounds, Development Compounds and Licensed Products for use in the Field and in the Territory and (b) to make and use Collaboration Targets, and any subject matter within the Collaboration Technology or Post-Collaboration Technology, for the purpose of discovering and commercializing Compounds, Development Compounds and Licensed Products for use within the Field.

5.2.2 CK Library Compounds.

(a) Notwithstanding Sections 1.4, 1.7, 1.13, 1.16 and 1.53, a CK Library Compound shall not be deemed within CK Existing Technology, unless and until such time as such CK Library Compound has become both a Compound and a Development Compound hereunder.

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However, GSK is hereby granted a non-exclusive license to make and use CK Library Compounds and CK Existing Technology to pursue discovery (including optimization) and initial development of such CK Library Compounds and derivatives thereof, for the purpose of identifying and conducting initial development of Development Compounds for Collaboration Targets and, during the Research Term and applicable extensions, for Mitotic Kinesin Targets (other than CK Targets). The CK Library Compounds that GSK is licensed to make and use under this Section 5.2.2 shall be limited to those (i) that were identified as Compounds against a Mitotic Kinesin Target in activities under the Research Plan; and (ii) that are derived from (i.e., tracing its chemical lineage to a CK Library Compound or resulting from the direct progression through a continuing

medicinal chemistry program from a CK Library Compound, in each case as evidenced by contemporaneous written laboratory records) the CK Library Compounds described in the preceding clause (i). GSK shall have no research license under this Section 5.2.2 with respect to CK Library Compounds that are not described in (i) or (ii) above.

(b) Notwithstanding Section 5.2.2(a) above, if CK has progressed a CK Library Compound licensed to GSK under this Section 5.2.2 to a stage equivalent to a Development Compound, where the primary mode of pharmacological action of such CK Library Compound is not through inhibition of one or more Mitotic Kinesin Targets, prior to GSK progressing such CK Library Compound to be a Development Compound, GSK's licenses to such CK Library Compound shall terminate. A compound shall be deemed to have reached a "stage equivalent to a Development Compound" if such compound would meet criteria comparable those specified in Exhibit 2.5, or IND Enabling Studies have been conducted for such compound. Upon request, CK shall use good faith efforts to advise GSK whether it is actively pursuing such CK Library Compound, and CK shall notify GSK at such time as such CK Library Compound has progressed to a stage equivalent to a Development Compound as described in this Section 5.2.2(b).

(c) Notwithstanding Section 5.2.2(a) above, GSK agrees not to engage in optimization activities to discover Compounds that are derived from a CK Library Compound in a manner that intentionally optimizes such Compounds specifically to exploit the activity of such Compound against any target, other than a Mitotic Kinesin Target that is not a CK Target.

5.2.3 Sublicenses. GSK may sublicense the right to [*] and/or [*] a particular Development Compound or Licensed Product [*] or [*] . GSK shall inform CK of its intention to sublicense its rights at least sixty (60) days prior to the date GSK intends to execute such sublicense and shall provide CK with the opportunity to provide comments to GSK with respect to such sublicense. GSK shall consider CK's reasonable comments in its decision whether to grant such sublicense. Notwithstanding the foregoing, (i) GSK shall have the right to sublicense the right to [*] and/or [*] a Licensed Product [*] or [*] , provided that GSK is actively [*] and [*] such Licensed Product itself [*] , and (ii) GSK shall have the right to have Licensed Products [*] for GSK by a Third Party [*] and [*] . Subject to the foregoing, GSK shall have the sole right to decide whether and how to grant any sublicenses under this Section 5.2.3. Any sublicensee of GSK must have

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reasonable capabilities to support the [*] of the Development Compound and/or Licensed Product. Any such sublicense (and any right to obtain such a sublicense) shall be granted no earlier than the date the Compound incorporated therein has been designated as a Development Compound in accordance with Section 2.5 above.

5.2.4 [*] . At least [*] ([*]) months prior to GSK [*], GSK will notify CK in writing of its intent to [*] ("Initial Notice"). Upon request by CK, GSK and CK will, during such [*] ([*]) month period, negotiate in good faith the [*] to CK, provided that [*] by GSK for the Compound, Development Compound or Licensed Product and the objective requirements set forth therein. It is understood that any such [*] would be subject to agreement between the Parties on the financial terms and other conditions of such [*] . Notwithstanding the foregoing, this Section 5.2.4 shall not apply with respect to [*] the Development Compound or Licensed Product.

5.2.5 No Other Active Ingredients. For clarity, it is understood that, notwithstanding Section 1.44 above, the licenses to GSK under this Section 5.2 shall not extend to any active ingredient included within a

Licensed Product other than a Compound, a Development Compound, or in the case of a Licensed Product for which GSK exercised its CK Product Option pursuant to Section 4.5 above, the active ingredients incorporated by CK into the CK Product that became such Licensed Product.

5.3 Commercialization License to CK.

5.3.1 CK Compounds and CK Products. Subject to GSK's Option for a license under Section 4.5 above, GSK hereby grants CK an exclusive license, with the right to grant and authorize sublicenses, under GSK Existing Technology (subject to Section 5.3.2 below), and GSK's interest in Collaboration Technology and Post-Collaboration Technology, (a) to make, have made, use, sell, offer for sale and import CK Compounds and CK Products in the Field in the Territory and (b) to make and use CK Targets, and any subject matter within the Collaboration Technology or Post-Collaboration Technology, solely for the purpose of discovering, developing and commercializing CK Compounds and CK Products.

5.3.2 GSK Library Compounds; Additional Research License.

(a) Notwithstanding Sections 1.13, 1.16, 1.34 and 1.53, a GSK Library Compound shall not be deemed within the GSK Existing Technology, unless and until such time as IND Enabling Studies are commenced by or under authority of CK with respect to such GSK

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Library Compound. However, CK is hereby granted a non-exclusive license to make and use GSK Library Compounds and GSK Existing Technology to pursue discovery (including optimization) and initial development of such GSK Library Compounds and derivatives thereof, for the purpose of identifying and conducting initial development of CK Compounds that meet criteria similar to that of Development Compounds; provided that the GSK Library Compounds that CK is so licensed to make and use under this Section 5.3.2 shall be limited to those (i) that were identified as Compounds against such Mitotic Kinesin Target before such Mitotic Kinesin Target was designated as a CK Target, or (ii) that are derived from (i.e., tracing its chemical lineage to a GSK Library Compound or resulting from the direct progression through a continuing medicinal chemistry program from a GSK Library Compound, in each case as evidenced by contemporaneous written laboratory records) the GSK Library Compounds described in the preceding clause (i). CK shall have no research license under this Section 5.3.2 with respect to GSK Library Compounds that are not described in (i) or (ii) above.

(b) Notwithstanding (a) above, if GSK has progressed a GSK Library Compound licensed to CK under this Section 5.3.2. to a stage equivalent to a Development Compound, where the primary mode of pharmacological action of such GSK Library Compound is not through inhibition of one or more Mitotic Kinesin Targets, prior to CK progressing such GSK Library Compound to a stage equivalent to a Development Compound, CK's licenses to such GSK Library Compound shall terminate. A compound shall be deemed to have reached a "stage equivalent to a Development Compound" if such compound would meet criteria comparable those specified in Exhibit 2.5, or IND Enabling Studies have been conducted for such compound. Upon request, GSK shall use good faith efforts to advise CK whether it is actively pursuing such GSK Library Compound and GSK shall notify CK at such time as a GSK Library Compound has progressed to a stage equivalent to a Development Compound as described in this Section 5.3.2(b).

(c) Notwithstanding Section 5.3.2(a) above, CK agrees not to engage in optimization activities to discover CK Compounds that are derived from a GSK Library Compound in a manner that intentionally optimizes such CK Compounds specifically to exploit the activity of such CK Compound against any target, other than a CK Target.

5.3.3 No Other Active Ingredients. For clarity, it is understood that, notwithstanding Section 1.9 above, the licenses to CK under this Section 5.3 shall not extend to any active ingredient included within a CK Product other than a CK Compound.

5.4 Additional Licenses for Unpatented Collaboration and Post-Collaboration Technology.

5.4.1 License to GSK. CK hereby grants to GSK a non-exclusive license, including the right to grant and authorize sublicenses, under CK's interest in any Collaboration Technology and Post-Collaboration Technology, other than CK Patents, to use and otherwise exploit the same for any purpose, subject to Sections 4.1-4.3, and Section 5.3, above.

5.4.2 License to CK. GSK hereby grants to CK a non-exclusive license, including the right to grant and authorize sublicenses, under GSK's interest in any Collaboration Technology and Post-Collaboration Technology, other than GSK Patents, to use and otherwise exploit the same for any purpose, subject to Sections 4.1-4.3, and Section 5.2, above.

5.5 Cytometrix(TM)Technology. It is understood that CK has developed certain Cytometrix(TM) Technology, which may be useful in the discovery of Compounds, and that CK will apply such Cytometrix(TM) Technology to the Research Program, as described more fully in the Research Plan. Notwithstanding any other provision of this Agreement, however, the Parties agree that CK's Cytometrix(TM) Technology is [*] or [*], and CK is [*] to [*] GSK with such Cytometrix(TM) Technology; provided, however, that (i) [*], as applicable, and (ii) [*] within the Cytometrix(TM) Technology would [*] be [*] by the [*] or [*] of a Compound, Development Compound, or Licensed Product, such [*] shall be [*], [*] for such purposes. [*] (i) [*]; (ii) [*] and (iii) [*].

5.6 [*]. If a chemical entity that would otherwise be a Compound or CK Compound hereunder, meets the Compound Criteria for both a [*] and a [*], then such chemical entity shall be considered a "[*]" if the difference in [*] activity ([*]) is less than [*] between the [*] and the [*]. Furthermore, such a chemical entity shall be deemed a Compound, and not a CK Compound, if its [*] activity ([*]) is [*] greater against the [*] than against the [*]. Such a chemical entity shall be deemed a CK Compound, and not a Compound, if its [*] activity ([*]) is [*] greater against a [*] than against

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the [*]. With respect to [*], either Party shall have the right to pursue research and optimization of such [*] for the purpose of identifying Compounds or CK Compounds that meet the criteria for Development Compounds (or, in the case of CK Compounds, criteria similar thereto); provided, however, that neither Party shall commence clinical development or commercialize a [*] as a Compound, Development Compound, Licensed Product, CK Compound or CK Product without the prior written approval of the other Party. Notwithstanding the foregoing, GSK shall not engage in optimization activities to discover Compounds in a manner that intentionally optimizes such Compounds specifically to exploit the activity of such Compound against a [*]; and, CK shall not engage in optimization activities to discover CK Compounds in a manner that intentionally optimizes such CK Compounds specifically to exploit the activity of such CK Compound against a [*]. As used herein, [*] activity ([*]) shall mean the first criterion set forth in Exhibit 1.17.

5.7 No Implied Licenses. Each Party acknowledges that the licenses

granted under this Article V are limited to the scope expressly granted, and all other rights to Licensed Technology are expressly reserved to the Party owning such Licensed Technology. Without limiting the foregoing, it is understood that where an exclusive license under Licensed Technology is granted to a Party under this Article V for a particular purpose, the Party granting such license retains all of its rights to such Licensed Technology for all purposes not expressly licensed. Accordingly, for example, the license granted under Section 5.2.1(b) above shall not preclude CK from making or using a Collaboration Target for purposes outside the Field.

5.8 Nothing in this Article V shall be construed as limiting or changing the rights and obligations of the Parties under Sections 4.1.1 and 4.1.2, except to the extent provided in Section 5.5 above.

ARTICLE VI - PAYMENTS

6.1 Initial Payments.

(a) Technology Access Fee. In consideration of CK's development efforts prior to the Effective Date and the performance of its obligations during the Research Program, on the Closing Date, GSK shall pay to CK an initial fee of Fourteen Million U.S. Dollars (U.S. $14,000,000), which amount shall be non-refundable and non-creditable against any other amounts due CK under this Agreement.

(b) Equity Investment. It is understood that GSK has also agreed to make an equity investment in CK, on the Closing Date, in the amount of Fourteen Million U.S. Dollars (U.S. $14,000,000) pursuant to the terms and conditions of a Stock Purchase Agreement of even date referencing this Agreement.

6.2 Research Payments - Funding. Subject to the limitations set forth below, from and after the Effective Date, GSK shall reimburse costs incurred by CK in performing the Research Program in accordance with the Research Plan, in the following manner:

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6.2.1 FTEs. An FTE rate determined in accordance with this Section 6.2.1 shall be used for purposes of determining the costs incurred by CK with respect to CK personnel performing work on the Research Program. The FTE rate shall be [*] U.S. Dollars (U.S. $[*]) per FTE (as adjusted below). The FTE rate includes all salary, employee benefits, incidental materials and other expenses including support staff and overhead for or associated with an FTE and travel and lodging expenses incurred by such FTEs in performance of the Research Program. Effective beginning with the calendar year 2002, the FTE rate shall increase no more than once annually by the percentage increase, if any, in (i) the Radford Associates Annual Biotechnology Compensation and Benefits Survey for the San Francisco Bay Area, or (ii) the Consumer Price Index, for All Urban Consumers for the San Francisco Bay Area, as published by the U.S. Department of Labor, Bureau of Labor Statistics, in each case whichever increase is higher since the last such increase under this Section 6.2.1, (or in the case of the first such increase, the Effective Date) (the "Cost of Labor Increase"), upon thirty (30) days prior written notice to GSK and such increase shall be effective for the then-current and all subsequent Research Plans hereunder until further modified under this Section 6.2.1.

6.2.2 Non-FTE Costs. If the JRC specifically requests, as confirmed by GSK in writing or in the written Research Plan approved by the JRC, that CK conduct and fund a research activity at an external center, CK's out-of-pocket external costs incurred by CK in following such request shall be reimbursed at CK's cost; provided that, if CK identifies that a particular task can be efficiently performed by a Third Party, CK may satisfy its FTE commitment

with personnel from such Third Patty if such Third Party is approved by the JRC, and that, unless the JRC determines otherwise, such Third Party personnel will be deemed a CK FTE for purposes of the Research Plan and this Agreement.

6.2.3 Payment. On or before the first day of each calendar [*] during the Research Term, after receipt of an invoice from CK, GSK shall pay to CK an amount equal to the costs budgeted to be incurred by CK under the Research Plan for such [*]. Unless otherwise specified in the applicable Research Plan, amounts budgeted for the full year will be deemed budgeted in equal amounts for each calendar [*] during such year. Within sixty (60) days following the end of each calendar [*] during the Research Term, CK shall provide to GSK a summary of the costs actually incurred during each calendar [*] in performing the Research Plan during such period, in a form mutually agreed by the Parties. If the costs so incurred by CK in such period are less than the amounts budgeted for CK to so incur during such period under the Research Plan, then the difference will be carried forward and credited against the next payment due to CK under this Section 6.2. If CK incurs in such period costs in excess of the amounts so budgeted, the excess may be carried forward and treated as costs incurred in a subsequent period. Notwithstanding the foregoing, for the period from the Effective Date through September 30, 2001, GSK shall pay to CK, within ten (10) business days after the Effective Date, an amount equal to the costs budgeted to be incurred by CK under the Research Plan for such period; provided, however, that if GSK or CK terminates this Agreement pursuant to Section 11.1.1, CK shall reimburse any payments made by GSK to CK under this Section.

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6.2.4 Interim Periods. In the event the JRC is unable for any reason to establish a Research Plan for any period during the Research Term, then in such case the [*] advance payments to CK for each [*] during any such interim period shall equal [*] of the FTE rate multiplied by the actual number of CK FTEs covered by the last Research Plan that was approved by the JRC, for the last [*] covered by such approved Research Plan; provided that, if such number exceeds the minimum number of CK FTEs required to be included in any Research Plan for the particular Contract Year, as reflected in Section 2.6 above, then GSK may elect to [*] the number of CK FTEs for such interim period to a number [*] specified in Section 2.6, by so notifying CK in writing. If GSK so elects, the [*] advance payments to CK for each [*] during any such interim period shall equal [*] of the FTE rate multiplied by the actual number of CK FTEs listed in GSK's notice (which shall [*] number of CK's FTEs for such period specified in Section 2.6 above). Any payments made under this Section 6.2.4 shall be non-refundable.

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6.3 Research Milestone Payments.

6.3.1 Milestones. GSK shall pay to CK the following amounts upon achievement of each occurrence of the following events (each a "Research Performance Milestone"):

CASH PAYMENT

MILESTONE	(IN U.S. DOLLARS)
1. [*]	$ [*]
2. [*]	$ [*]
3. [*]	$ [*]
4. [*]	$ [*]
5. [*]	$ [*]
6. [*]	$ [*]

6.3.2 Certain Terms and Conditions.

(a) "[*]" shall have the meaning set forth in Exhibit [*], attached hereto and incorporated herein.

(b) In the event that the first Compound against the [*] Mitotic Kinesin Target induces [*] , but [*], in its [*] discretion, elects to approve the Compound as a [*], then Research Performance Milestone 5 shall be [*] to [*] United States dollars (U.S. $[*]). "[*] " shall have the meaning set forth in Exhibit 6.3.2(b), attached hereto and incorporated herein. If such [*] does not exhibit evidence of [*] in [*] (as defined in Exhibit 6.4.4), then the Development Milestone under Section 6.4 below (initiation of [*]) for a Licensed Product incorporating such [*] shall be [*] by [*] U.S. Dollars (U.S. $[*]).

(c) It is understood that Research Performance Milestone 5 may be satisfied by [*], if and when [*] by [*] as a [*] in accordance with Section [*].

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(d) Selection of [*] shall be in accordance with Section [*]. It is understood that Research Performance Milestone [*] shall be paid on a Target-by-Target basis, so that the selection of the first [*] for each [*] Mitotic Kinesin Target shall trigger a separate payment of [*] U.S. Dollars (U.S. $[*]).

6.4 Development Milestones. Except as set forth below, GSK shall pay to CK upon achievement of the corresponding events set forth below (each, a "Development Milestone") for each Licensed Product, regardless of whether the development, promotion, or marketing of such Licensed Product is discontinued at any time after the achievement of such milestone:

6.4.1 [*]. For each Licensed Product that [*]:

MILESTONE	[*]	[*]	[*]
1. [*]	$[*]	[*]	[*]
2. [*]	$[*]	[*]	[*]
3. [*]	$[*]	[*]	$[*]
4. [*]	$[*]	[*]	$[*]
5. [*]	$[*]	[*]	$[*]
6. [*]	$[*]	$[*]	$[*]

7. [*]	$[*]	$[*]	$[*]	

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6.4.2 [*] For each Licensed Product that [*], on a Collaboration Target-by-Target basis:

MILESTONE	[*]	[*]	[*]
1. [*]	$[*]	[*]	[*]
2. [*]	$[*]	[*]	[*]
3. [*]	$[*]	[*]	$[*]
4. [*]	$[*]	[*]	$[*]
5. [*]	$[*]	[*]	$[*]
6. [*]	$[*]	$[*]	$[*]
7. [*]	$[*]	$[*]	$[*]

6.4.3 Certain Terms. For purposes of the Development Milestones due under this Section 6.4:

(a) In no event will multiple Development Milestone payments be made for the same Licensed Product, except in the event where a Licensed Product for [*] is also the [*] Licensed Product directed against that Mitotic Kinesin Target to be [*] for a [*].

(b) It is understood that the Development Milestone payments reflected under the column "[*]" shall be payable whether or not Development Milestones have been paid for such Licensed Product with respect to [*]. In addition, the "[*]" need not be the same Licensed Product as the "[*]."

(c) Notwithstanding the definition of [*] under Section [*], a clinical trial that is a [*] shall not be deemed a [*] trial that meets such Development Milestone [*], and accordingly, the payment corresponding to such Development Milestone [*] shall not become due by reason of such a [*]. For purposes of this Section 6.4.3, a "[*]" shall mean a [*], as provided in

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[*], submitted for the sole purpose of conducting a [*] study or [*] study of

the [*] of no more than [*] ([*]) [*] to compare the [*] of at least [*] ([*]), but not more than [*] ([*]), [*]. Any clinical trial that includes activities in addition to those listed in this Section, including without limitation [*] or any subsequent clinical trial of the particular Compound, shall not be deemed a [*], and upon initiation of such trial, Development Milestone [*] shall be immediately due and payable.

(d) For purposes of this Section 6.4, and Section 6.6 below, all dosage forms, and all formulations, of the same active ingredient shall be deemed a single Licensed Product. Licensed Products having a different or additional active ingredient shall be deemed a separate Licensed Product; provided, however, that the different or additional active ingredient is a different or additional Development Compound than the original Development Compound contained in the Licensed Product.

(e) The Development Milestone payments under Section 6.4.2 shall be determined on a Mitotic Kinesin Target-by-Target basis, meaning, for example, that the [*] that is directed to a particular Mitotic Kinesin Target shall trigger the payments under the column "[*]" milestone, and that the [*] for another Mitotic Kinesin Target shall also trigger those payments.

(f) "[*]" of a particular clinical trial shall mean the date of [*] of the [*] subject in such trial.

(g) If a subsequent Development Milestone is achieved with respect to a particular Licensed Product before a prior Development Milestone ("prior" and "subsequent" referring to a lower number in the tables above, e.g., Development Milestone 2 being "prior" to Development Milestone 3), then all such prior Development Milestones shall be deemed achieved upon achievement of the subsequent Development Milestone.

(h) "[*]" of an [*] shall mean the date of receipt by GSK of written notice of [*] from the FDA (or its equivalent in a country outside the U.S.) of an [*] for the Licensed Product for [*].

(i) "[*] of an [*] by [*]" shall mean the date that an [*] has been [*] for a Licensed Product in [*]; provided that, if such application is [*] by the [*] ("[*]") under the [*] the Development Milestone will be met (in full). For purposes of the foregoing, validation of an [*] by [*] or the [*] shall be deemed "[*]" of such [*] by such [*] or [*], as applicable, and if an [*] is submitted under the [*] and validated by the [*] ("[*]"), such [*] shall be deemed [*] by a [*]

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upon confirmation that the resulting [*] in the [*] will serve as the basis for [*] in such [*].

(j) "Receipt of [*] from [*]" shall mean the [*] for the Licensed Product, in [*]; provided, however, that GSK shall pay CK [*] ([*]) of Development Milestone [*] under Sections 6.4.1 and 6.4.2, as applicable, upon the date that GSK receives [*] from [*]. GSK shall subsequently pay CK an additional [*] ([*]) of Development Milestone [*] when GSK receives [*] from each of [*].

6.4.4 Credits.

(a) Should all development of a particular Licensed Product for a particular Collaboration Target discontinue prior to [*] in [*], for any reason, and be replaced by an alternative Licensed Product against that Collaboration Target, then, for the next Licensed Product for such

Collaboration Target to achieve a milestone for which a corresponding milestone payment was made for the discontinued Licensed Product, no payment shall be due with respect to such alternative Licensed Product with respect to such milestone.

(b) If there is evidence of [*] in [*] for a particular Licensed Product, but GSK, in its sole discretion, elects to continue development of such Licensed Product, then (i) Development Milestone [*] shall be [*] by [*] percent ([*]%), and (ii) Development Milestones [*] through [*] shall each be [*] by [*] percent ([*]%). "[*]" shall have the meaning set forth in Exhibit 6.4.4, attached hereto and incorporated herein. Notwithstanding the foregoing, in the event that such Licensed Product receives [*] in the [*] or a [*], and the [*] required [*] by such [*] does not [*], then the amount of all such milestone [*] for such Licensed Product shall be paid to CK upon receipt of such [*].

6.5 Milestone Payment Timing. The payments set forth in Sections 6.3 and 6.4 hereof shall each be due and payable by GSK to CK within forty-five (45) days of the occurrence of the milestone event set forth therein. For milestones accomplished by CK, such payment shall be due forty-five (45) days after receipt by GSK of an invoice from CK therefor to GSK, subject to GSK's verification during such forty-five (45) day period that the milestone occurred. GSK and CK agree to promptly notify the other of its achievement of any milestone.

6.6 Earned Royalties For Licensed Products. GSK shall pay CK a royalty on worldwide Net Sales of Licensed Products by GSK, its Affiliates or Sublicensees. Such royalty shall be paid based on the total annual worldwide Net Sales for each calendar year, on a Licensed Product-by- Licensed Product basis.

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6.6.1 General. Subject to Section 6.6.2 below, the annual royalty rate for a particular Licensed Product in a given year shall be determined by the total worldwide annual Net Sales of such Licensed Product for the particular calendar year, according to the following schedules.

(a) For each Licensed Product that [*]:

Total Annual Net Sales	Royalty
Less than $[*]	[*]%
Between $[*] and $[*]	[*]%
Greater than $[*]	[*]%

(b) For each Licensed Product that [*]:

Total Annual Net Sales	Royalty
Less than $[*]	[*]%
Between $[*] and $[*]	[*]%
Greater than $[*]	[*]%

6.6.2 Licensed Products Subject to Co-Funding Option. With respect to Licensed Products for which CK has exercised its Co-Funding Option pursuant to Section 3.4, the annual royalty rate for a particular Licensed Product in a given calendar year shall be determined by the total annual worldwide Net Sales of such Licensed Product in that calendar year and the percentage of Later Stage Development Costs for such Licensed Product that CK elected to fund, according to the following schedules.

(a) If CK elected to fund the Later Stage Development Costs with respect to a Co-Funded Product at a CK Percentage of [*] ([*]%),

(i) For each Licensed Product [*]:

Total Annual Net Sales	Royalty
Less than $[*]	[*]%
Between $[*] and $[*]	[*]%
Greater than $[*]	[*]%

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(ii) For each Licensed Product that [*]:

Total Annual Net Sales	Royalty
Less than $[*]	[*]%
Between $[*] and $[*]	[*]%
Greater than $[*]	[*]%

(b) If CK elected to fund the Later Stage Development Costs with respect to a Co-Funded Product at a CK Percentage of [*] percent ([*]%),

(i) For each Licensed Product that [*]:

Total Annual Net Sales	Royalty
Less than $[*]	[*]%
Between $[*] and $[*]	[*]%
Greater than $[*]	[*]%

(ii) For each Licensed Product that [*]:

Total Annual Net Sales	Royalty
Less than $[*]	[*]%
Between $[*] and $[*]	[*]%
Greater than $[*]	[*]%

(c) For any particular Co-Funded Product for which CK terminates its obligation to fund Later Stage Development Costs under Section 3.4.2(e), GSK shall pay the royalty rate under this Section 6.6.2 corresponding to the CK Percentage elected by CK for such Co-Funded Product; provided that GSK's obligation to pay the royalty rate set forth in this Section 6.6.2 for Net Sales of such Co-Funded Product shall continue only until such time as the difference between the cumulative royalties paid under this Section 6.6.2 for such Co-Funded Product, and the cumulative royalties for Net Sales of such Co-Funded Product that would have otherwise been payable under Section 6.6 if CK had not exercised its Co-Funding Option, equals the amount paid by CK to GSK for Later Stage Development Costs, plus interest at a rate of [*] percent ([*]%) per annum, for such Co-Funded Product prior to the effective date of the termination. Thereafter, GSK shall pay royalties on Net Sales of such Co-Funded Product according to Section 6.6.1.

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6.6.3 Other.

(a) For purposes of determining the royalty rates applicable hereunder, it is understood that "total annual Net Sales" shall be determined on a world-wide, calendar year basis, and shall be determined separately for each separate Licensed Product.

(b) Further, it is understood that if the total annual Net Sales for a particular calendar year are within a particular Net Sales range, as reflected in the tables in paragraphs (a) or (b) of either 6.6.1 or 6.6.2 above, then the royalty corresponding to such range shall apply to all total Net Sales for the particular calendar year (i.e., not just to those Net Sales within the range). For example, for a Licensed Product [*] covered by Section 6.6.1(a) above, if the total Net Sales in a particular calendar year are $[*], then the royalty for all Net Sales of such Licensed Product for such calendar year shall equal [*] percent ([*]%). Eighteen (18) months after the date of the initial commercial sale of a Licensed Product in the Territory, GSK and CK shall agree upon a reasonable mechanism to smooth out the quarterly payment of royalties based on the expected levels of Net Sales of Licensed Products for the particular calendar year, and the corresponding royalty expected to be due for such calendar year, so that the royalties paid for each quarter shall equal as approximately as practical the actual royalty that will be payable for the calendar year in which such quarter occurs, based on the application of this Section 6.6.

(c) GSK agrees to establish list prices and discounts for each Licensed Product in the best interests of such Licensed Product, taking into account the competitive environment, product profile and commercial potential of the Licensed Product. Without limiting the foregoing, GSK agrees that it shall establish list prices and discounts for each Licensed Product in a manner to maximize the commercial success of the Licensed Product in a particular country. Such pricing and discounting decisions shall take into consideration their impact on CK.

6.7 Term For Royalty Payment. Royalties payable under Section 6.6 shall be paid on a country-by-country basis from the date of the first commercial sale of each Licensed Product with respect to which royalty payments

are due for a period which is the longer of:

(i) the expiration of the last to expire Patent in such country covering the composition of matter or use of a Compound or Licensed Product; or

(ii) [*] ([*]) years following the date of the first commercial sale of such Licensed Product in such country.

6.8 Payment; Foreign Exchange. All payments under this Agreement shall be made from the United States by a United States entity or from the United Kingdom by a U.K. entity. The remittance of royalties payable on Net Sales will be payable in U.S. dollars to a bank and to an account designated by CK using a rate of exchange of the currency in which the Net Sales occurred with U.S. dollars, as published in the Wall Street Journal on the last day of the quarter for which such payment was due.

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6.9 Taxes. Subject to Section 12.5, in the event that GSK is required to withhold and remit any tax to the revenue authorities in any country in the Territory regarding any milestone payment or royalties payable to CK due to the laws of such country, such amount shall be withheld by GSK, and GSK shall notify CK and promptly furnish CK with copies of any documentation evidencing such withholding.

6.10 Timing of Royalty Payments and Reports. Royalty payments under this Agreement shall be made to CK or its designee quarterly within sixty (60) days following the end of each calendar quarter for which royalties are due. Each royalty payment shall be accompanied by a report summarizing the Net Sales during the relevant three (3) month period.

6.11 Accounting. The Parties shall maintain complete and accurate records, in accordance with generally accepted accounting practices, which are relevant to costs, expenses and payments under this Agreement. Such records shall be open during reasonable business hours for examination at the other Party's expense, upon written notice to the other Party, and not more often than once each year by a certified public accountant or other representative selected by the Party for the sole purpose of verifying the correctness of calculations or such costs, expenses or payments made under this Agreement. In the event that such examination establishes a discrepancy for any period covered by such examination in excess of [*] percent ([*]%), the Party owing any payment shall reimburse the other Party for such unpaid amount in addition to the expense of the examination. Any records or accounting information received from the other Party shall be Confidential Information for purposes of Article IX.

6.12 [*].

6.12.1 Right of [*]. In the event that (i) it becomes necessary for [*] to [*] under [*] of a Third Party, where such [*] or [*] of a Development Compound comprising a Licensed Product, or the [*] or [*] (as defined below) of the Collaboration Target to which such Licensed Product is directed, which Development Compound or Collaboration Target is within the CK Existing Technology or consists of Collaboration or Post-Collaboration Technology owned solely or jointly by CK, and such [*] would [*] or [*] of such Licensed Product (but not, for example, by reason of its [*] or [*]), and (ii) [*] must [*] such Third Party for such [*] on [*] such Licensed Product [*], [*] may [*] that [*] of the [*] to such Third Party as the Parties agree under [*] below, but in no event more than [*] percent ([*]%) of such [*], against [*] on [*] of such Licensed Product [*], subject in each case to the [*] of [*] specified in [*] below. [*] shall not be entitled to such [*] in [*] of the [*] in the event the [*] of such Third Party for which such [*] have been incurred

are [*] or [*]. For purposes of this Section 6.12.1, a [*] shall "[*] of the Collaboration Target" if such [*] a [*] or [*] by [*] of such Collaboration Target.

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6.12.2 Consultation; Disputes. [*] shall consult with [*] prior to entering into any [*] with a Third Party for which [*] would seek to [*] under this Section 6.12, and shall take into account reasonable suggestions of [*] with respect to such proposed [*]. Any dispute under this Section 6.12, including any dispute as to whether such a [*] is necessary, shall be resolved in accordance with Section 12.3.1 below.

6.12.3 [*]. In addition to the [*], it is understood that on a case-by-case basis, GSK and CK may agree that it would be in their mutual best interests to [*] a [*] for [*] with a Licensed Product, and in such case may similarly agree that it would be in their mutual best interests to [*] with respect to such [*]; provided, however, that neither Party shall be obligated to agree to any such [*] or [*], and no such [*] shall be made unless so agreed.

6.13 [*] in [*] for [*]. If, during the Exclusivity Period or Extension Period, as applicable, [*] occurs in [*] or [*] of the [*] between a Licensed Product being marketed and sold under this Agreement by GSK, its Affiliates or Sublicensees and any [*] (as defined below) [*] and [*] (other than a GSK Affiliate or Sublicensee), and for so long as such [*] is [*] and [*] in such [*] or [*] of [*], and [*] of such [*] percent ([*]%) of the total [*] of such [*] and the Licensed Product in the [*] in such Contract Year, the [*] in respect of such [*] or [*] shall be [*] to the extent provided in Section [*] below. GSK shall give CK [*] of such [*] with suitable and reasonable supporting documentation. Any [*] in the [*] as a result of such [*] shall apply from the [*] by GSK to CK of such [*] and shall be [*] only for the period such [*], subject in each case to Section [*] below. For the purposes of this Section 6.13, a "[*]" shall mean any [*] (other than a Licensed Product sold by or under authority of GSK) containing the [*] as the [*] in the Licensed Product being sold by GSK, or its Affiliate or Sublicensee in [*], and which [*] the Licensed Product in the [*] or [*].

6.14 Conditions to [*]; Amount of [*].

6.14.1 Conditions to [*]. It is understood that, if [*] of a Licensed Product [*] are [*] by the [*] or by [*], [*] will be [*] by [*] due to [*]. Consequently, the Parties acknowledge that Sections 6.12 and 6.13 are intended only to avoid a [*] on [*] in the event described herein. Accordingly, notwithstanding Section 6.12 or 6.13 above, the [*] with respect to [*] of a Licensed Product [*] shall only be [*] if [*] and [*] of such Licensed Product in [*] have been [*] by reason of either [*] or [*], and the [*] would create [*] between GSK and CK with respect to the [*]

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of such Licensed Product in [*] without a [*] under Section 6.12 or 6.13, as applicable. In addition, (i) before any [*] under Section 6.12 or 6.13 shall take effect, GSK shall consult with CK as to measures that can reasonably be taken to [*] of such [*] or [*], and (ii) [*] under Section 6.12 or 6.13 shall continue only if GSK reasonably initiates and continues to progress such [*]; and (iii) any [*] under Section 6.12 or 6.13 shall continue only if GSK continues to pursue all reasonably available legal measures that could [*] or [*] for [*] or [*] or [*], as applicable, including the [*] of any [*] that

could [*] or [*] of a [*], directly or indirectly, and the [*] of any applicable [*] or [*] that could affect the [*].

6.14.2 Amount of [*]. The amount of the [*] under Sections 6.12 and 6.13 shall be reasonably agreed by GSK and CK, taking into account the factors described in this Section 6.14 above, provided that the [*] otherwise [*] on such [*] shall not be so [*], after [*] or [*] under this Agreement, if any, to [*] specified in the tables below:

(a) For Licensed Products [*]:

	NO CO-FUNDING	[*]% CO-FUNDING	[*]% CO-FUNDING
TOTAL ANNUAL NET SALES			
< $[*]	[*]%	[*]%	[*]%
$[*] - $[*]	[*]%	[*]%	[*]%
> $[*]	[*]%	[*]%	[*]%

(b) For Licensed Products that [*]:

	NO CO-FUNDING	[*]% CO-FUNDING	[*]% CO-FUNDING
TOTAL ANNUAL NET SALES			
< $[*]	[*]%	[*]%	[*]%
$[*] - $[*]	[*]%	[*]%	[*]%
> $[*]	[*]%	[*]%	[*]%

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Accordingly, under the foregoing table, (i) if Net Sales of a particular Licensed Product are less than [*] U.S. Dollars (U.S. $ [*]), the royalty payable shall be [*] percent ([*]%); (ii) if Net Sales of a particular Licensed Product are between than [*] U.S. Dollars (U.S. $ [*]) and [*] U.S. Dollars (U.S. $[*]), the royalty payable shall be [*] percent ([*]%); and (iii) if Net Sales of a particular Licensed Product exceed [*] U.S. Dollars (U.S. $[*]), the royalty payable shall be [*] percent ([*]%). For example, if GSK is entitled under Section 6.12 above to [*]on [*] of a Licensed Product [*] that is co-funded by CK at the [*] percent ([*]%) level, and GSK's total annual Net Sales for such Licensed Product is [*] U.S. Dollars (U.S. $[*]), then the royalties due CK shall [*] percent ([*]%).

6.14.3 In the event the Parties are unable to agree on such [*], the amount of the [*] shall be established in accordance with Section 12.3.1 below. In any event, however, the [*] shall only apply for so long as the circumstances and conditions described in Sections 6.12 and 6.13 above continue to exist, and shall only apply to [*] on [*] of the particular Licensed Product [*].

6.15 [*]. In the event that a [*] in [*] or [*], other than a GSK

Affiliate or Sublicensee, for the Licensed Product, and as a result, the conditions of Section 6.13 apply, then it is understood that [*] may be entitled to a [*] in accordance with Section 6.14 above, as a result of such [*].

ARTICLE VII - COMMERCIALIZATION

7.1 Commercialization Rights. Subject to the provisions of Section 7.4 below, GSK shall be responsible for the establishment, control and implementation of the strategy, plans and budgets for marketing and promotion of the Licensed Products.

7.2 Commercialization Committee.

7.2.1 Establishment. No later than at the initiation of the first Phase III clinical study for a Licensed Product, the Parties shall establish a Joint Commercialization Committee ("JCC"). The JCC shall have responsibility to monitor the conduct and progress of the commercialization strategy, plans, and budgets, including establishment of a plan and budget for the marketing, promotion, sale and distribution of such Licensed Product (each a "Sales and Marketing Plan"). The JCC shall update the Sales and Marketing Plan periodically, and no less often than annually, and shall include therein detailed plans and budgets for the marketing, promotion, sale and distribution of each Licensed Product.

7.2.2 Meetings; Information. The JCC shall meet at least monthly. GSK shall notify CK at least two weeks in advance of the date of each JCC meeting, and CK shall have the

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opportunity to send [*] to each such meeting, who shall be designated as [*] of the JCC. Either Party may replace its respective JCC representative(s) at any time with prior written notice to the other Party. GSK shall provide such [*] with schedules of all such meetings, as well as any other information distributed to GSK members of the JCC. GSK agrees to keep CK informed regarding the Sales and Marketing Plan (including by providing CK at least quarterly such reports regarding shipments and sales of Licensed Products), and the activities being undertaken with respect to the commercialization of the Licensed Product, and shall consider all reasonable suggestions of CK in formulating and implementing the Sales and Marketing Plan. GSK shall have right of final decision regarding all matters under the jurisdiction of the JCC, subject to Section 7.2.3 below.

7.2.3 Section 4.5 Products. With respect to any Licensed Product for which GSK exercised the CK Product Option under Section 4.5 above, then for all matters pertaining to such Licensed Product: (i) the JCC shall be comprised of an equal number of representatives of each of GSK and CK, (ii) decisions of the JCC shall be by majority vote, provided that if there is not an equal number of representatives of each Party voting, then only an equal number of representatives of each Party shall be entitled to vote on the matter, and (iii) notwithstanding Section 7.2.2 above, GSK shall not have the right of final decision with respect to such matters.

7.3 Commercialization Efforts.

7.3.1 Generally. GSK shall use diligent efforts to discover, research, develop and commercialize Licensed Products, and to perform its obligations under Sections 2.1, 3.1-3.3 and 7.1 of this Agreement, and to obtain the optimum commercial return for each Licensed Product in all major markets throughout the world, consistent with high professional standards for the research, development, commercialization, and marketing of pharmaceutical products of similar commercial value potential. GSK shall develop and commercialize Licensed Products in the best interests of maximizing the success

of such Licensed Product.

7.3.2 Reversion to CK. If after the second anniversary of the Exclusivity Period, or with respect to a particular Collaboration Target that was an Extended Target, the second anniversary of the end of the Extension Period under Section 4.2 with respect to such Collaboration Target, (i) GSK is not actively and diligently performing IND Enabling Studies, or human clinical trials or pursuing Marketing Approval with respect to a Development Compound or Licensed Product directed to a Collaboration Target, and (ii) is not then actively marketing a Licensed Product directed to such Collaboration Target, then such Target shall cease to be a Collaboration Target for all purposes of this Agreement and shall thereafter be deemed a CK Target. Notwithstanding the foregoing, if prior to or during the period described in this Section 7.3.2, GSK has conducted IND Enabling Studies or clinical trials of a Development Compound or Licensed Product directed to a particular Collaboration Target, but later ceased such Studies or trials, then such Target shall not so cease to be a Collaboration Target by reason of this Section 7.3.2 if GSK has then ongoing and is actively conducting a [*] Program with respect to such Collaboration Target, and satisfies the conditions of (i) above within thirty-six (36) months after the prior IND Enabling

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Studies and clinical trials ceased, whichever is later. It is understood that this Section 7.3.2 shall not be deemed to limit Sections 4.2.1 or 7.3.1 above.

7.3.3 After the Exclusivity Period, if GSK acquires a product that is directed to a Mitotic Kinesin Target, GSK shall continue to commit resources to the discovery, development and commercialization of Compounds, Development Compounds and Licensed Products hereunder for their maximal commercial success and in a manner that will not disadvantage the Licensed Product to the benefit of the newly acquired product. In addition, in the event GSK is required by a regulatory agency to divest a Licensed Product in North America or a Major European Country, CK shall have the first right to negotiate with GSK to acquire full rights to such Licensed Product on commercially reasonable terms. GSK shall provide written notice to CK of its intent to divest the Licensed Product prior to entering into any agreement with a Third Party, shall use commercially reasonable efforts to reach such an agreement with CK, and shall provide reasonable assistance to CK with respect to its discussions with the relevant governmental authority(ies) overseeing the divestiture of such Licensed Product, including encouraging the relevant governmental authority(ies) to select CK as the acquirer of the Licensed Product. It is understood that any agreement for CK's acquisition of the Licensed Product would be subject to agreement between the Parties on the financial terms and other conditions of CK's acquisition of the Licensed Product.

7.4 Co-Promotion Option of CK, Provided that CK has exercised its Co-Funding Option under Section 3.4 or 4.5.2(d) with respect to a Licensed Product, at any time prior to the MAA submission for a Licensed Product in the United States and Canada (respectively), CK will have an option (the "Co-Promotion Option") to co-promote such Licensed Product in the United States and/or Canada (respectively) according to the terms and conditions set forth in this Section 7.4. This Co-Promotion Option may be exercised, at CK's discretion, on a product-by-product basis, for each Licensed Product with respect to which CK has exercised its Co-Funding Option and has participated in funding [*] for such Licensed Product under Section 3.4 or for which GSK exercised the CK Product Option under Section 4.5 above. CK shall notify GSK of its intent to exercise its Co-Promotion Option with respect to a particular Licensed Product at any time prior to submission of an MAA for such Licensed Product (each such Licensed Product for which CK exercises the Co-Promotion Option being referred as a "Co-Promoted Product"). As used in this Section 7.4, "co-promote" shall

mean to promote jointly a Licensed Product through GSK and CK's respective sales forces under a single trademark in a given country; "details" shall mean face-to-face sales presentations made to physicians, nurses, pharmacists and other individuals who provide health care services to patients, in their capacity as such.

7.4.1 Scope of Co-Promotion. At such time as CK exercises its Co-Promotion Option with respect to a Co-Promoted Product, it shall notify GSK of the [*] that CK intends to perform annually for such Co-Promoted Product (such total being referred to as the "Co-Promotion Percentage" for such Co-Promoted Product) in each of the United States and Canada. This Co-Promotion Percentage shall not be greater than [*] percent ([*]%), nor less than [*] percent ([*]%), of the [*], in each of the United States and Canada, [*] to be conducted for such Co-

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Promoted Product in any calendar year, unless otherwise agreed by the Joint Commercialization Committee. CK shall have the right to [*] over the initial [*] ([*]) years of co-promoting a Co-Promoted Product; provided that CK must commit to [*] at least [*] percent ([*]%) of its [*] in the [*], and [*] percent ([*]%) of such commitment in the [*], calendar year of such Co-Promoted Products.

7.4.2 [*]. The Parties recognize that CK, under its Co-Promotion Option, may receive orders from Third Parties for the Co-Promoted Product. CK shall transmit such orders to GSK and [*].

7.4.3 Co-Promotion Coordination. The JCC shall be responsible for coordinating the co-promotion activities under this Section 7.4, and shall develop the strategies and programs to optimally carry-out details, including but not limited to, the assignment of details in accordance with the Sales and Marketing Plan. In the event CK exercises its Co-Promotion Option, the Sales and Marketing Plan shall include detailed plans and budgets for the [*], and shall at all times provide for CK sales representatives to conduct the [*] to be conducted in the particular country (subject to CK's right to [*] CK's [*], as described in Section 7.4.1 above); provided that such [*] be [*], and that [*] will include at least a [*] in the particular therapeutic areas.

7.4.4 Co-Promotion Obligations. CK shall employ a professional and trained sales force to co-promote the Co-Promoted Product in the country(s) in which it has elected to co-promote, and such sales force shall meet standards of competence and professionalism as is common in the pharmaceutical industry. With the prior written consent of GSK (which shall not be withheld or delayed unreasonably), CK may sub-contract its Co-Promotion obligations to a Third Party, provided that CK has the right to approve the hiring of sales personnel performing details for a Licensed Product hereunder and to cause the removal from such detailing activities of such sales personnel. In all events, CK's Co-Promotion and detailing shall be conducted in accordance with the then current Sales and Marketing Plan and in accordance with all applicable laws. [*] (including samples) as are reasonably necessary to effectively promote the particular Co-Promoted Product consistent with the Sales and Marketing Plan.

7.4.5 Reimbursement. GSK shall reimburse CK for the costs incurred by CK in [*] in accordance with this Section 7.4, [*]. Promptly following CK's exercise of the Co-Promotion Option for a particular Co-Promoted Product, the Parties shall reasonably agree [*] to be paid to CK for [*] performed by CK in accordance with the Sales and Marketing Plan then in effect (the "[*]"). Such [*] shall equal CK's [*] cost of performing [*] over the particular period, on a fully allocated basis, provided that the [*] shall not exceed [*] for the Co-Promoted Product ([*]) for the [*] period. The [*] shall be paid to CK quarterly in advance, based on the [*] budgeted to be conducted by

CK during such

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quarter under the Sales and Marketing Plan. Promptly following the end of each calendar quarter, CK shall provide to GSK a report, in a form reasonably agreed by the Parties, summarizing the [*] actually [*] during such quarter. In the event the actual [*] was less than the [*] for which CK received advance payment, then GSK shall be entitled to a credit for the [*] associated with such shortfall against the next payment due to CK under this Section 7.4.5.

7.4.6 CK and GSK Right to Terminate. CK shall have the right to terminate its Co-Promotion of any Co-Promoted Product, and its obligations under this Article VII with respect to such Product, on a product-by-product, country-by-country basis, upon [*] ([*]) days prior notice to GSK. Upon such termination by CK, CK shall have no further right to [*] under Section 7.4.5, other than for services provided prior to the date of termination. GSK shall have the right to terminate CK's Co-Promotion of any Co-Promoted Product, on a product-by-product, country-by-country basis, upon [*] ([*]) days prior notice to CK, in the event that employees or consultants promoting the Co-Promoted Product, do not perform in accordance with GSK's Sales and Marketing Plan for the Co-Promoted Product, and CK fails to correct such non-performance during such [*]-day period. Upon such termination by GSK, CK shall have no further right to [*] under Section 7.4.5, other than for services provided prior to the date of termination.

7.5 CK Logo. The name and logo of CK shall appear, with reasonable size and prominence, on all packaging, package inserts, labeling, marketing and sales materials and advertisements for Licensed Products for which CK exercised the Co-Funding Option under Section 3.4 above. In the case of such Co-Funded Products that became Licensed Products pursuant to Section 4.5 above, the name and logos of CK and GSK shall be of equal size and prominence.

ARTICLE VIII - OWNERSHIP OF INTELLECTUAL PROPERTY AND PATENT RIGHTS

8.1 Ownership.

8.1.1 Generally. Each Party shall retain all of its rights, title and interest in and to its Existing Technology, including the right to transfer or license such intellectual property to others for any purpose, subject only to its obligations under this Agreement, including but not limited to the exclusivity obligations below. All right, title and interest in and to all inventions made solely by personnel of a Party shall be owned by such Party. All right, title and interest in and to all other inventions made jointly by personnel of GSK and CK shall be jointly owned by GSK and CK in equal and undivided shares. Except as expressly provided in this Agreement, neither Party shall have any obligation to account to the other for profits, or to obtain any consent of the other Party to license or exploit patented jointly-owned subject matter, by reason of joint ownership thereof, and each Party hereby waives any right it may have under the laws of any jurisdiction to require any such consent or accounting.

8.1.2 CK Targets. Notwithstanding the foregoing, all inventions and Information (including all Patents and intellectual property rights in such inventions and Information) made by

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CK personnel in connection with activities specifically pertaining to CK Targets, CK Compounds or CK Products shall be owned by CK. All inventions and Information (including all Patents and intellectual property rights in such inventions and Information) made by GSK personnel in connection with activities specifically pertaining to CK Targets, CK Compounds or CK Products shall be owned by GSK, and GSK hereby grants to CK an exclusive, worldwide license, with the right to grant and authorize sublicenses, to make, have made, use, sell, offer for sale, import and otherwise exploit subject matter within such inventions, Information or intellectual property. It is understood that the inventions and Information licensed to CK under this Section shall be limited to inventions and Information that pertain to CK Targets, CK Compounds or CK Products prior to their designation as such (e.g., with respect to CK Targets prior to the time that the particular Mitotic Kinesin Target had been designated as a CK Target).

8.2 Patent Filings. The Party responsible for Prosecution and Maintenance (as defined below) of patents covering inventions within the Collaboration Technology or Post-Collaboration Technology shall use [*] to obtain a reasonable scope of protection of Compounds and CK Compounds, and will consider in good faith reasonable comments provided by the other Party.

8.2.1 Joint Patents. The Prosecution and Maintenance of jointly owned Patents shall be only as mutually agreed by GSK and CK. In such connection, the Parties agree to cooperate in good faith to obtain appropriate patent protection for Compounds, Licensed Products, CK Compounds, and CK Products. Accordingly, the Parties agree to cooperate and to prepare and prosecute patent applications for Patents within the Licensed Technology directed to such claims in a manner that ensures reasonable scope of protection for such subject matter. Subject always to the foregoing, [*] will be responsible at the expense of [*] for drafting, filing, prosecuting and maintaining any jointly owned Patent directed primarily to Compounds, including but not limited to processes for making Compounds, methods of use of Compounds or intermediates of such.

8.2.2 Solely Owned Patents. GSK or CK, as the case may be, shall control the Prosecution and Maintenance of Patents within the Collaboration Technology and Post-Collaboration Technology that are owned by such Party, in each case [*] and using counsel of its choice and in such countries as such Party determines is appropriate.

8.2.3 Other Matters Pertaining to Prosecution of Patents.

(a) Disclosure. Prior to the filing of any patent claiming Collaboration Technology, the JRC shall establish a subcommittee to coordinate Prosecution and Maintenance of patents covering inventions within the Collaboration Technology and Post-Collaboration Technology (the "Patent Subcommittee"). After the end of the Research Term, the Patent Subcommittee shall report to the JSC. Prior to filing any patent application claiming Collaboration Technology or Post-Collaboration Technology, each Party shall submit to the Patent Subcommittee an invention disclosure containing such information and in a form to be mutually agreed by the Parties. Each Party shall keep the Patent Subcommittee informed as to material developments with respect to the Prosecution and Maintenance of Patents claiming Collaboration Technology or Post-Collaboration Technology, including without limitation, by providing upon request copies of any

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substantive documents that such Party receives from any patent office, including notice of all interferences, reissues, re-examinations, oppositions or requests for patent term extensions, and by providing the other Party the opportunity to

have reasonable input into the strategic aspects of such Prosecution and Maintenance. Without limiting the foregoing, neither Party shall file an application for such a Patent unless it has first disclosed the same to the Patent Subcommittee.

(b) If, during the term of this Agreement, the Party responsible for prosecuting a Patent within the Collaboration Technology or Post-Collaboration Technology, as specified in this Section 8.2, (the "Prosecuting Party") intends to allow such Patent to lapse or become abandoned without having first filed a substitute, the Prosecuting Party shall, whenever practicable, notify the other Party of such intention at least sixty (60) days prior to the date upon which such Patent shall lapse or become abandoned, and such other Party shall thereupon have the right, but not the obligation, to assume responsibility for the Prosecution and Maintenance and defense thereof at its own expense with counsel of its own choice.

(c) "Prosecution and Maintenance" or "Prosecute and Maintain" with regard to a Patent shall mean the preparing, filing, prosecuting and maintenance of such Patent, as well as re-examinations, reissues, requests for patent term extensions and the like with respect to such Patent, together with the conduct of interferences, the defense of oppositions and other similar proceedings with respect to the particular Patent.

8.3 Patent Costs.

8.3.1 Collaboration and Post-Collaboration Technology. [*]. CK and GSK shall share the Patent Costs associated with the Prosecution and Maintenance of jointly owned Patents, as the Parties agree.

8.3.2 CK and GSK Existing Technology. CK shall be responsible for [*] percent ([*]%) of the Patent Costs incurred by CK prior to and after the Effective Date in all countries in the Territory with respect to CK Existing Technology. GSK shall be responsible for [*] percent ([*]%) of the [*] incurred by GSK prior to and after the Effective Date in all countries in the Territory with respect to GSK Existing Technology. If a Party chooses not to Prosecute and Maintain a Patent within its Existing Technology that it solely owns in a country or countries of the Territory, it shall use [*] efforts to promptly notify the other Party of its decision, and, if such patent pertains to a Collaboration Target, Compound, Development Compound, Licensed Product, CK Compound or CK Product licensed to the other Party hereunder, the other Party shall have the right to Prosecute and Maintain such Patent and at its own expense with counsel of its own choice.

8.3.3 Definition of Patent Costs. "Patent Costs" shall mean the reasonable fees and expenses paid to outside legal counsel, and filing, maintenance and other out-of-pocket expenses paid to Third Parties, incurred in connection with the Prosecution and Maintenance of Patents.

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8.4 Third Party Technologies.

8.4.1 Existing Third Party Technology. It is understood that certain Patents within the CK Existing Technology have been in-licensed pursuant to that certain Exclusive License Agreement dated April 21, 1998, as modified, among CK, the Regents of the University of California and the Board of Trustees of the Leland Stanford Junior University (the "University License"), and that CK shall be responsible for payment of all partnership and other fees required pursuant to Section 5.2 thereof. As required for the furtherance of the objectives of this Agreement, CK shall use [*] to maintain the University License and to timely pay all fees due under the University License. Should CK be unable to make any payment required under the University License, it shall

notify GSK, and GSK shall thereupon have the option to make such payment on behalf of CK and to seek reimbursement from CK for such payment.

8.4.2 Acquired After Effective Date. In addition, if after the Effective Date, CK or GSK (the "Sublicensing Party") acquire from a Third Party subject matter within the Licensed Technology ("Third Party Technology"), but that is subject to royalty or other payment obligations to the Third Party, then the following shall apply: The licenses granted to the other Party (the "Commercializing Party") under Section 5.2 and 5.3 above with respect to such Third Party Technology shall be subject to the Commercializing Party's promptly reimbursing the Sublicensing Party for any milestones, royalties or other amounts that become owing to such Third Party by reason of the Commercializing Party's exercise of such license or sublicense to the Third Party Technology. Upon request by the Commercializing Party, the Sublicensing Party shall disclose to the Commercializing Party a true, complete and correct written description of such payment obligations, and the Commercializing Party's obligation to reimburse such amounts following such request shall be limited to those payment obligations as so disclosed by the Commercializing Party, with any such payments made [*] under [*] (to the extent [*] applies). In the event that the Commercializing Party does not promptly reimburse the Sublicensing Party for such amounts upon request, then such Third Party Technology shall thereafter be deemed excluded from the Licensed Technology. Notwithstanding the foregoing, neither Party shall utilize in performing the Research Program any Third Party Technology that would impose a royalty or other payment obligation to a Third Party for which the other Party would become responsible under this Section 8.4.2 with respect to a Licensed Product or CK Product, unless the JRC has approved such utilization.

8.5 Enforcement Rights.

8.5.1 Defense and Settlement of Third Party Claims. If a Third Party asserts that a Patent or other right owned by it is infringed by the manufacture, use, sale or importation of any Licensed Product, [*] shall have the primary right but not the obligation to defend against any such assertions at its cost and expense. In the event [*] elects to defend against any such Third Party claims, [*] shall have the sole right to direct the defense of any such Third Party claims and to elect to settle such claims. In any event, the Parties shall assist one another and cooperate in any such litigation at the other's request without expense to the requesting Party. Each Party may at its own expense and with its own counsel join any defense brought by the other Party.

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8.5.2 Infringement by Third Parties.

(a) If any Patent within the Licensed Technology Controlled by CK is infringed by a Third Party in any country in connection with the manufacture, use and sale of a product substantially similar to a Licensed Product in such country, GSK shall have the primary right, but not the obligation to institute, prosecute, and control any action or proceeding with respect to such infringement of such Patent, by counsel of its own choice, and CK shall have the right, at its own expense, to be represented in that action by counsel of its own choice. If GSK fails to bring an action or proceeding within a period of [*] ([*]) days after a request by CK to do so, CK shall have the right to bring and control any such action by counsel of its own choice, and GSK shall have the right to be represented in any such action by counsel of its own choice at its own expense.

(b) If any Patent within the Licensed Technology that is Controlled by GSK is infringed by the manufacture, sale or importation of a product substantially similar to a CK Product, CK shall have the primary

right, but not the obligation, to institute, prosecute, and control any action or proceeding with respect to such infringement of such Patent, by counsel of its own choice, and GSK shall have the right, at its own expense, to be represented in that action by counsel of its own choice. If CK fails to bring an action or proceeding within a period of [*] ([*]) days after a request by GSK to do so, GSK shall have the right to bring and control any such action by counsel of its own choice, and CK shall have the right to be represented in any such action by counsel of its own choice at its own expense.

(c) If one Party brings any such action or proceeding in accordance with this Section 8.5.2, the second Party agrees to be joined as a party plaintiff and to give the first Party reasonable assistance and authority to file and prosecute the suit. The costs and expenses of the Party bringing suit under this Section shall be borne by such Party, and any damages or other monetary awards recovered shall be shared as follows: The amount of such recovery actually received by the Party controlling such action shall first be applied to the out-of-pocket costs of such action, and then shall be shared (a) in the event of an action with respect to an infringing product substantially similar to a Licensed Product, CK shall receive a percentage of such net recovery equal [*] that would have been payable to CK with respect to such Licensed Product (without giving effort to Sections [*] or [*] above) (e.g., if CK were entitled [*] for such Licensed Product, CK would be entitled to receive [*] of the net recovery), and GSK shall be entitled to the remainder of such net recovery; and (b) in the event of an action with respect to an infringing product substantially similar to a CK Product, GSK shall receive a percentage of such net recovery equal to [*] that would be payable to GSK under this Agreement with respect to such CK Product, and CK shall be entitled to the remainder of such net recovery. A settlement or consent judgment or other voluntary final disposition of a suit under this Section 8.5.2(c) may be entered into without the consent of the Party not bringing the suit; provided that such settlement, consent judgment or other disposition does not admit the invalidity or unenforceability of any Patent within the Licensed Technology and provided further, that any rights

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to continue the infringing activity in such settlement, consent judgment or other disposition shall be limited to those rights that the granting Party otherwise has the right to grant.

(d) General. Subject to Paragraphs (a), (b) and (c) above, with respect to jointly owned Patents, each Party may proceed in such manner as the law permits. Each Party shall bear its own expenses, and any recovery obtained by either Party may be retained by such Party unless otherwise agreed.

ARTICLE IX - CONFIDENTIALITY

9.1 Confidentiality: Exceptions. Except to the extent expressly authorized by this Agreement or otherwise agreed in writing, the Parties agree that the receiving Party shall keep confidential and shall not publish or otherwise disclose or use for any purpose other than as provided for in this Agreement any Information and other confidential and proprietary information and materials furnished to it by the other Party pursuant to this Agreement or any Information developed during the term of this Agreement (collectively, "Confidential Information"), except to the extent that it can be established by the receiving Party that such Confidential Information:

(i) was in the lawful knowledge and possession of the receiving Party prior to the time it was disclosed to, or learned by, the receiving Party, or was otherwise developed independently by the receiving Party, as evidenced by written records kept in the ordinary course of

business, or other documentary proof of actual use by the receiving Party;

(ii) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving Party;

(iii) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving Party in breach of this Agreement; or

(iv) was disclosed to the receiving Party, other than under an obligation of confidentiality, by a Third Party who had no obligation to the disclosing Party not to disclose such information to others.

9.2 Authorized Disclosure. Except as expressly provided otherwise in this Agreement, each Party may use and disclose Confidential Information of the other Party as follows: (i) under appropriate confidentiality provisions substantially equivalent to those in this Agreement, in connection with the performance of its obligations or exercise of rights granted or reserved in this Agreement (including the rights to commercialize Licensed Products and CK Products and to grant licenses and sublicenses hereunder), or (ii) to the extent such disclosure is reasonably necessary in filing or prosecuting patent, copyright and trademark applications, complying with the terms of licenses from Third Parties with respect to a Party's Existing Technology, prosecuting or defending litigation, complying with applicable governmental regulations, obtaining regulatory approval, conducting preclinical or clinical trials, marketing Licensed Products or CK Products, or otherwise

required by law, provided, however, that if a Party is required by law or regulation to make any such disclosure of the other Party's Confidential Information it will, except where impracticable for necessary disclosures, for example in the event of medical emergency, give reasonable advance notice to the other Party of such disclosure requirement and, except to the extent inappropriate in the case of patent applications, will use its reasonable efforts to secure confidential treatment of such Confidential Information required to be disclosed or (iii) in communication with investors, consultants, advisors or others on a need to know basis, in each case under appropriate confidentiality provisions substantially equivalent to those of this Agreement, or (iv) to the extent mutually agreed to by the Parties.

9.3 Termination of Prior Agreement. This Agreement supersedes the Confidentiality Agreement between the Parties (or their predecessors) dated [*] (including amendments) and the Materials Transfer Agreement between the Parties dated [*], including all modifications. All information exchanged between the Parties under that Agreement shall be deemed Confidential Information and shall be subject to the terms of this Article IX.

9.4 Publications. Each Party shall submit any proposed publication containing Confidential Information to the other Party at least [*] ([*]) days in advance to allow that Party to review such planned public disclosure. The reviewing Party will promptly review such proposed publication and make any objections that it may have to the publication of Confidential Information of the reviewing Party contained therein. Should the reviewing Party make an objection to the publication of any such Confidential Information, then the Parties shall discuss the advantages and disadvantages of publishing such Confidential Information. If the Parties are unable to agree on whether to publish the same, subject to Section 12.1 below, the JRC shall attempt to resolve the matter. If the JRC is unable to resolve the matter promptly, the Chief Executive Officer of CK and the Chairman, Research and Development, Pharmaceuticals of GSK shall reasonably agree on the extent to which the publication of such Confidential Information shall be made.

9.5 Limit on Disclosure of Information Relating to Mitotic Kinesin Targets. Notwithstanding Section 9.2(i) above:

(a) for both Parties during the Exclusivity Period and any Extension Period, on a Target-by-Target basis with respect to any Mitotic Kinesin Targets that have not been designated as a Collaboration Target or a CK Target,

(b) for CK, for the duration of its obligation under Section 4.2.3 with respect to a particular Collaboration Target and with respect to matters pertaining specifically to such Collaboration Target, and

(c) for GSK, with respect to matters relating to CK Targets, such Party in question shall not disclose to a Third Party any CK Existing Technology, GSK Existing Technology, Collaboration Technology or Post-Collaboration Technology specifically directed to matters within the Field specifically pertaining to such Mitotic Kinesin Target(s), such as

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structure/activity relationship data, target validation data and the like; provided, however, that CK shall have the right to disclose such data in (b) above (other than data that is directed specifically to one or more Mitotic Kinesin Targets other than CK Targets) (i) in connection with research and development on CK Targets, CK Compounds and CK Products, or (ii) in connection with commercialization of CK Products (subject to GSK's CK Product Option under Section 4.5); and provided, further, that GSK shall have the right to disclose such data in (c) above (other than data that is directed specifically to one or more Mitotic Kinesin Targets other than Collaboration Targets) (i) in connection with research and development on Collaboration Targets, Compounds, Development Compounds and Licensed Products, or (ii) in connection with commercialization of Licensed Products. This Section 9.5 shall not be deemed to restrict CK's disclosure of any such Licensed Technology in connection with activities pertaining to (x) performance of its obligations under the Research Program, (y) [*] or [*] after such [*] are excluded from the Field pursuant to Section 2.6.4, or (z) any disclosure authorized under Section 9.2(ii), (iii) or (iv) above.

ARTICLE X - REPRESENTATIONS AND WARRANTIES; COVENANTS AND INDEMNIFICATION

10.1 Representations and Warranties. Each of the Parties hereby represents and warrants and covenants as follows:

(a) This Agreement is a legal and valid obligation binding upon such Party and enforceable in accordance with its terms. Except as otherwise noted in Exhibit 10.1 hereto, the execution, delivery and performance of the Agreement by such Party does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it is bound, nor violate any law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it.

(b) Other than the notification requirements under the Hart-Scott-Rodino ("HSR") Act and approval of the transaction contemplated by this Agreement by the Federal Trade Commission ("FTC"), no government authorization, consent, approval, license, exemption of or filing or registration with any court or governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, under any applicable laws, rules or regulations currently in effect, is or will be necessary for, or in connection with, the transaction contemplated by this Agreement or any other agreement or instrument executed in connection herewith, or for the performance by it of its obligations under this Agreement and such other agreements.

(c) Each Party has not, and during the term of the Agreement will not, grant any right to any Third Party relating to its

respective technology in the Field which conflicts with the rights granted to the other Party hereunder. Each Party will not, during the Exclusivity Period or Extension Period, as applicable, encumber its respective CK Patents or GSK Patents within the Licensed Technology, as applicable, with liens, mortgages, security interests or another similar interest that would give the holder the right to convert the interest into patent ownership, unless the encumbrance is expressly subject to the licenses herein.

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(d) Each Party owns or otherwise controls all of the rights, title and interest in and to its Patents and Know-How within the Licensed Technology.

(e) Each Party has no present knowledge from which it concludes that the CK Patents or GSK Patents within the Licensed Technology, as applicable, are invalid or that their exercise would infringe patent rights of Third Parties.

(f) Each Party has not omitted to furnish the other with any information requested by the other Party, or intentionally concealed from the other Party any information in its possession concerning the Mitotic Kinesin Targets or the transactions contemplated by this Agreement which would be material to the other Party's decision to enter into this Agreement and to undertake the commitments and obligations set forth herein.

10.2 Indemnification.

10.2.1 Indemnification by GSK. GSK hereby agrees to indemnify, defend and hold CK and its agents, directors and employees harmless from and against any and all suits, claims, actions, demands, liabilities, expenses and/or loss, including reasonable legal expense and attorney's fees ("Losses") resulting directly from the development, manufacture, use, handling, storage, sale or other disposition of chemical agents or Licensed Products by GSK, its Affiliates, agents or Sublicensees.

10.2.2 Indemnification by CK. CK hereby agrees to indemnify, defend and hold GSK and its agents, directors and employees harmless from and against any and all Losses resulting directly from the development, manufacture, use, handling, storage, sale or other disposition of chemical agents or CK Products by CK, its Affiliates, agents or Sublicensees.

10.2.3 Procedure. In the event a Party is seeking indemnification under Sections 10.2.1 or 10.2.2, it shall inform the other Party (the "Indemnifying Party") of a claim as soon as reasonably practicable after it receives notice of the claim, shall permit the Indemnifying Party to assume direction and control of the defense of the claim (including the right to settle the claim) and shall cooperate as requested (at the expense of the Indemnifying Party) in the defense of the claim.

10.3. Covenants of the Parties.

(a) Upon the terms and subject to the conditions hereof, each of the Parties hereto shall use its good faith efforts, before the Closing to (i) take, or cause to be taken, all actions necessary, proper or advisable under applicable law or otherwise to consummate and make effective the transactions contemplated by this Agreement, (ii) make all necessary filings, and thereafter make any other advisable submissions, with respect to this Agreement and the transactions contemplated by this Agreement required under the HSR Act; provided that, with respect to this clause (a), neither GSK nor CK shall be required to agree to any modification or amendment that, in the reasonable opinion of the Party's legal and/or financial counsel, would be

adverse to such Party.

The Parties hereto shall cooperate with each other in connection with the making of all such filings. The Parties hereto shall furnish all information required for any application or other filing to be made pursuant to the rules and regulations of any applicable law in connection with the transactions contemplated by this Agreement.

(b) GSK and CK shall file as soon as practicable (but not later than five (5) business days) after the Effective Date notifications under the HSR Act and shall respond as promptly as practicable to all inquiries or requests received from the FTC, the Antitrust Division of the Department of Justice, for additional information or documentation and shall respond as promptly as practicable to all inquiries and requests received from any such authority (including any state attorney general) in connection with antitrust matters. The Parties shall cooperate with each other in connection with the making of all such filings or responses. GSK agrees to pay the filing fees and all associated costs for required HSR filings related to this Agreement.

ARTICLE XI - TERM AND TERMINATION

11.1 Term. Unless earlier terminated, the Agreement and the payment obligations under Article VI will continue in effect, on a product-by-product and country-by-country basis until the later of (i) the expiration of the last to expire Patent within the Licensed Technology covering such Compound or Licensed Product in such country, or (ii) [*] ([*]) years after the date of the first commercial sale of such Licensed Product in such country. Effective upon the expiration (but not earlier termination) of this Agreement, CK hereby grants to GSK a fully-paid-up, royalty-free license under CK Existing Technology and CK's interest in Collaboration Technology and Post-Collaboration Technology to make, have made, use and sell the Development Compounds and Licensed Products in the Territory without further payment or consideration to CK. Effective upon the expiration of this Agreement, GSK hereby grants to CK a fully-paid-up, royalty-free license, under GSK Existing Technology and GSK's interest in Collaboration Technology and Post-Collaboration Technology, to make, have made, use and sell the CK Compounds and CK Products, in the Territory without further payment or consideration to GSK.

11.1.1 Termination Prior to Closing. This Agreement may be terminated at any time prior to the Closing:

(a) by GSK or CK, if all applicable waiting periods for the HSR filing made in connection with this Agreement have not lapsed or been terminated early by August 1, 2001 or the FTC initiates an investigation into the transaction contemplated by this Agreement; or

(b) by GSK or CK, if the Closing has not occurred by August 1, 2001; or

(c) by the mutual written consent of GSK and CK.

11.2 Termination For Breach. Either Party may terminate this Agreement in the event the other Party shall have materially breached or defaulted in the performance of any of its material obligations hereunder, and such default shall have continued for ninety (90) days after written notice

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thereof was provided to the breaching party by the non-breaching party. Any termination shall become effective at the end of such ninety (90) day period unless the breaching party (or any other party on its behalf) has cured any such breach or default prior to the expiration of the ninety (90) day period.

11.3 Termination Upon Notice.

11.3.1 Termination by GSK on Notice. GSK may terminate this Agreement upon [*] ([*]) months written notice to CK, provided that such notice is given after the fifth anniversary of the Effective Date; and provided further that if GSK extends the Research Term in accordance with Section 2.8 above, such termination may not take effect prior to the end of the Research Term.

11.3.2 Termination by GSK on a Product-by-Product Basis. In addition GSK may terminate this Agreement as to any particular Licensed Product by so notifying CK, which termination shall be effective [*] ([*]) months after the date of such notice; provided, however, if the Research Term has ended and as a result of such termination: (i) GSK is not actively performing substantial research and/or development activities with respect to a Collaboration Target or any Compound, Development Compound or Licensed Product directed to the Collaboration Target that is so terminated, and is not then actively marketing a Licensed Product directed to such Collaboration Target, then such Target shall cease to be a Collaboration Target for all purposes of this Agreement, and shall thereafter be deemed a CK Target; or (ii) GSK is not then actively pursuing substantial research and/or development activities or human clinical trials with respect to any Collaboration Target, Compound, Development Compound or Licensed Product directed to any Collaboration Target, and is not then actively marketing a Licensed Product directed to any Collaboration Target, then the termination of such Licensed Product shall be deemed a termination of this Agreement in its entirety under Section 11.3.1 above. This Section 113.2 shall not be deemed to limit Sections 4.2.1 or 7.3.2 above.

11.3.3 Termination by CK on Notice. If at any time after the Research Term the conditions in clause (ii) of Section 11.3.2 above are met (i.e., regardless of whether GSK has formally terminated a particular Licensed Product under Section 11.3.2), CK shall have the right to terminate this Agreement upon [*] ([*]) months notice to GSK.

11.4 Termination on Bankruptcy. Either Party may terminate this Agreement, if, at any time, the other Party shall file in any court or agency pursuant to any statute or regulation of any state or country, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of the Party or of substantially all of its assets, or if the other Party proposes a written agreement of composition or extension of substantially all of its debts, or if the other Party shall be served with an involuntary petition against it, filed in any insolvency proceeding, and such petition shall not be dismissed within [*] ([*]) days after the filing thereof, or if the other Party shall propose or be a party to any dissolution or liquidation, unless in connection with such dissolution or liquidation this Agreement is assigned under Section 12.5, or if the other Party shall make an assignment of substantially all of its assets for the benefit of creditors.

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11.6 Certain Payment Terms.

11.6.1 Milestone Payments. Notwithstanding anything herein to the contrary, GSK shall not be obligated to pay any payment otherwise payable under Section 6.3 as a result of occurrence of a Research Performance Milestone

or under Section 6.4 as the result of occurrence of a Development Milestone if the Research Performance Milestone or Development Milestone occurs after (i) a termination notice is properly given pursuant to Section 11.3 above or (ii) a termination pursuant to Section 11.2 above by reason of a breach by CK. Similarly, in the event that GSK terminates this Agreement with respect to a particular Licensed Product in accordance with Section 11.3.2 above, GSK shall not be obligated to pay any payment under Section 6.4 above as the result of occurrence of a Development Milestone with respect to such terminated Licensed Product if the milestone event occurs after a notice of such termination is properly given by GSK pursuant to Section 11.3.2.

11.7 Effect of Termination.

11.7.1 Termination Prior to Closing. Notwithstanding any other provision of this Agreement, in the event that this Agreement is terminated pursuant to Section 11.1.1, this Agreement shall be deemed terminated ab initio, and notwithstanding Section 11.7.3 below, no provisions of this Agreement shall survive such termination. All amounts paid prior to the date of such termination shall be non-refundable; provided that CK shall promptly reimburse to GSK any amounts paid to CK under Sections 3.1.2 (a), 6.2 or 6.3 above. All Confidential Information disclosed prior to such termination shall be deemed Confidential Information pursuant to the Confidentiality Agreement (as amended) between the Parties dated [*], which Confidentiality Agreement shall survive.

11.7.2 Accrued Rights, Surviving Obligations. Termination, relinquishment or expiration of the Agreement for any reason shall be without prejudice to any obligations which shall have accrued prior to such termination, relinquishment or expiration, including, without limitation, the payment obligations under Article 6 hereof and any and all damages arising from any breach hereunder.

11.7.3 Survival. Except as provided under Section 11.7.1, Articles 1,10,11 and 12 (other than Section 12.2) and Sections 8.1, 8.3, 9.1, and 9.2 shall survive the expiration and any termination of this Agreement; and Article 5 shall survive the expiration but not an earlier termination (except as provided below) of this Agreement. In addition, the following provisions shall survive termination of this Agreement in the events set forth below:

(a) Certain Terminations. In the event of a termination of this Agreement pursuant to Section 11.3, or termination by CK pursuant to Section 11.2: (i) Section 4.4.2 shall survive, and all Licensed Products, Compounds and Collaboration Targets shall be deemed CK Products, CK Compounds and CK Targets, respectively; (ii) without limiting any other provisions of

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this Section 11.7.3, CK's rights and GSK's obligations (but not GSK's rights or CK's obligations) under Sections 2.4, 8.2.3 and 8.4.2 and under the last two sentences of Section 3.2 shall survive; (iii) Sections 5.3 and 5.4.2 shall survive, and in addition, CK shall have an irrevocable, exclusive, worldwide license, with the right to grant and authorize sublicenses, under GSK's interest in the Collaboration Technology and Post-Collaboration Technology, and any trademarks owned by GSK and used specifically by GSK to identify the Licensed Products (excluding the GlaxoSmithKline trade name and trade dress) to make, use, sell, import and otherwise exploit products directed to Mitotic Kinesin Targets for use in the Field (without giving effect to any modification under Section 2.6.4), including the right to practice any invention within such Technology for the purpose of conducting research or development activities directed to such products; and (iv) without limiting the foregoing, GSK's obligations under Section 4.1.1, 4.1.2 and 4.3.2 above shall continue for the

Exclusivity Period as if the Agreement had not been terminated. From and after the date of a notice of termination in the events described in this Section 11.7.3(a), CK shall have no further obligations under this Agreement beyond those obligations that survive termination in such events as specified in this Section 11.7.3.

(b) Breach by CK. In the event of a termination of this Agreement by GSK pursuant to Section 11.2: (i) in the event that such termination occurs before the end of the Research Term, those Lead Targets identified as of the termination effective date but not selected pursuant to Section 2.7 shall become Collaboration Targets, all other Mitotic Kinesin Targets shall revert to CK and the licenses granted to GSK under Section 5.1 shall be expanded to include conducting research independently beyond the Research Term for the purpose of identifying Compounds directed to such Collaboration Targets, without any further payment by GSK to CK (subject to (b)(ii)); (ii) the provisions of Article 6 (other than 6.2) and Sections 5.2 (other than 5.2.4), 5.4, 4.1.3 and 7.3.1, and GSK's rights and CK's obligations (but not CK's rights or GSK's obligations) under Sections 2.4, 8.2.3 and 8.4.2 shall survive and, in addition, GSK shall have an irrevocable, non-exclusive, worldwide license, with the right to grant and authorize sublicenses, under CK's interest in the Collaboration Technology and Post-Collaboration Technology, to make, use, sell, import and otherwise exploit products directed to Collaboration Targets for use in the Field (without giving effect to any modification under Section 2.6.4), including the right to practice any invention within such Technology for the purpose of conducting research or development activities directed to such products; and (iii) without limiting the foregoing, CK's obligations under Section 4.1.1 and 4.1.2 above shall continue for the Exclusivity Period as if the Agreement had not been terminated. From and after the date of a notice of termination in the events described in this Section 11.7.3(b), GSK shall have no further obligations under this Agreement beyond those obligations that survive termination in such events as specified in this Section 11.7.3.

(c) Termination under Section 11.3.3. In the event CK provides notice to GSK of its intent to terminate this Agreement pursuant to Section 11.3.3, then, with respect to any CK Compound or CK Product for which CK had begun IND Enabling Studies that would otherwise be subject to the CK Product Option, but for which CK has not completed [*] ([*]) [*] studies, prior to the date of such notice (each, a "Potential Option Product"), GSK may exercise its CK Product Option pursuant to Section 4.5, as follows:

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(i) Upon request by GSK within thirty (30) days after receiving CK's notice of termination under Section 11.3.3, GSK may request that CK notify GSK of such Potential Option Products (the "GSK Information Request"). Within thirty (30) days after receiving such GSK Information Request, CK shall notify GSK of such Potential Option Products, together with a copy of any IND that has been filed by CK with respect to such Potential Option Product as of the date of such notice by CK (the "CK Notice"). Then, within [*] ([*]) days after GSK's receipt of the CK Notice, GSK may exercise the CK Product Option with respect to such Potential Option Products (i.e., as if CK had completed [*] ([*]) [*] studies for such Potential Option Products and provided GSK a proper CK [*] Notice therefore in accordance with Section 4.5). In such case, and solely for purposes of such case, (i) the first three sentences of Section 4.5 shall not apply to GSK's exercise of the CK Product Option for such Potential Option Products, (ii) notwithstanding Section 4.5.2(d) or any other provision of Section 4.5, CK shall not be obligated to exercise the Co-Funding Option with respect to any Potential Option Product for which GSK exercises the CK Product Option under this Section 11.7.3, and (iii) CK's obligations under Section 4.6 shall thereafter terminate.

(ii) In the event that GSK so exercises

the CK Product Option with respect to one or more Potential Option Products, then CK's notice of termination described above shall not be effective under Section 11.3.3, and this Agreement shall continue in force and effect, subject to the terms and conditions hereof. However, in such case, upon such exercise by GSK, all Collaboration Targets and Unselected Targets shall be deemed CK Targets (notwithstanding Sections 2.7, 2.8, 4.2 or any other provision of this Agreement), all Compounds, Development Compounds and Licensed Products shall be deemed CK Compounds and CK Products, and the CK Product Option shall terminate with respect to all such CK Targets, and all CK Compounds and CK Products directed to such CK Targets (i.e., all rights of GSK under Section 4.5 shall terminate with respect to CK Products directed to all Mitotic Kinesin Targets other than those that were CK Targets at the time of CK's notice of termination under Section 11.3.3). Once GSK has exercised the CK Product Option under this Section 11.7.3(c), GSK shall not have any further right under this Section 11.7.3(c) upon a subsequent termination by CK under Section 11.3.3.

11.8 Termination Not Sole Remedy. Termination is not the sole remedy under this Agreement and, whether or not termination is effected, all other remedies will remain available except as agreed to otherwise herein.

ARTICLE XII - MISCELLANEOUS

12.1 Publicity

12.1.1 Financial Terms. Each of the Parties hereto agrees not to disclose to any Third Party the financial terms of this Agreement without the prior written consent of the other Party hereto, except to advisors, investors and others on a need-to-know basis under circumstances that reasonably ensure the confidentiality thereof, or to the extent necessary to comply with the terms of licenses from Third Parties with respect to a Party's Existing Technology, or to the extent required by law. Notwithstanding the foregoing, following the Effective Date, the Parties shall agree upon a

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press release to announce the execution of this Agreement together with a corresponding Question & Answer outline for use in responding to inquiries about the Agreement; thereafter, GSK and CK may each disclose to Third Parties the information contained in such press release and Question & Answer outline without the need for further approval by the other.

12.1.2 Publicity Review. The Parties acknowledge the importance of supporting each other's efforts to publicly disclose results and significant developments regarding Licensed Products, CK Products and other activities in connection with this Agreement, beyond what is required by law, and each Party may make such disclosures from time to time with the approval of the other Party, which approval shall not be unreasonably withheld or delayed. Such disclosures may include, without limitation, achievement of Research Performance Milestones, Development Milestones, significant events in the research, development and regulatory process with respect to such a Development Compound, Licensed Product or CK Product, commercialization activities and the like. When a Party (the "Requesting Party") elects to make any such public disclosure under this Section 12.1.2, it will give the other Party (the "Cooperating Party") at least five (5) business days notice to review and comment on such statement, it being understood that if the Cooperating Party does not notify the Requesting Party in writing within such five day period of any reasonable objections, as contemplated in this Section 12.1.2, such disclosure shall be deemed approved, and in any event the Cooperating Party shall work diligently and reasonably to agree on the text of any proposed disclosure in an expeditious manner. The principles to be observed in such disclosures shall be accuracy, compliance with applicable law and regulatory guidance documents, reasonable sensitivity to potential negative reactions of

the EDA (and its foreign counterparts) and the need to keep investors informed regarding the Requesting Party's business. Accordingly, the Cooperating Party shall not withhold its approval of a proposed disclosure that complies with such principles.

12.2 Overall Management of Collaboration.

12.2.1 Joint Steering Committee. The Parties shall establish an overall committee ("Joint Steering Committee") to review and coordinate the conduct of the collaboration under this Agreement. The Joint Steering Committee shall be comprised of three (3) members each from CK and GSK, with the members selected from senior management of each Party. Unless otherwise agreed, the Joint Steering Committee shall at all times include [*]. The Joint Steering Committee shall meet at least annually, or as more frequently as is requested by either Party, to review and discuss the performance of the collaboration. All other committees under this Agreement shall be subordinate to the Joint Steering Committee.

12.2.2 Mutual Decisions. CK and GSK shall cause each of their representatives on the JRC, JDC, or any other committee established under this Agreement to vote, and shall otherwise perform their respective activities under this Agreement, in the best interests of the collaboration contemplated herein, including the timely research, development and commercialization of Compounds, Development Compounds, Licensed Products and not in the present or future interest

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of either Party outside the collaboration. Where this Agreement calls for specified officers of CK and GSK to meet and resolve a particular issue, each Party shall make its respective officer reasonably available for an in-person meeting on at least three particular dates and times within the thirty (30) days after the request.

12.3 Short-Form Arbitration.

12.3.1 Certain Disputes.

(a) If the Parties do not agree upon (i) a matter to be decided by the IDC, or the JCC, for which [*] does not have the right to [*] (i.e., pursuant to the last sentence of Section [*], or under Section [*], above) or the JRC (e.g., pursuant to Sections 2.2 and 2.3.2); or (ii) the royalty terms to be established under Section 4.7 above; (iii) whether one or more amounts are required to be reimbursed under Section 3.4.4 or 4.5.2(a); or (iv) a dispute under Section 6.12, 6.13 or 6.14 above, then such matters in issue shall be determined by binding arbitration conducted pursuant to this Section 12.3.1 by one (1) arbitrator. In such arbitration, the arbitrator shall be an independent expert (including in the area of the dispute) in the pharmaceutical or biotechnology industry mutually acceptable to the Parties. If the Parties are unable to agree on an arbitrator, the arbitrator shall be an independent expert as described in the preceding sentence selected by the chief executive of the Chicago office of the American Arbitration Association.

(b) In the event of a dispute under (a) above, (i) each Party shall prepare a written report setting forth its position with respect to the substance of the dispute and (ii) in the case of a dispute under (a)(i), (a)(ii) or (a)(iv) above (but not under (a)(iii)), the arbitrator shall select one of the Party's positions as his decision, and shall not have authority to render any substantive decision other than to so select the position of either GSK or CK. Except as provided in the preceding clause (ii) such arbitration shall be conducted in all respects under the rules of the

American Arbitration Association.

(c) The costs of any arbitration under this Section 12.3.1 shall be shared equally by the Parties, and each Party shall bear its own expenses in connection with such arbitration. The Parties shall use diligent efforts to cause the completion of any such arbitration within ninety (90) days following a request by any Party for such arbitration.

12.3.2 Disputes as to CK Products. In the event that GSK disputes under Section 2.6.4 or 4.5 above CK's right to develop or otherwise commercialize products under Section 2.6.4 or 4.5 above, GSK shall initiate an arbitration proceeding under this Section 12.3.2 within [*] ([*]) days of its receipt of notice from CK that CK intends to so develop or otherwise commercialize such a compound, product or Mitotic Kinesin Target. If GSK does not initiate such arbitration within such [*] ([*]) day period, it shall have no further right to dispute CK's right to develop and commercialize such compound(s), product(s) or Target(s). Any such dispute shall be finally settled by binding arbitration in Chicago under the Licensing Rules of American Arbitration Association by a single arbitrator appointed in accordance with such rules. The arbitrator shall be a retired federal judge with experience trying patent cases, and the Parties shall use their respective best efforts to

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obtain a final determination by the arbitrator within sixty (60) days after the initiation of such proceeding. THE FOREGOING REMEDY SHALL BE THE PARTIES' SOLE AND EXCLUSIVE REMEDY WITH RESPECT TO ANY DISPUTE DESCRIBED IN THIS SECTION 12.3.2.

12.3.3 Retention of Rights. Nothing in this Section 12.3 shall preclude GSK or CK from resorting to judicial or equitable remedies for any disputes not within Section 12.3.1 or 12.3.2.

12.4 Governing Law. This Agreement and any dispute arising from the performance or breach hereof shall be governed by and construed and enforced in accordance with the laws of the [*], U.S.A., without reference to conflicts of laws principles.

12.5 Assignment.

12.5.1 General. This Agreement shall not be assignable by either Party to any Third Party hereto without the written consent of the other Party hereto. Notwithstanding the foregoing, either Party may assign this Agreement, without the written consent of the other Party, to an Affiliate or to an entity that acquires all or substantially all of the business or assets of such Party to which this Agreement pertains (whether by merger, reorganization, acquisition, sale or otherwise), and agrees in writing to be bound by the terms and conditions of this Agreement. Notwithstanding the foregoing, either Party may assign and/or delegate any rights and/or obligations hereunder without the consent of the other Party to an Affiliate that is at least ninety percent (90%) owned by such Party, or, in the case of GSK, to an Affiliate that is at least ninety percent (90%) owned, directly or indirectly, by the ultimate parent of Glaxo Group Limited (for so long as such Party or parent maintains at least that level of ownership); provided in each case, however, that such assignment shall not relieve the assigning Party of any of its obligations hereunder. It is understood that the provisions of Section 12.5.2 shall apply in the event of assignment of this Agreement under the circumstances described therein. If any permitted assignment would result in withholding or other similar taxes becoming due on payments to the other Party under this Agreement, the assigning Party shall be responsible for all such taxes and the amount of such taxes shall not be withheld or otherwise deducted from the amounts payable to such other Party. If, in such event, such other Party actually reduces the amount of income tax

paid by such Party as a result of using a credit for the amount of such withholding or similar taxes paid by the assigning Party, then such other Party shall promptly refund to the assigning Party the amount of such reduction in income tax resulting from the use of such credit. No assignment and transfer shall be valid and effective unless and until the assignee/transferee shall agree in writing to be bound by the provisions of this Agreement. The terms and conditions of this Agreement shall be binding on and inure to the benefit of the permitted successors and assigns of the Parties.

12.5.2 Certain Matters Relating to Acquisitions. In the event of an assignment of this Agreement to a Third Party, or another transaction in which a Third Party becomes an Affiliate of CK that controls CK (as "control" is defined in Section 1.2 above) (each such event, a "Subject Transaction"), then the following shall apply:

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(a) Notwithstanding the definitions of Collaboration Technology, Post-Collaboration Technology, CK Patents and CK Know-How, CK Existing Technology, Cytometrix Technology, Compounds, Development Compounds, Licensed Products, CK Compounds, CK Products, CK Library Compounds, or Mitotic Kinesin Targets (together, "Collective CK Technologies"), the Collective CK Technologies shall not include any intellectual property or subject matter (the "Previously Existing Subject Matter") that, prior to the Subject Transaction, was held or Controlled by such Third Party (or an Affiliate of such Third Party that was not an Affiliate of CK at the time of such assignment or transaction, each such Third Party and Affiliate being referred to as a "Subsequently Affiliated Company") and GSK shall have no right or license under this Agreement to any such Previously Existing Subject Matter except as may be agreed under Section 12.5.2(b)(i) or (b)(ii) below.

(b) If, at the time of the Subject Transaction, the Subsequently Affiliated Company had [*], or [*] for the [*] of [*] to [*] which is then subject to [*] under [*] or [*], then:

(i) CK in its sole discretion, may elect to [*], including any [*], with the [*] efforts under this Agreement, on the same terms and conditions.

(ii) If CK does not make the election in (i), then, on request by either Party, GSK and CK shall meet, together with representatives of the Subsequently Affiliated Company, to discuss [*] to [*] activities, including all relevant [*], on such terms as the parties may agree. It is understood that any such [*] would [*] involve a [*] of the [*] granted to CK and GSK hereunder. It is understood, however, that neither GSK nor CK shall be obligated to enter into any agreement to so [*]. In the event the Parties do not agree to so [*], then the provisions of subparagraphs (iii)-(vii) below shall apply.

(iii) Following the Subject Transaction, the [*] immediately prior to the Subject Transaction (the "[*]") shall [*] and [*] to those that were [*] to research activities (A) in the Research Program and (B) which generate [*] that would reasonably accrue to the Research Program or that are reasonably necessary for CK to fulfill its obligations under the Research Program, to the extent CK would otherwise have [*] and [*] had the Subject Transaction not occurred. The obligations under this paragraph (b)(iii) shall terminate on the [*] of the Effective Date of this Agreement.

(iv) [*] shall not disclose non-public Collaboration Technology, Post-Collaboration Technology or GSK Existing Technology to any Subsequently Affiliated Company for use in connection with the research, development or commercialization of products within the Field, the

primary mode of pharmacological action of which is through the

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inhibition of one or more Mitotic Kinesin Targets, other than those CK Targets for which the CK Product Option under Section 4.5 above does not apply at that time (i.e., CK Products directed to such CK Targets would not be subject to the CK Product Option) (such Mitotic Kinesin Targets, excluding such CK Targets, being referred to as "Restricted Mitotic Kinesin Targets"), unless [*] could have disclosed such item to a Third Party.

(v) No Subsequently Affiliated Company shall have any license under Collaboration Technology, Post-Collaboration Technology, GSK Existing Technology, or CK Existing Technology for any purpose unless such license could also be granted to a Third Party herein.

(vi) The Parties shall use diligent efforts to put procedures in place to [*] of GSK or CK Confidential Information to a Subsequently Affiliated Company that would not [*] Third Party herein and to prevent [*] of any [*], including requiring each Party's representatives on the JRC, JDC, JSC and any employees performing research in connection with this Agreement to [*] agreeing to comply with the [*] of this Agreement. Without limiting the foregoing, any employee of [*] immediately prior to the Subject Transaction who is transferred to a Subsequently Affiliated Company shall [*] with respect to a Restricted Mitotic Kinesin Target at any Subsequently Affiliated Company or in collaboration with personnel of such Subsequently Affiliated Company, for so long as [*] activities with respect to such Restricted Mitotic Kinesin Target are prohibited under Section 4.1.2 or 4.2.3 above.

(vii) Notwithstanding the foregoing, the conditions of subparagraphs (iii)-(vi) above shall be deemed satisfied in all respects, if such [*] (or its successor) is maintained and operated as an independent company. Such entity shall be deemed to be operated as an independent company if, after the Subject Transaction (A) [*] can remain fully bound under all terms and conditions of this Agreement, (B) [*] has the capability to perform as would have CK prior to the Subject Transaction for all purposes under this Agreement and (C) [*] and the Subsequently Affiliated Company contractually commit that there shall be no disclosures or licenses with respect to Licensed Technology under this Agreement from [*] to the Subsequently Affiliated Company that would not have been either (x) permitted to be disclosed or granted to a Third Party under this Agreement or (y) permitted to be used or disclosed by CK for its independent efforts under this Agreement.

(c) Unless this Agreement is [*] under Section 12.5.2(b)(i) or (ii) above, the Collective CK Technologies shall not include any intellectual property or subject matter created or acquired by such Subsequently Affiliated Company following the Subject Transaction, and no activities of the Subsequently Affiliated Company shall be deemed within the Research Program. It is understood, however, that if Cytokinetics, Inc. (i.e., the Party to this Agreement) is legally merged with and into another corporate entity, then the resulting merged corporate entity shall be fully bound by all provisions of this Agreement and shall not be a "Subsequently Affiliated Company" under this Section 12.5.2.

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(d) Subject to the foregoing and paragraph (b) above, Sections 4.1.2 and 4.2.3 shall not apply with respect to activities of the Subsequently Affiliated Company. In addition, subject to paragraph (b) above, Section 2.6.4(b) shall not apply to a Subsequently Affiliated Company, and no officer or representative of a Subsequently Affiliated Company shall be required or permitted to serve on the JRC or JSC (e.g., under Section 2.2(a) above).

12.5.3 Certain Additional Matters on Change of Control of CK. Notwithstanding the provisions of Section 12.5.2, in the event CK assigns this Agreement (i) to [*] [*] US Dollars ($[*]), or in (ii) the event that CK merges or consolidates or enters into a similar transaction with such a pharmaceutical or biotechnology entity in which such entity becomes an Affiliate of CK, and, in either case, then upon request by GSK, the Parties will each use their respective diligent efforts to put procedures into place to [*] under any of Section 2.2, 3.2, 3.5, 7.2 and/or 7.4 above, including, without limitation, requiring each Party's representatives on the JRC, JDC, JSC and any employees performing research in connection with this Agreement to [*] agreeing to comply with the [*] of this Agreement. It is understood that the provisions of Section 12.5.2 may also apply in the event of the occurrence of the events described in this Section 12.5.3.

12.6 Performance Warranty. Each Party hereby warrants and guarantees the performance of any and all rights and obligations by its Affiliate(s).

12.7 Notices. All notices, requests and communications hereunder shall be in writing and shall be personally delivered or sent by facsimile transmission (confirmed by prepaid registered or certified mail, return receipt requested or by international express delivery service) (e.g., Federal Express), mailed by registered or certified mail (return receipt requested), postage prepaid, or sent by international express courier service, and shall be deemed to have been properly served to the addressee upon receipt of such written communication, to following addresses of the Parties, or such other address as may be specified in writing to the other Party hereto:

IF TO CK,

ADDRESSED TO: CYTOKINETICS, INC.
280 East Grand Avenue
South San Francisco, California 94080
Attention: Robert Blum,
Vice President, Business Development
Telephone: (650) 624-3002
Telecopy: (650) 624-3010

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WITH COPY TO: WILSON SONSINI GOODRICH & ROSATI
PROFESSIONAL CORPORATION
650 Page Mill Road
Palo Alto, CA 94304-1050
Attention: Kenneth A. Clark, Esq.
Telephone: (650) 493-9300
Telecopy: (650)493-6811

IF TO GSK,

ADDRESSED TO: GLAXO GROUP LIMITED, DOING BUSINESS AS GLAXOSMITHKLINE
709 Swedeland Road
King of Prussia, Pennsylvania 19406
Attention: Vice President, Business Development

Telephone: (610) 270-5973
Telecopy: (610) 270-5962

WITH A COPY TO: GLAXOSMITHKLINE
Corporate Legal Department
One Franklin Plaza
200 N. 16th Street/FP 2360
Philadelphia, PA 19103
Attention: Senior Vice President and Assistant
General Counsel-R&D Legal Operations
Telephone: 215-751-4000
Telecopy: 215-751-3935

12.8 Waiver. Neither Party may waive or release any of its rights or interests in this Agreement except in writing. The failure of either Party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition. No waiver by either Party of any condition or term in any one or more instances shall be construed as a continuing waiver of such condition or term or of another condition or term.

12.9 Severability. If any provision hereof should be held invalid, illegal or unenforceable in any jurisdiction, the Parties shall negotiate in good faith a valid, legal and enforceable substitute provision that most nearly reflects the original intent of the Parties and all other provisions hereof shall remain in full force and effect in such jurisdiction and shall be liberally construed in order to carry out the intentions of the Parties hereto as nearly as may be possible. Such invalidity, illegality or unenforceability shall not affect the validity, legality or enforceability of such provision in any other jurisdiction. In the event a Party seeks to avoid a provision of this Agreement by asserting that such provision is invalid, illegal or otherwise unenforceable, the other Party shall have the right to terminate this Agreement upon sixty (60) days' prior written notice to the asserting Party, unless such assertion is eliminated and the effect of such assertion cured within such sixty (60) day period. Any termination in accordance with the foregoing sentence shall be deemed a termination pursuant

to Section 11.3.1 if the Party who made such assertion was GSK, and shall be deemed a termination under Section 11.2 by reason of a breach by CK, if CK is the Party who made such assertion.

12.10 Entire Agreement. This Agreement and the accompanying Stock Purchase Agreement set forth all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties hereto and supersede and terminate all prior agreements and understanding between the Parties. There are no covenants, promises, agreements, warranties, representations, conditions or understandings, either oral or written, between the Parties other than as set forth herein and therein. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties hereto unless reduced to writing and signed by the respective authorized officers of the Parties.

12.11 Independent Contractors. Nothing herein shall be construed to create any relationship of employer and employee, agent and principal, partnership or joint venture between the Parties. Each Party is an independent contractor. Neither Party shall assume, either directly or indirectly, any liability of or for the other Party. Neither Party shall have the authority to bind or obligate the other Party and neither Party shall represent that it has such authority.

12.12 Headings. Headings used herein are for convenience only and shall not in any way affect the construction of or be taken into consideration in interpreting this Agreement.

12.13 Counterparts. This Agreement may be executed in two counterparts, each of which shall be deemed an original, and all of which together, shall constitute one and the same instrument.

ARTICLE XIII - CLOSING

13.1 Upon the terms and subject to the conditions of this Agreement, the closing of this Agreement and the closing of the Stock Purchase Agreement shall take place at a closing (the "Closing") to be held at the offices of Wilson Sonsini Goodrich & Rosati, at 10:00 A.M. Pacific Daylight Time on such date as agreed by the Parties (the "Closing Date"), or at such other place or at such other time contemporaneous with satisfaction of the last closing condition as GSK and CK may mutually agree upon in writing.

IN WITNESS WHEREOF, the Parties have executed this Agreement in duplicate originals by their duly authorized representatives as of the date and year first above written.

CYTOKINETICS, INC.	GLAXO GROUP LIMITED, A GLAXOSMITHKLINE CORPORATION
By: /s/ James H. Sabry	By: /s/ Tadataka Yamada
Name: James H. Sabry, M. D., Ph. D.	Name: Dr. Tadataka Yamada
Title: President and CEO	Title: Chairman, R&D
Date: June 20, 2001	Date: 6/20/01

EXHIBIT 1.17

COMPOUND CRITERIA

[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT 1.55

[*] PROGRAM ACTIVITIES

[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT 1.65

TRACTABLE COMPOUND CRITERIA

[*]

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EXHIBIT 2.5

DEVELOPMENT COMPOUND CRITERIA

[*]

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EXHIBIT 4.5.1

CLINICAL REPORT FORM

[*]

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EXHIBIT 6.3.2

FEASIBILITY STUDY

[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT 6.3.2(b)

[*]

[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT 6.4.4

[*]

[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT 10.1

THIRD PARTY AGREEMENTS

EFFECTIVE DATE	COMPANY/CONSULTANT	AGREEMENT WITH CYTOKINETICS

[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 10.18

[*] CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 406 OF THE SECURITIES EXCHANGE ACT OF 1933, AS AMENDED.

MEMORANDUM

June 20, 2001

Cytokinetics, Inc.
280 East Grand Avenue
South San Francisco, CA 94080

Glaxo Group Limited
709 Swedeland Road
King of Prussia, PA 19406

Reference is made to the Collaboration and License Agreement dated June 20, 2001 between Cytokinetics, Inc. and Glaxo Group Limited (the "Collaboration Agreement"). The criteria to be agreed by the Parties as described in Section 1.49 shall be those criteria attached to this Memorandum as Appendix I and incorporated herein. The Research Plan referenced in Section 1.58 shall be the Research Plan attached to this Memorandum as Appendix II and incorporated herein.

It is understood and agreed that this letter shall not be deemed superseded or terminated by reason of Section 12.10 of the Collaboration Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement in duplicate originals by their duly authorized representatives as of the date and year first above written.

CYTOKINETICS, INC.

By: /s/ James H. Sabry
Name: James H. Sabry, M.D., Ph.D.
Title: President and CEO
Date: June 20, 2001

GLAXO GROUP LIMITED,
A GLAXOSMITHKLINE CORPORATION

By: /s/ Tadataka Yamada
Name: Dr. Tadataka Yamada
Title: Chairman, R&D
Date: 6/20/01

APPENDIX I

CRITERIA FOR MITOTIC KINESIN TARGET

"Mitotic Kinesin Targets" include the human kinesin proteins KSP; [*] and [*] as exemplified by

1. the [*] listed in (A); and

2. those other human proteins that meet the following criteria

   a. [*]

   b. the kinesin plays a role in mitosis as evidenced by

      i. [*]

      ii. [*]

A. [*] OF MITOTIC KINESINS

[*]

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[*]

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[*]

KSP

[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

[*]

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[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

[*]

B. Mitotic Kinesin [*]

[*]

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[*]

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omitted portions.

APPENDIX II - PART A

JOINT GSK-CK RESEARCH PLAN
MAY 7, 2001

2001 OBJECTIVES & Activities

LOGISTICAL ISSUES TO BE ADDRESSED (Q3)

MAJOR GOALS

- [*]

NON-KSP
MAJOR GOALS

- [*]

1. [*]

- [*]

[*]

2. [*]

- [*]

[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

APPENDIX II - PART A
JOINT GSK-CK RESEARCH PLAN
MAY 7, 2001

3. [*]

- [*]

[*]

4. [*] ([*] KSP) [*]

- [*] ([*] KSP)

- [*]

[*]

5. [*]

- [*]

[*]

6. [*]

- [*]

[*]

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APPENDIX II - PART A
JOINT GSK-CK RESEARCH PLAN
MAY 7, 2001

KSP
MAJOR GOALS

- [*]

1. [*]

- [*]

[*]

2. [*]

- [*]

[*]

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APPENDIX II - PART A
JOINT GSK-CK RESEARCH PLAN
MAY 7, 2001

3. [*]

- [*]

[*]

4. [*]

[*]

5. [*]

[*]

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APPENDIX II - PART A
JOINT GSK-CK RESEARCH PLAN
MAY 7, 2001

GSK-CK ALLIANCE, EFFORTS BY YEAR

2001	2002	2003	2004	2005
[*]				

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APPENDIX II - PART B

CYTOKINETICS/GSK
RESEARCH PLAN

1. [*]

[*]

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APPENDIX II - PART B
CYTOKINETICS/GSK
RESEARCH PLAN

2. [*]

[*]

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APPENDIX II - PART B
CYTOKINETICS/GSK
RESEARCH PLAN

3. [*]

[*]

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APPENDIX II - PART B
CYTOKINETICS/GSK
RESEARCH PLAN
[*]

4. [*]

[*]

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APPENDIX II -PART B
CYTOKINETICS/GSK
RESEARCH PLAN

5. [*]

[*]

6. [*]

[*]

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Exhibit 10.19

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[CYTOKINETICS LOGO]

280 East Grand Avenue
South San Francisco, CA 94080
Tel (650) 624-3000 Fax (650) 624-3010

October 28, 2002

Glaxo Group Limited, doing business as GlaxoSmithKline
709 Swedeland Road
King of Prussia, Pennsylvania 19406
Attn: Pradip K. Bhatnagar, Ph.D., Director, Genetic & Discovery Alliances

RE: [*] UNDER THAT CERTAIN COLLABORATION AND LICENSE AGREEMENT BY AND BETWEEN GLAXO GROUP LIMITED, A GLAXOSMITHKLINE COMPANY, ("GSK") AND CYTOKINETICS, INC. ("CK") OF EVEN DATE JUNE 20, 2001 (THE "COLLABORATION AGREEMENT").

Dear Pradip:

Pursuant to this letter amendment to the Collaboration Agreement (the "Letter Amendment"), GSK desires to have CK [*], and CK agrees to [*], [*] as part of the Research Program under the Collaboration Agreement, all on the terms set forth herein.

Now therefore, GSK and CK agree, effective as of October 1, 2002 (the "Letter Amendment Effective Date"), as follows:

1. All capitalized terms not defined herein shall have the meaning ascribed to them in the Collaboration Agreement.

2. In accordance with the budget and timeline set forth in Attachment A (attached hereto and incorporated herein by reference), CK shall use its diligent efforts to [*] by [*].

3. The [*] to be [*] under this Letter Amendment shall be selected as agreed by the Parties [*] set forth in Attachment B (attached hereto and incorporated herein by reference).

4. GSK shall use its diligent efforts to resupply to CK sufficient quantities of those chemical entities requested by CK to conduct such [*] in order that CK may diligently conduct its activities in accordance with the budget and timeline set forth in Paragraph 2 above.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

5. In consideration for such [*], GSK shall pay to CK [*] U.S. Dollars (U.S.$[*]) in two (2) installments as follows:

5.1 GSK shall pay to CK [*] U.S. Dollars (U.S.$[*]) on the Letter Amendment Effective Date; and

5.2 GSK shall pay to CK [*] U.S. Dollars (U.S.$[*]) on [*] .

6. Except as specifically modified or amended hereby, the Collaboration Agreement shall remain in full force and effect and, as modified or amended, is hereby ratified, confirmed and approved. No provision of this Letter Amendment may be modified or amended except expressly in a writing signed by both parties nor shall any terms be waived except expressly in a writing signed by the party charged therewith. This Letter Amendment shall be governed in accordance with the laws of the [*] , without regard to principles of conflicts of laws.

Please sign and return two copies of this letter if you agree to the foregoing terms.

Sincerely,

/s/ Robert I. Blum

Robert I. Blum
Senior Vice President, Finance and Corporate Development
Chief Financial Officer
Cytokinetics, Inc.

Agreed and accepted:

GLAXO GROUP LIMITED

/s/ Pradip K. Bhatnagar

Name: Pradip K. Bhatnagar

Title: Director, Genetic & Discovery Alliances

cc: Vice President, Business Development, Glaxo Group Limited, doing business as GlaxoSmithKline
Senior Vice President and Assistant General Counsel-R&D Legal Operations, GlaxoSmithKline Corporate Legal Department
Kenneth A. Clark, Esq., Wilson Sonsini Goodrich & Rosati Professional Corporation

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

ATTACHMENT A
CYTOKINETICS/GSK [*]

PLAN B [*]		Oct	Nov	Dec	2002	Jan	Feb	2003
FTE expenses	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
[*] work associated with [*]	[*]		[*]	[*]	[*]			
Capital Equipment	[*]	[*]			[*]			
Leased Equipment	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
Total	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]

CONFIDENTIAL

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Attachment B

[*]

CONFIDENTIAL

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Exhibit 10.20

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280 East Grand Avenue
South San Francisco, CA 94080
[CYTOKINETICS LOGO] Tel (650) 624-3000 Fax (650) 624-3010

November 5, 2002

Glaxo Group Limited, doing business as GlaxoSmithKline
709 Swedeland Road
King of Prussia, Pennsylvania 19406
Attn: Pradip K. Bhatnagar, Ph.D., Director, Genetic & Discovery Alliances

RE: ASSIGNMENT OF GSK MEDICINAL CHEMISTRY PERSONNEL TO HIT-TO-LEAD ACTIVITIES UNDER THAT CERTAIN COLLABORATION AND LICENSE AGREEMENT BY AND BETWEEN GLAXO GROUP LIMITED, A GLAXOSMITHKLINE COMPANY, ("GSK") AND CYTOKINETICS, INC. ("CK") OF EVEN DATE JUNE 20, 2001 (the "COLLABORATION AGREEMENT")

Dear Pradip:

Pursuant to this letter amendment to the Collaboration Agreement (the "Letter Amendment"), GSK desires to assign certain medicinal chemistry personnel within GSK to perform hit-to-lead activities as part of the Research Program under the Collaboration Agreement, all on the terms set forth herein.

Now therefore, GSK and CK agree, effective as of November 5, 2002 (the "Letter Amendment Effective Date"), as follows:

1. All capitalized terms not defined herein shall have the meaning ascribed to them in the Collaboration Agreement.

2. GSK may assign medicinal chemistry personnel (other than CK FTEs) within GSK's high-throughput chemistry resource (the "HTC Resource") at the rate (i.e., a running rate) of [*] ([*]) full-time equivalents or more, solely to perform Hit-To-Lead activities under the Research Program relating to a particular Mitotic Kinesin Target, without such assignment and Hit-To-Lead activities accruing toward the [*] ([*]) FTE limit of establishing a [*] Program pursuant to Section 2.6.2(a).

3. Notwithstanding the foregoing, if a Tractable Compound has been identified with respect to a particular Mitotic Kinesin Target, the assignment by GSK of any medicinal chemistry personnel (other than CK FTEs) to perform activities relating to such Mitotic Kinesin Target, including without limitation any medicinal chemistry personnel within the HTC Resource and regardless of the activities of such personnel, shall accrue towards the [*] ([*]) FTE limit of establishing a [*] Program pursuant to Section 2.6.2(a).

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

4. As used herein, "Hit-To-Lead" shall mean those activities directed to the process of synthesizing and identifying active new chemical entities up to and including identification of a compound that meets the Tractable Compound Criteria. It is understood that activities directed to the subsequent synthetic modification and testing of a Tractable Compound are not included in Hit-To-Lead.

5. Except as specifically modified or amended hereby, the Collaboration Agreement shall remain in full force and effect and, as modified or amended, is hereby ratified, confirmed and approved. No provision of this Letter Amendment may be modified or amended except expressly in a writing signed by both parties nor shall any terms be waived except expressly in a writing signed by the party charged therewith. This Letter Amendment shall be governed in accordance with the laws of the [*], without regard to principles of conflicts of laws.

Please sign and return two copies of this letter if you agree to the foregoing terms.

Sincerely,

/s/ Robert I. Blum

Robert I. Blum
Senior Vice President, Finance and Corporate Development
Chief Financial Officer
Cytokinetics, Inc.

Agreed and accepted:

GLAXO GROUP LIMITED

/s/ Pradip K Bhatnagar

Name: PRADIP K BHATNAGAR

Title: DIRECTOR, Genetic & Discovery Alliances

cc: Vice President, Business Development, Glaxo Group Limited, doing business as GlaxoSmithKline
Senior Vice President and Assistant General Counsel-R&D Legal Operations, GlaxoSmithKline Corporate Legal Department
Kenneth A. Clark, Esq., Wilson Sonsini Goodrich & Rosati Professional Corporation

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Exhibit 10.21

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280 East Grand Avenue
South San Francisco, CA 94080
[CYTOKINETICS LOGO] Tel (650) 624-3000 Fax (650) 624-3010

December 13, 2002

Glaxo Group Limited, doing business as GlaxoSmithKline
709 Swedeland Road
King of Prussia, Pennsylvania 19406
Attn: Pradip K. Bhatnagar, Ph.D., Director, Genetic & Discovery Alliances

RE: DEFINITION OF TOOL COMPOUND AND USE THEREOF UNDER THAT CERTAIN COLLABORATION AND LICENSE AGREEMENT BY AND BETWEEN GLAXO GROUP LIMITED, A GLAXOSMITHKLINE COMPANY, ("GSK") AND CYTOKINETICS, INC. ("CK") OF EVEN DATE JUNE 20, 2001 (THE "COLLABORATION AGREEMENT")

Dear Pradip:

Pursuant to this letter amendment to the Collaboration Agreement (the "Letter Amendment"), GSK and CK desire to use certain tool compounds arising under the Collaboration Agreement, all on the terms set forth herein.

Now therefore, GSK and CK agree, effective as of December 13, 2002 (the "Letter Amendment Effective Date"), as follows:

1. All capitalized terms not defined herein shall have the meaning ascribed to them in the Collaboration Agreement.

2. A "Tool Compound" shall mean any Compound, including but not limited to [*] and [*], not designated nor intended to be designated as a Development Compound, and that the JRC has approved for distribution to Third Parties for the conduct of studies that may result in the subsequent publication of the results of such studies; provided that, such results are not to be reportable to the FDA. At the time of such approval by the JRC, the composition of matter and method of use of such Tool Compound shall be covered by a Patent within the Licensed Technology.

3. The JRC may amend the definition of Tool Compound at any time, such amendments to be reflected in agreed and approved minutes of JRC meetings; provided, once a Compound has met the definition of Tool Compound it shall remain a Tool Compound, unless and until otherwise mutually agreed in writing by the Parties.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

4. Notwithstanding Sections 1.13, 1.53 and 5.7, and the restrictions on use and disclosure set forth in Sections 4.1 and 9.5, of the Collaboration Agreement, each Party shall have the right to use Tool Compounds, and information relating thereto, outside the Research Program for the sole purpose of generating negative control information in studies directed to the research, discovery and development of compounds based on their activity in directly modulating a target other than a Mitotic Kinesin Target, and Collaboration Technology and/or Post-Collaboration Technology shall not include any inventions and/or results that arise from such use.

5. Except as specifically modified or amended hereby, the Collaboration Agreement shall remain, in full force and effect and, as modified or amended, is hereby ratified, confirmed and approved. No provision of this Letter Amendment may be modified or amended except expressly in a writing signed by both Parties nor shall any terms be waived except expressly in a writing signed by the Party charged therewith. This Letter Amendment shall be governed in accordance with the laws of the [*], without regard to principles of conflicts of laws.

Please sign and return two copies of this letter if you agree to the foregoing terms.

Sincerely,

/s/ Robert I. Blum

Robert I. Blum
Senior Vice President, Finance and Corporate Development
Chief Financial Officer
Cytokinetics, Inc.

Agreed and accepted:

GLAXO GROUP LIMITED

/s/ Pradip Bhatnagar

Name: Pradip Bhatnagar, Ph.D.

Title: Alliance Management, Director

cc: Vice President, Business Development, Glaxo Group Limited, doing business as GlaxoSmithKline
Senior Vice President and Assistant General Counsel-R&D Legal Operations, GlaxoSmithKline Corporate Legal Department
Kenneth A. Clark, Esq., Wilson Sonsini Goodrich & Rosati Professional Corporation

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Exhibit 10.22

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[CYTOKINETICS LOGO]

280 East Grand Avenue
South San Francisco, CA 94080
Tel (650) 624-3000 Fax (650) 624-3010

July 11, 2003

Glaxo Group Limited, doing business as GlaxoSmithKline
709 Swedeland Road
King of Prussia, Pennsylvania 19406
Attn: Pradip K. Bhatnagar, Ph.D., Director, Genetic & Discovery Alliances

RE: ASSIGNMENT OF GSK MEDICINAL CHEMISTRY PERSONNEL TO HIT-TO-LEAD ACTIVITIES UNDER THAT CERTAIN COLLABORATION AND LICENSE AGREEMENT BY AND BETWEEN GLAXO GROUP LIMITED, A GLAXOSMITHKLINE COMPANY, ("GSK") AND CYTOKINETICS, INC. ("CK") OF EVEN DATE JUNE 20, 2001 (THE "COLLABORATION AGREEMENT")

Dear Pradip:

Pursuant to that certain letter amendment to the Collaboration Agreement of even date November 5, 2002 (the "Letter Amendment"), GSK and CK agreed to amend the Collaboration Agreement in order to allow GSK to assign certain medicinal chemistry personnel within GSK to perform hit-to-lead activities as part of the Research Program under the Collaboration Agreement without such assignment accruing toward the [*] ([*]) FTE limit of establishing a [*] Program pursuant to Section 2.6.2(a) of the Collaboration Agreement.

Pursuant to this letter amendment to the Collaboration Agreement (the "H2L Letter Amendment"), GSK and CK desire to void such Letter Amendment in its entirety and replace it with this H2L Letter Amendment, all on the terms set forth herein.

Now therefore, GSK and CK agree, effective as of November 5, 2002 (the "H2L Letter Amendment Effective Date"), as follows:

1. All capitalized terms not defined herein shall have the meaning ascribed to them in the Collaboration Agreement.

2. The Letter Amendment shall be void and have no force or effect as between the parties, effective November 5, 2002.

3. GSK may assign chemistry personnel (other than CK FTEs) within GSK's chemistry resource at the rate (i.e., a running rate) of [*] ([*]) full-time equivalents or more, solely to perform Hit-To-Lead activities under the Research Program relating to a particular Mitotic Kinesin Target, without such assignment and Hit-To-Lead activities accruing toward the [*]([*]) FTE limit of establishing a [*] Program pursuant to Section 2.6.2(a).

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

4. Notwithstanding the foregoing, if a Tractable Compound has been identified with respect to a particular Mitotic Kinesin Target, the assignment by GSK of any chemistry personnel (other than CK FTEs) to perform activities relating to such Mitotic Kinesin Target, including without limitation any chemistry personnel within GSK's high-throughout chemistry resource (the "HTC Resource") and regardless of the activities of such personnel, shall accrue towards the [*]([*]) FTE limit of establishing a [*] Program pursuant to Section 2.6.2(a).

5. As used herein, "Hit-To-Lead" shall mean those activities directed to the process of synthesizing and identifying active new chemical entities up to and including identification of a compound that meets the Tractable Compound Criteria. It is understood that activities directed to the subsequent synthetic modification and testing of a Tractable Compound are not included in Hit-To-Lead.

6. Except as specifically modified or amended hereby, the Collaboration Agreement shall remain in full force and effect and, as modified or amended, is hereby ratified, confirmed and approved. No provision of this H2L Letter Amendment may be modified or amended except expressly in a writing signed by both parties nor shall any terms be waived except expressly in a writing signed by the party charged therewith. This H2L Letter Amendment shall be governed in accordance with the laws of the [*], without regard to principles of conflicts of laws.

Please sign and return two copies of this letter if you agree to the foregoing terms.

Sincerely,

/s/ Robert I. Blum

Robert I. Blum
Senior Vice President, Finance and Corporate Development
Chief Financial Officer
Cytokinetics, Inc.

Agreed and accepted:

GLAXO GROUP LIMITED

/s/ Pradip Bhatnagar

Name: Pradip Bhatnagar

Title: Director, Alliance Management
---

cc: Vice President, Business Development, Glaxo Group Limited, doing business as GlaxoSmithKline
Senior Vice President and Assistant General Counsel-R&D Legal Operations, GlaxoSmithKline Corporate Legal Department
Kenneth A. Clark, Esq., Wilson Sonsini Goodrich & Rosati Professional Corporation

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Exhibit 10.23

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[CYTOKINETICS LOGO]

280 East Grand Avenue
South San Francisco, CA 94080
Tel (650) 624-3000 Fax (630) 624-3010

July 28, 2003

Glaxo Group Limited, doing business as GlaxoSmithKline
709 Swedeland Road
King of Prussia, Pennsylvania 19406
Attn: Pradip K. Bhatnagar, Ph.D., Director, Genetic & Discovery Alliances

RE: COMPOUND CRITERIA UNDER THAT CERTAIN COLLABORATION AND LICENSE AGREEMENT BY AND BETWEEN GLAXO GROUP LIMITED, A GLAXOSMITHKLINE COMPANY, ("GSK") AND CYTOKINETICS, INC. ("CK") OF EVEN DATE JUNE 20, 2001 (THE "COLLABORATION AGREEMENT").

Dear Pradip:

Pursuant to this letter amendment to the Collaboration Agreement (the "Compound Criteria Letter Amendment"), GSK and CK desire to revise the Compound Criteria applicable under the Collaboration Agreement as approved by the JRC on September 21, 2001, all on the terms set forth herein.

Now therefore, GSK and CK agree as follows:

1. All capitalized terms not defined herein shall have the meaning ascribed to them in the Collaboration Agreement.

2. For purposes of the Collaboration Agreement, "Compound Criteria" shall mean, effective as of the Effective Date, those criteria set forth in the revised Exhibit 1.17 attached hereto and incorporated by reference. For clarity, it is understood that the Compound Criteria may only be modified or amended pursuant in a writing signed by both Parties referencing the Collaboration Agreement and expressly modifying or amending the Compound Criteria.

3. Except as specifically modified or amended hereby, the Collaboration Agreement shall remain in full force and effect and, as modified or amended, is hereby ratified, confirmed and approved. No provision of this Compound Criteria Letter Amendment may be modified or amended except expressly in a writing signed by both Parties nor shall any terms be waived except expressly in a writing signed by the Party charged therewith. This Compound Criteria Letter Amendment shall be governed in accordance with the laws of the [*], without regard to principles of conflicts of laws.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Please sign and return two copies of this letter if you agree to the foregoing terms.

Sincerely,

/s/ Robert I. Blum

Robert I. Blum
Senior Vice President, Finance and Corporate Development
Chief Financial Officer
Cytokinetics, Inc.

Agreed and accepted:

GLAXO GROUP LIMITED

/s/ Pradip K. Bhatnagar

Name: Pradip K. Bhatnagar

Title: Director

cc: Vice President, Business Development, Glaxo Group Limited, doing business as GlaxoSmithKline
Senior Vice President and Assistant General Counsel-R&D Legal Operations, GlaxoSmithKline Corporate Legal Department
Kenneth A. Clark, Esq., Wilson Sonsini Goodrich & Rosati Professional Corporation

EXHIBIT 1.17
[Revised September 21, 2001]

Compound Criteria
(effective as of June 20, 2001)

[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 10.24

[*] CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 406 OF THE SECURITIES EXCHANGE ACT OF 1933, AS AMENDED.

[CYTOKINETICS LOGO]

280 East Grand Avenue
South San Francisco, CA 94080
Tel (650) 624-3000 Fax (650) 624-3010

July 28, 2003

Glaxo Group Limited, doing business as GlaxoSmithKline
709 Swedeland Road
King of Prussia, Pennsylvania 19406
Attn: Pradip K. Bhatnagar, Ph.D., Director, Genetic & Discovery Alliances

RE: FEASIBILITY STUDY UNDER THAT CERTAIN COLLABORATION AND LICENSE AGREEMENT BY AND BETWEEN GLAXO GROUP LIMITED, A GLAXOSMITHKLINE COMPANY, ("GSK") AND CYTOKINETICS, INC. ("CK") OF EVEN DATE JUNE 20, 2001 (THE "COLLABORATION AGREEMENT")

Dear Pradip:

Pursuant to this letter amendment to the Collaboration Agreement (the "Feasibility Study Letter Amendment"), GSK and CK desire to revise the definition of Feasibility Study applicable under the Collaboration Agreement as agreed by the JRC on July 25, 2003, all on the terms set forth herein.

Now therefore, GSK and CK agree as follows:

1. All capitalized terms not defined herein shall have the meaning ascribed to them in the Collaboration Agreement.

2. For purposes of the Collaboration Agreement, "Feasibility Study" shall have the meaning, effective as of the Effective Date, set forth in the revised Exhibit 6.3.2, attached hereto and incorporated herein. For clarity, it is understood that the definition of Feasibility Study may only be modified or amended pursuant in a writing signed by both Parties referencing the Collaboration Agreement and expressly modifying or amending the definition of Feasibility Study.

3. Except as specifically modified or amended hereby, the Collaboration Agreement shall remain in full force and effect and, as modified or amended, is hereby ratified, confirmed and approved. No provision of this Feasibility Study Letter Amendment may be modified or amended except expressly in a writing signed by both Parties nor shall any terms be waived except expressly in a writing signed by the Party charged therewith. This Feasibility Study Letter Amendment shall be governed in accordance with the laws of the [*], without regard to principles of conflicts of laws.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Please sign and return two copies of this letter if you agree to the foregoing terms.

Sincerely,

/s/ Robert I. Blum

Robert I. Blum
Senior Vice President, Finance and Corporate Development
Chief Financial Officer
Cytokinetics, Inc.

Agreed and accepted:

GLAXO GROUP LIMITED

/s/ Pradip K. Bhatnagar

Name: Pradip K. Bhatnagar

Title: Director
---

cc: Vice President, Business Development, Glaxo Group Limited, doing business as GlaxoSmithKline
Senior Vice President and Assistant General Counsel-R&D Legal Operations, GlaxoSmithKline Corporate Legal Department
Kenneth A. Clark, Esq., Wilson Sonsini Goodrich & Rosati Professional Corporation

EXHIBIT 6.3.2
[Revised July 25, 2003]

Feasibility Study
(effective as of June 20, 2001)

[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 10.25

[*] CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 406 OF THE SECURITIES EXCHANGE ACT OF 1933, AS AMENDED.

[CYTOKINETICS LOGO]

280 East Grand Avenue
South San Francisco, CA 94080
Tel (650) 624-3000 Fax (650) 624-3010

July 28, 2003

Glaxo Group Limited, doing business as GlaxoSmithKline
709 Swedeland Road
King of Prussia, Pennsylvania 19406
Attn: Pradip K. Bhatnagar, Ph.D., Director, Genetic & Discovery Alliances

RE: TRACTABLE COMPOUND CRITERIA UNDER THAT CERTAIN COLLABORATION AND LICENSE AGREEMENT BY AND BETWEEN GLAXO GROUP LIMITED, A GLAXOSMITHKLINE COMPANY, ("GSK") AND CYTOKINETICS, INC. ("CK") OF EVEN DATE JUNE 20, 2001 (THE "COLLABORATION AGREEMENT")

Dear Pradip:

Pursuant to this letter amendment to the Collaboration Agreement (the "Tractable Compound Criteria Letter Amendment"), GSK and CK desire to revise the Tractable Compound Criteria applicable under the Collaboration Agreement as agreed by the JRC on April 11, 2003, all on the terms set forth herein.

Now therefore, GSK and CK agree as follows:

1. All capitalized terms not defined herein shall have the meaning ascribed to them in the Collaboration Agreement.

2. For purposes of the Collaboration Agreement, "Tractable Compound Criteria" shall mean, effective as of the Effective Date, those criteria set forth in the revised Exhibit 1.65 attached hereto and incorporated by reference. For clarity, it is understood that the Tractable Compound Criteria may only be modified or amended pursuant in a writing signed by both Parties referencing the Collaboration Agreement and expressly modifying or amending the Tractable Compound Criteria.

3. Except as specifically modified or amended hereby, the Collaboration Agreement shall remain in full force and effect and, as modified or amended, is hereby ratified, confirmed and approved. No provision of this Tractable Compound Criteria Letter Amendment may be modified or amended except expressly in a writing signed by both Parties nor shall any terms be waived except expressly in a writing signed by the Party charged therewith. This Tractable Compound Criteria Letter Amendment shall be governed in accordance with the laws of the [*], without regard to principles of conflicts of laws.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Please sign and return two copies of this letter if you agree to the foregoing terms.

Sincerely,

/s/ Robert I. Blum

Robert I. Blum
Senior Vice President, Finance and Corporate Development
Chief Financial Officer
Cytokinetics, Inc.

Agreed and accepted:

GLAXO GROUP LIMITED

/s/ Pradip K. Bhatnagar

Name: Pradip K. Bhatnagar

Title: Director
---

cc: Vice President, Business Development, Glaxo Group Limited, doing business as GlaxoSmithKline
Senior Vice President and Assistant General Counsel-R&D Legal Operations, GlaxoSmithKline Corporate Legal Department
Kenneth A, Clark, Esq., Wilson Sonsini Goodrich & Rosati Professional Corporation

EXHIBIT 1.65
[Revised April 11, 2003]

Tractable Compound Criteria
(effective as of June 20, 2001)

[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

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EXHIBIT 10.26

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EXHIBITS

CYTOKINETICS, INCORPORATED

SERIES D PREFERRED STOCK PURCHASE AGREEMENT

This Series D Preferred Stock Purchase Agreement (the "Agreement") is made as of the 20th day of June, 2001 (the "Effective Date") by and between Cytokinetics, Incorporated, a Delaware corporation (the "Company") and Glaxo Wellcome International B.V., a Netherlands corporation (the "Investor").

RECITALS

WHEREAS, the Company and the Investor are entering into Collaboration and License Agreement, contemporaneously with the execution of this Agreement (the "Collaboration Agreement");

WHEREAS, pursuant to the transactions contemplated by this Agreement and in connection with the Collaboration Agreement the Company desires to sell to the Investor, and the Investor desires to purchase from the Company, shares of the Company's Series D Preferred Stock;

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. PURCHASE AND SALE OF SERIES D PREFERRED STOCK.

1.1 SALE AND ISSUANCE OF SERIES D PREFERRED STOCK.

(a) The Company has, or will have before the Closing (as defined in Section 1.2(a) below) authorized the sale and issuance of up to 2,333,334 shares of Series D Preferred Stock. Subject to the terms and conditions of this Agreement, the Investor agrees to purchase at the Closing and the Company agrees to sell and issue to the Investor at the Closing 2,333,334 shares of Series D Preferred Stock at a purchase price of $6.00 per share for an aggregate purchase price of $14,000,004. The shares of Series D Preferred Stock issued to the Investor pursuant to this Agreement shall be hereinafter referred to as the "Stock."

(b) On or before the Closing, as defined below, the Company shall have adopted and filed with the Secretary of State of the State of Delaware the Fourth Amended and Restated Certificate of Incorporation, substantially in the form attached hereto as Exhibit A (the "Restated Certificate").

1.2 CLOSING; DELIVERY.

(a) Closing. The purchase and sale of the Stock shall take place at the offices of Wilson Sonsini Goodrich & Rosati ("WSGR"), 650 Page Mill Road, Palo Alto, California,

at 10:00 a.m., on a date within 5 days of the fulfillment of the conditions to closing contained in Sections 4 and 5 of this Agreement (which time and place are designated as the "Closing").

(b) Delivery. At the Closing, the Company will deliver to the Investor a certificate or certificates representing the number of shares of Stock, against payment of the purchase price therefor by wire transfer payable to the Company.

2. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company hereby represents and warrants to the Investor that, except as set forth on a Schedule of Exceptions attached hereto as Exhibit B, which exceptions shall be deemed to be representations and warranties as if made hereunder:

2.1 ORGANIZATION, GOOD STANDING AND QUALIFICATION. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business, to execute and deliver this Agreement, the Third Amended and Restated Investors' Rights Agreement (the "Investors' Rights Agreement") substantially in the form attached hereto as Exhibit C, the Third Amended and Restated Voting Agreement (the "Voting Agreement," and together with the Investors' Rights Agreement, collectively, the "Ancillary Agreements") substantially in the form attached hereto as Exhibit D, to issue and sell the Stock and the Common Stock issuable upon conversion thereof (together, as applicable, the "Stock"), and to carry out the provisions of this Agreement, the Investors' Rights Agreement, the Voting Agreement, and the Restated Certificate. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which the failure so to qualify would have a material adverse effect on its business, assets, operations, affairs or financial condition ("Material Adverse Effect").

2.2 CAPITALIZATION.

(a) The authorized capital of the Company will consist, immediately prior to the Effective Date, of:

(i) 24,800,000 shares of Preferred Stock, of which 5,550,000 shares have been designated Series A Preferred Stock, 5,300,000 of which are issued and outstanding, and of which 7,000,000 have been designated Series B Preferred Stock, 6,896,545 of which are issued and outstanding and 12,250,000 of which have been designated Series C Preferred Stock, 11,578,980 of which are issued and outstanding immediately prior to the Effective Date. The rights, privileges and preferences of the Preferred Stock are as stated in the Third Amended and Restated Certificate of Incorporation (the "Certificate"). All of the outstanding shares of Preferred Stock have shall be duly authorized and fully paid and are nonassessable and issued in compliance with all applicable federal and state securities laws.

(ii) 40,000,000 shares of Common Stock, 3,529,176 shares of which are issued and outstanding immediately prior to the Effective Date. All of the outstanding shares of Common Stock are duly authorized and fully paid and are nonassessable and issued in compliance with all applicable federal and state securities laws.

(iii) The Company has reserved 6,332,345 shares of Common Stock for issuance to officers, directors, employees and consultants of the Company pursuant to its 1997 Stock Plan duly adopted by the Board of Directors and approved by the Company stockholders (the "Stock Plan"). Of such reserved shares of Common Stock, no shares have been issued pursuant to restricted stock purchase agreements, and options to purchase 4,639,381 shares have been granted. Of such options shares, 2,403,066 have been exercised and 2,236,315 are currently outstanding. Options to purchase 1,692,964 shares of Common Stock remain available for issuance to officers, directors, employees and consultants pursuant to the Stock Plan.

(iv) Except for outstanding options issued pursuant to the Stock Plan or preemptive rights pursuant to the Investors' Rights Agreement, there are no outstanding options, warrants, rights (including conversion or preemptive rights and rights of first refusal or similar rights) or agreements, orally or in writing, for the purchase or acquisition from the Company of any shares of its capital stock. No stock plan, stock purchase, stock option or other agreement or understanding between the Company and any holder of any equity securities or right to purchase equity securities provides for acceleration or other changes in the vesting provisions or other terms of such agreement or understanding as the result of any merger, consolidated sale of stock or assets, change of control or other similar transaction by the Company.

(b) The authorized capital of the Company as set forth in the Restated Certificate consists of:

(i) 27,300,000 shares of Preferred Stock of which 5,550,000 shares shall be designated Series A Preferred Stock, 7,000,000 shall be designated Series B Preferred Stock, 12,250,000 shall be designated Series C Preferred Stock and 2,500,000 shall be designated Series D Preferred Stock. The rights, privileges and preferences of the Preferred Stock shall be as stated in the Restated Certificate.

(ii) 45,000,000 shares of Common Stock.

2.3 SUBSIDIARIES. The Company does not currently own or control, directly or indirectly, any interest in any other corporation, association, or other business entity.

2.4 AUTHORIZATION. All corporate action on the part of the Company, its officers, directors and stockholders necessary for the authorization, execution and delivery of this Agreement and the Ancillary Agreements (collectively the "Agreements"), the performance of all obligations of the Company hereunder and thereunder and the authorization, issuance and delivery of the Stock will be taken prior to the Closing, and the Agreements, when executed and delivered by the Company, shall constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, and other laws of general application affecting enforcement of creditors' rights generally, as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies, or (ii) to the extent the indemnification provisions contained in the Investors' Rights Agreement may be limited by applicable federal or state securities laws.

2.5 VALID ISSUANCE OF STOCK. The Stock that is being issued to the Investor hereunder, when issued, sold and delivered in accordance with the terms hereof for the consideration expressed herein, will be duly and validly issued, fully paid and nonassessable and free of restrictions on transfer other than restrictions on transfer under this Agreement, the Investors' Rights Agreement and applicable state and federal securities laws. Based in part upon the representations of the Investor in this Agreement and subject to the provisions of Section 2.6 below, the Stock will be issued in compliance with all applicable federal and state securities laws. The Common Stock issuable upon conversion of the Stock shall be, immediately prior to the Closing, duly and validly reserved for issuance, and upon issuance in accordance with the terms of the Restated Certificate, shall be duly and validly issued, fully paid and nonassessable and free of restrictions on transfer other than restrictions on transfer under this Agreement, the Investors' Rights Agreement and applicable federal and state securities laws and will be issued in compliance with all applicable federal and state securities laws.

2.6 GOVERNMENTAL CONSENTS. No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority on the part of the Company is required in connection with the consummation of the transactions contemplated by this Agreement, except for filings pursuant to Section 25102(f) of the California Corporate Securities Law of 1968, as amended, and the rules thereunder or other applicable state securities laws.

2.7 LITIGATION. There is no action, suit, proceeding or investigation pending or, to the Company's knowledge, currently threatened against the Company or any of its subsidiaries that questions the validity of the Agreements or the right of the Company to enter into them, or to consummate the transactions contemplated hereby or thereby, or that might result, either individually or in the aggregate, in any Material Adverse Effect, or any change in the current equity ownership of the Company, nor is the Company aware that there is any basis for the foregoing. The Company is not a party to, or subject

to the provisions of, any material order, writ, injunction, judgment or decree of any court or government agency or instrumentality. There is no action, suit, proceeding or investigation by the Company currently pending or which the Company intends to initiate.

2.8 INTELLECTUAL PROPERTY. To its knowledge (but without conducting any special investigation or patent search), the Company owns or possesses sufficient legal rights to all patents, trademarks, service marks, tradenames, copyrights, trade secrets, licenses, information and proprietary rights and processes (collectively, "Intellectual Property") necessary for its business without any conflict with, or infringement of, the rights of others. There are no outstanding options, licenses or agreements of any kind relating to the foregoing, nor is the Company bound by or a party to any options, licenses or agreements of any kind with respect to the Intellectual Property of any other person or entity other than such licenses or agreements arising from the purchase of "off the shelf" or standard products. The Company is not in breach of any provision of any option, license or agreement as would have now or with the passage of time a Material Adverse Effect. The Company has not received any communications alleging that the Company has violated or infringed or, by conducting its business, would violate or infringe any of the Intellectual Property of any other person or entity. Neither the Company nor any of its licensors is a party to any proceeding or litigation

relating to any Intellectual Property owned by or licensed to the Company. The Company is not a party to any proceeding or litigation relating to the Intellectual Property of any other person or entity. The Company is not aware that any of its employees is obligated under any contract (including licenses, covenants or commitments of any nature) or other agreement, or subject to any judgment, decree or order of any court or administrative agency, that would interfere with the use of such employee's best efforts to promote the interest of the Company or that would conflict with the Company's business. Neither the execution or delivery of this Agreement, nor the carrying on of the Company's business by the employees of the Company, nor the conduct of the Company's business as currently proposed, will, to the Company's knowledge, conflict with or result in a breach of the terms, conditions, or provisions of, or constitute a default under, any contract, covenant or instrument under which any such employee is now obligated. The Company does not believe it is or will be necessary to use any inventions, trade secrets or proprietary information of any of its consultants, or of its employees (or persons it currently intends to hire) made prior to their employment by the Company.

2.9 COMPLIANCE WITH OTHER INSTRUMENTS.

(a) The Company is not in violation or default of any provisions of its Certificate or Bylaws or of any instrument, judgment, order, writ, decree or contract to which it is a party or by which it is bound or of any material provision of federal or state statute, rule or regulation applicable to the Company. The execution, delivery and performance of the Agreements and the consummation of the transactions contemplated hereby or thereby will not result in any such violation or be in material conflict with or constitute, with or without the passage of time and giving of notice, either a material default under any such provision, instrument, judgment, order, writ, decree or contract or an event which results in the creation of any material lien, charge or encumbrance upon any assets of the Company or the suspension, revocation, impairment, forfeiture, or nonrenewal of any material permit, license, authorization, or approval to the Company, its business or operations or any of its assets or properties.

(b) The Company has avoided every condition, and has not performed any act, the occurrence of which would result in the Company's loss of any right granted under any license, distribution agreement or other agreement, the loss of which would have a Material Adverse Effect.

2.10 AGREEMENTS; ACTION.

(a) There are no agreements, understandings or proposed transactions between the Company and any of its officers, directors, affiliates, or any affiliate thereof.

(b) Except for agreements explicitly contemplated by the Agreements, there are no agreements, understandings, instruments, contracts or proposed transactions to which the Company is a party or by which it is bound that involve (i) obligations (contingent or otherwise) of, or payments to, the Company in excess of, $100,000, (ii) the license of any patent, copyright, trade secret or other proprietary right to or from the Company, (iii) the grant of rights to manufacture, produce, assemble, license, market, or sell its products to any other person or affect the

Company's exclusive right to develop, manufacture, assemble, distribute, market or sell its products, or (iv) indemnification by the Company with respect to infringements of proprietary rights (other than indemnification obligations arising from purchase or sale agreements entered into in the ordinary course of business).

(c) The Company has not (i) declared or paid any dividends, or authorized or made any distribution upon or with respect to any class or series of its capital stock, (ii) incurred any indebtedness for money borrowed or incurred any other liabilities individually in excess of $50,000 or in excess of $100,000 in the aggregate, (iii) made any loans or advances to any person, other than ordinary advances for travel expenses, or (iv) sold, exchanged or otherwise disposed of any of its assets or rights, other than the sale of its inventory in the ordinary course of business. For purposes of this subsection (c) and subsection (b) above, all indebtedness, liabilities, agreements, understandings, instruments, contracts and proposed transactions involving the same person or entity (including persons or entities the Company has reason to believe are affiliated therewith) shall be aggregated for the purpose of meeting the minimum dollar amounts of such subsections.

(d) The Company is not a party to and is not bound by any contract, agreement or instrument, or subject to any restriction under its Certificate or Bylaws, that would have a Material Adverse Effect.

(e) The Company has not engaged in the past three (3) months in any discussion (i) with any representative of any corporation or corporations regarding the merger of the Company with or into any such corporation or corporations, (ii) with any representative of any corporation, partnership, association or other business entity or any individual regarding the sale, conveyance or disposition of all or substantially all of the assets of the Company or a transaction or series of related transactions in which more than fifty percent (50%) of the voting power of the Company would be disposed of, or (iii) regarding any other form of liquidation, dissolution or winding up of the Company.

2.11 DISCLOSURE. The Company has provided the Investor with all the information that the Investor has requested for deciding whether to acquire the Stock and all information that the Company believes is reasonably necessary to enable the Investor to make such a decision. No representation or warranty of the Company contained in this Agreement and the exhibits attached hereto or any certificate furnished or to be furnished to the Investor at the Closing or Effective Date (when read together) contains or shall contain any untrue statement of a material fact or omits or shall omit to state a material fact necessary in order to make the statements contained herein or therein not misleading in light of the circumstances under which they were made. To the Company's knowledge, there are no facts which (individually or in the aggregate) would have a Material Adverse Effect that have not been set forth in the Agreements or the Exhibits hereto and thereto.

2.12 NO CONFLICT OF INTEREST. The Company is not indebted, directly or indirectly, to any of its officers, directors, stockholders, employees or consultants, or to their respective spouses or children, in any

amount whatsoever other than in connection with expenses or advances of expenses incurred in the ordinary course of business or relocation expenses of employees. To the

Company's knowledge, none of the Company's officers, directors, stockholders, employees or consultants, or any members of their immediate families, are, directly or indirectly, indebted to the Company or have any direct or indirect ownership interest in any firm or corporation with which the Company is affiliated or with which the Company has a business relationship, or any firm or corporation which competes with the Company except that officers, directors, stockholders, employees and consultants of the Company may own stock in (but not exceeding two percent of the outstanding capital stock of) any publicly traded companies that may compete with the Company. To the Company's knowledge, none of the Company's officers, directors or stockholders or any members of their immediate families are, directly or indirectly, interested in any material contract with the Company. The Company is not a guarantor or indemnitor of any indebtedness of any other person, firm or corporation.

2.13 RIGHTS OF REGISTRATION. Except as contemplated in the Second Amended and Restated Investors' Rights Agreement dated as of November 22 and 24, 2000, and the Investors' Rights Agreement the Company is not under any obligation and has not granted rights to register under the Securities Act any of its presently outstanding securities or any of its securities that may subsequently be issued. Except as contemplated in this Agreement, the Second Amended and Restated Voting Agreement dated as of November 22 and 24, 2000, and the Voting Agreement the Company has not, and to the knowledge of the Company no shareholder of the Company has, entered into any agreement with respect to the voting of shares of capital stock of the Company.

2.14 TITLE TO PROPERTY AND ASSETS. Except (a) as reflected in the Financial Statements (defined in paragraph 2.15), (b) for liens for current taxes not yet delinquent, (c) for liens imposed by law and incurred in the ordinary course of business for obligations not past due to carriers, warehousemen, laborers, materialmen and the like, (d) for liens in respect of pledges or deposits under workers' compensation laws or similar legislation, or (e) for minor defects in title, none of which, individually or in the aggregate, materially interferes with the use of such property, the Company owns its property and assets free and clear of all mortgages, liens, loans and encumbrances. With respect to the property and assets it leases, the Company is in compliance with such leases and, to its knowledge, holds a valid leasehold interest free of any liens, claims or encumbrances, subject to clauses (a)-(e) above. The Company does not own and has not agreed to purchase any real property.

2.15 FINANCIAL STATEMENTS. The Company has made available to the Investor the Company's audited financial statements (including balance sheet, income statement and statement of cash flows) as of December 31, 2000 for the fiscal year then ended, and its unaudited financial statements (including balance sheet, income statement and statement of cash flows) as of March 31, 2001 and for the three-month period then ended (collectively, the "Financial Statements"). The Financial Statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods indicated, except that the unaudited Financial Statements may not contain all footnotes required by generally accepted accounting principles. The Financial Statements fairly present the financial condition and operating results of the Company as of the dates, and for the periods, indicated therein, subject, in the case of unaudited Financial Statements, to normal year-end audit adjustments. Except as set forth in the Financial

Statements, the Company has no material liabilities, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to March 31, 2001 and (ii) obligations under contracts and

commitments incurred in the ordinary course of business and not required under generally accepted accounting principles to be reflected in the Financial Statements, which, in both cases, individually or in the aggregate are not material to the financial condition or operating results of the Company. Except as disclosed in the Financial Statements, the Company is not a guarantor or indemnitor of any indebtedness of any other person, firm, or corporation. The Company maintains and will continue to maintain a standard system of accounting established and administered in accordance with generally accepted accounting principles.

2.16 CHANGES. After March 31, 2001, there has not been:

(a) any change in the assets, liabilities, financial condition or operating results of the Company from that reflected in the Financial Statements, except changes in the ordinary course of business;

(b) any damage, destruction or loss, whether or not covered by insurance, materially and adversely affecting the business, properties, prospects, or financial condition of the Company (as such business is presently conducted and as it is presently proposed to be conducted);

(c) any waiver or compromise by the Company of a valuable right or of a material debt owed to it;

(d) any satisfaction or discharge of any lien, claim, or encumbrance or payment of any obligation by the Company, except in the ordinary course of business and that is not material to the business, properties, prospects or financial condition of the Company (as such business is presently conducted and as it is presently proposed to be conducted);

(e) any material change to a material contract or agreement by which the Company or any of its assets is bound or subject;

(f) any material change in any compensation arrangement or agreement with any employee, officer, director or stockholder;

(g) any sale, assignment or transfer of any patents, trademarks, copyrights, trade secrets or other intangible assets;

(h) any mortgage, pledge, transfer of a security interest in, or lien, created by the Company, with respect to any of its material properties or assets, except liens for taxes not yet due or payable;

(i) any declaration, setting aside or payment or other distribution in respect to any of the Company's capital stock, or any direct or indirect redemption, purchase, or other acquisition of any of such stock by the Company;

(j) to the Company's knowledge, any other event or condition of any character that might have a Material Adverse Effect;

(k) any arrangement or commitment by the Company to do any of the things described in this Section 2.16;

(l) any resignation or termination of employment of any officer or key employee of the Company; or

(m) any loans or guarantees made by the Company to or for the benefit of its employees, shareholders, officers or directors, or any members of their immediate families, other than travel advances and other advances made in the ordinary course of its business.

2.17 EMPLOYEE BENEFIT PLANS.

(a) The Company does not have any Employee

Benefit Plan as defined in the Employee Retirement Income Security Act of 1974.

(b) There is no contract, agreement, plan or arrangement covering any employee of the Company that, individually or collectively, could, in connection with the transactions contemplated herein accelerate the time of payment or vesting of any payment, forgive any indebtedness, or increase the amount of any compensation due any employee.

2.18 TAX MATTERS. The Company has timely filed all returns ("Tax Returns") due with respect to all federal, state, county, local, foreign and other taxes including, without limitation, income taxes, estimated taxes, excise taxes, sales taxes, use taxes, gross receipts taxes, franchise taxes, employment and payroll related taxes, property taxes and import duties, whether or not measured in whole or in part by net income (hereinafter, "Taxes" or, individually, a "Tax") required to be filed by it through the date hereof unless an extension to file any such Tax Return has been filed by the Company. All such Tax Returns are true and correct in all material respects and all Taxes shown as due on such Tax Return have been paid, other than Taxes being disputed by the Company in good faith for which adequate reserves have been made in accordance with GAAP. With respect to all Tax Returns of the Company, (i) there is no unassessed Tax deficiency proposed or, to the knowledge of the Company, threatened against the Company and (ii) no audit is in progress with respect to any return for Taxes, no extension of time is in force with respect to any date on which any return for Taxes was or is to be filed and no waiver or agreement is in force for the extension of time for the assessment or payment of any Tax. All provisions for Tax liabilities of the Company with respect to the Financial Statements have been made in accordance with GAAP consistently applied, and all liabilities for Taxes of the Company attributable to periods prior to or ending on the Closing Date have been adequately provided for on the Financial Statement in accordance with GAAP. There are no liens for Taxes on the assets of the Company other than liens for Taxes not yet due and payable. The Company has never been a "United States real property holding corporation" (a "USRPHC") as that term is defined in Section 897(c)(2) of the Internal Revenue Code of 1986, as amended (the "Code"), and treasury regulations promulgated thereunder. The Company is not a "foreign person" within the meaning of Section 1445 of the Code.

2.19 INSURANCE. The Company has in full force and effect fire and casualty insurance policies, with extended coverage, sufficient in amount (subject to reasonable deductibles) to allow it to replace any of its properties that might be damaged or destroyed. The Company has obtained life insurance for James Sabry, and any other employees or consultants to the Company deemed to be key to the success of the Company as determined in good faith by the Company's Board of Directors.

2.20 LABOR AGREEMENTS AND ACTIONS. The Company is not bound by or subject to (and none of its assets or properties is bound by or subject to) any written or oral, express or implied, contract, commitment or arrangement with any labor union, and no labor union has requested or, to the knowledge of the Company, has sought to represent any of the employees, representatives or agents of the Company. There is no strike or other labor dispute involving the Company pending, or to the knowledge of the Company threatened, which could have a Material Adverse Effect, nor is the Company aware of any labor organization activity involving its employees. The employment of each officer and employee of the Company is terminable at the will of the Company. The Company has complied in all material respects with all applicable state and federal equal employment opportunity laws and with other laws related to employment. To the Company's knowledge, no employee of the Company, nor any consultant with whom the Company has contracted, is in violation of any term of any employment contract, proprietary information agreement or any other agreement relating to the right of any such individual to be employed by, or to contract with, the Company because of the nature of the business to be conducted by the Company; and to the Company's knowledge the continued employment by the Company of its present employees, and the performance of the Company's contracts with its independent contractors, will not result in any such violation. The

Company has not received any notice alleging that any such violation has occurred. No employee of the Company has been granted the right to continued employment by the Company or to any material compensation following termination of employment with the Company. To the Company's knowledge, no officer or key employee, or any group of key employees, intends to terminate their employment with the Company. The Company does not have a present intention to terminate the employment of any officer, key employee or group of key employees.

2.21 CONFIDENTIAL INFORMATION AND INVENTION ASSIGNMENT AGREEMENTS. Each employee, consultant and officer of the Company has executed an agreement with the Company regarding confidentiality and proprietary information. Except as recorded on such agreements, no employee, officer or consultant of the Company has excluded works or inventions made prior to his or her employment with the Company from his or her assignment of inventions to the Company pursuant to such agreements. The Company is not aware that any of its employees or consultants is in violation thereof.

2.22 PERMITS. The Company has all material franchises, permits, licenses and any similar authority necessary for the conduct of its business. The Company is not in default in any material respect under any of such franchises, permits, licenses or other similar authority.

2.23 CORPORATE DOCUMENTS. The Restated Certificate and Bylaws of the Company on the Closing shall be in the form provided to counsel for the Investor. The minute

books of the Company contain minutes of all meetings of directors and stockholders and all actions by written consent without a meeting by the directors and stockholders since the date of incorporation and reflects all actions by the directors (and any committee of directors) and stockholders with respect to all transactions referred to in such minutes accurately in all material respects.

2.24 ENVIRONMENTAL AND SAFETY LAWS. The Company is not in violation of any applicable material statute, law or regulation relating to the environment or occupational health and safety, and, to its knowledge, no material expenditures are or will be required in order to comply with any such existing statute, law or regulation, and there is no material civil, criminal or administrative judgment, action, suit, demand, claim, hearing, notice of violation, investigation, proceeding, notice or demand letter pending or, to the Company's knowledge, threatened against the Company pursuant to any such statute, law or regulation. No Hazardous Materials (as defined below) are used or have been used, stored, or disposed of by the Company or, to the Company's knowledge, by any other person or entity on any property owned, leased or used by the Company. For the purposes of the preceding sentence, "Hazardous Materials" shall mean (a) materials which are listed or otherwise defined as "hazardous" or "toxic" under any applicable local, state, federal and/or foreign laws and regulations that govern the existence and/or remedy of contamination on property, the protection of the environment from contamination, the control of hazardous wastes, or other activities involving hazardous substances, including building materials or (b) any petroleum products or nuclear materials.

2.25 PRIVATE OFFERING. No form of general solicitation or general advertising was used by the Company or its representatives in connection with the offer or sale of the Stock. No registration of the Stock or the shares of common stock issuable upon conversion thereof, pursuant to the provisions of the Securities Act or any state securities or "blue sky" laws, will be required by offer, sale or issuance of the Stock. The Company agrees that neither it, nor anyone acting on its behalf, shall offer to sell the Stock or any other securities of the Company so as to require the registration of the Stock or the shares of Common Stock issuable upon conversion thereof pursuant to the provisions of the Securities Act or any state securities or "blue sky" laws, unless such Stock or other securities are so registered.

2.26 OUTSTANDING BORROWING. Except as set forth in the

Financial Statements, the Schedule of Exceptions sets forth the amount of all Indebtedness of the Company as of the date hereof, the liens that relate to such Indebtedness and that encumber the Company's assets and the name of each lender thereof. No holder of Indebtedness of the Company is entitled to any voting rights in any matters voted upon by the holders of the Common Stock. "Indebtedness" means, as to any person, (a) all obligations of such person for borrowed money (including, without limitation, reimbursement and all other obligations with respect to surety bonds, letters of credit and bankers' acceptances, whether or not matured), (b) all obligations of such person to pay the deferred purchase price of property or services, except trade accounts payable and accrued commercial or trade liabilities arising in the ordinary course of business, (c) all interest rate and currency swaps, caps, collars and similar agreements or hedging devices under which payments are obligated to be made by such person, whether periodically or upon the happening of a contingency, (d) all indebtedness

created or arising under any conditional sale or other title retention agreement with respect to property acquired by such person (even though the rights and remedies of the seller or lender under such agreement in the event of default are limited to repossession or sale of such property), (e) all obligations of such person under leases which have been or should be, in accordance with GAAP, recorded as capital leases, (f) all indebtedness secured by any Lien (other than Liens in favor of lessors under leases other than leases included in clause (e)) on any property or asset owned or held by that person regardless of whether the indebtedness secured thereby shall have been assumed by that person or is non-recourse to the credit of that person, and (g) any material contingent obligation of such person.

3. REPRESENTATIONS AND WARRANTIES OF THE INVESTORS. The Investor hereby represents and warrants to the Company, that:

3.1 AUTHORIZATION. Such Investor has full power and authority to enter into this Agreement. The Agreements, when executed and delivered by the Investor, will constitute valid and legally binding obligations of the Investor, enforceable in accordance with their terms, except (a) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, and any other laws of general application affecting enforcement of creditors' rights generally, and as limited by laws relating to the availability of a specific performance, injunctive relief, or other equitable remedies, or (b) to the extent the indemnification provisions contained in the Investors' Rights Agreement may be limited by applicable federal or state securities laws.

3.2 PURCHASE ENTIRELY FOR OWN ACCOUNT. This Agreement is made with the Investor in reliance upon the Investor's representation to the Company, which by the Investor's execution of this Agreement, the Investor hereby confirms, that the Stock to be acquired by the Investor will be acquired for investment for the Investor's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and that the Investor has no present intention of selling, granting any participation in, or otherwise distributing the same. By executing this Agreement, the Investor further represents that the Investor does not presently have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participations to such person or to any third person, with respect to any of the Stock. The Investor has not been formed for the specific purpose of acquiring the Stock.

3.3 DISCLOSURE OF INFORMATION. The Investor believes it has received all the information it considers necessary or appropriate for deciding whether to purchase the Stock. The Investor has had an opportunity to discuss the Company's business, management, financial affairs and the terms and conditions of the offering of the Stock with the Company's management. The Investor understands that such discussions, as well as any other written information delivered by the Company to the Investor, were intended to describe the aspects of the Company's business which it believes to be material.

3.4 RESTRICTED SECURITIES. The Investor understands that the Stock has not been, and will not be, registered under the Securities Act, by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent and the accuracy of the Investor's representations as expressed

herein. The Investor understands that the shares of Stock are "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to these laws, the Investor must hold the Stock indefinitely unless they are registered with the Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available. The Investor acknowledges that the Company has no obligation to register or qualify the Stock for resale except as set forth in the Investors' Rights Agreement. The Investor further acknowledges that if an exemption from registration or qualification is available, it may be conditioned on various requirements including, but not limited to, the time and manner of sale, the holding period for the Stock, and on requirements relating to the Company which are outside of the Investor's control, and which the Company is under no obligation and may not be able to satisfy.

3.5 NO PUBLIC MARKET. The Investor understands that no public market now exists for any of the securities issued by the Company, and that the Company has made no assurances that a public market will ever exist for the Stock.

3.6 LEGENDS. The Investor understands that the certificate or certificates representing the Stock and any certificates evidencing securities issued in respect of or exchange for the Stock, may bear one or all of the following legends in substantially the form listed below:

(a) "THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISTRIBUTION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933."

(b) Any legend set forth in the other Agreements.

(c) Any legend required by the Blue Sky laws of any state to the extent such laws are applicable to the shares represented by the certificate so legended.

3.7 ACCREDITED INVESTOR. The Investor is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act.

3.8 FOREIGN INVESTORS. If the Investor is not a United States person (as defined by Section 7701(a)(30) of the Internal Revenue Code of 1986, as amended), such Investor hereby represents that it has satisfied itself as to the full observance of the laws of its jurisdiction in connection with any invitation to subscribe for the Stock or any use of this Agreement, including (i) the legal requirements within its jurisdiction for the purchase of the Stock, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained, and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale, or transfer of the Stock. Such Investor's subscription and payment for and continued beneficial ownership of the Stock, will not violate any applicable securities or other laws of the Investor's jurisdiction.

4. CONDITIONS OF THE INVESTORS' OBLIGATIONS AT CLOSING. The obligations of the Investor to the Company under this Agreement are subject to the fulfillment, on or before the Closing, of each of the following conditions, unless otherwise waived:

4.1 REPRESENTATIONS AND WARRANTIES.

(a) The representations and warranties of the Company contained in Sections 2.4, 2.5 and 2.6 shall be true and correct in all material respects on and as of the Closing except for the representations and warranties which are qualified as to materiality by their terms, which shall be true and correct on and as of the Closing.

(b) The representations and warranties of the Company contained in Section 2, other than the representations and warranties contained in Sections 2.4, 2.5 and 2.6, shall be true and correct in all material respects on and as of the Effective Date except for the representations and warranties which are qualified as to materiality by their terms, which shall be true and correct on and as of the Effective Date.

4.2 PERFORMANCE. The Company shall have performed and complied in all material respects with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing.

4.3 COMPLIANCE CERTIFICATE. The President of the Company shall deliver to the Investor at the Closing a certificate dated as of the Closing certifying that the conditions specified in Sections 4.1, 4.2 and 4.4 have been fulfilled.

4.4 QUALIFICATIONS. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful issuance and sale of the Stock pursuant to this Agreement shall be obtained and effective as of the Closing.

4.5 OPINION OF COMPANY COUNSEL. The Investor shall have received from WSGR, counsel for the Company, an opinion, dated as of the Closing, in substantially the form of Exhibit E.

4.6 INVESTORS' RIGHTS AGREEMENT. The Company and the required holders of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall have executed and delivered the Investors' Rights Agreement, substantially in the form attached hereto as Exhibit C.

4.7 VOTING AGREEMENT. The Company, the required holders of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock and the Founders shall have executed and delivered the Voting Agreement substantially in the form attached hereto as Exhibit D.

4.8 RESTATED CERTIFICATE. The Company shall have filed the Restated Certificate with the Secretary of State of Delaware on or prior to the Closing, which shall continue to be in full force and effect as of the Closing.

4.9 SECRETARY'S CERTIFICATE. The Investor shall have received a certificate from the Company, in form and substance satisfactory to the Investor, dated as of the Closing Date and signed by the Secretary or an Assistant Secretary of the Company, certifying (a) that the attached copies of the Restated Certificate, the Bylaws, resolutions of the Board of Directors and resolutions of the stockholders of the Company approving the Agreements and the transactions contemplated thereby, are all true, complete and correct and remain

unamended and in full force and effect, (b) as to the incumbency and specimen signature of each officer of the Company executing the Agreements, and any other document delivered in connection herewith on behalf of the Company and (c) that the good standing of the Company, as evidenced by the attached Good Standing certificates issued by the Delaware and California Secretaries of State, dated with ten (10) business days of the Closing, remains in effect for such jurisdictions.

4.10 COLLABORATION AGREEMENT. The Company and the Investor shall have executed and delivered to each other the Collaboration Agreement and such Collaboration Agreement shall not have been terminated.

4.11 HART-SCOTT-RODINO. No order to restrain, enjoin or otherwise prevent the consummation of this Agreement, or the transactions contemplated hereby or by the Collaboration Agreement shall have been entered by any court or administrative body, and all applicable waiting periods under the Hart-Scott-Rodino Antitrust Improvement Act of 1976 (as amended from time to time, the "HSR Act") shall have expired or terminated.

4.12 GOOD STANDING. The Investor shall have received certificates of Good Standing issued by the Delaware and California Secretaries of State showing that the Company is in good standing in such jurisdictions, dated with ten (10) business days of the Closing.

5. CONDITIONS OF THE COMPANY'S OBLIGATIONS AT CLOSING. The obligations of the Company to the Investor under this Agreement are subject to the fulfillment, on or before the Closing, of each of the following conditions, unless otherwise waived:

5.1 REPRESENTATIONS AND WARRANTIES.

(a) The representations and warranties of the Investor contained in Section 3.3 shall be true and correct in all material respects on and as of the Effective Date, except for representations and warranties which are qualified as to materiality by their terms, which shall be true and correct on and as of the date of the Effective Date.

(b) The representations and warranties of the Investor contained in Section 3, other than those representations and warranties contained in Section 3.3, shall be true and correct in all material respects on and as of the Closing, except for representations and warranties

which are qualified as to materiality by their terms, which shall be true and correct on and as of the date of the Closing.

5.2 PERFORMANCE. All covenants, agreements and conditions contained in this Agreement to be performed by the Investor on or prior to the Closing shall have been performed or complied with in all material respects.

5.3 QUALIFICATIONS. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful issuance and sale of the Stock pursuant to this Agreement shall be obtained and effective as of the Closing.

5.4 STOCKHOLDER APPROVAL. The Company shall have obtained the vote or written consent from the stockholders of the Company required to approve the adoption and filing of the Restated Certificate, and otherwise required to carry out the transaction contemplated by this Agreement, the Ancillary Agreements and the Collaboration Agreement.

5.5 INVESTORS' RIGHTS AGREEMENT. The Investor and the required holders of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall have executed and delivered the Investors' Rights Agreement.

5.6 VOTING AGREEMENT. The Investo, the Founders and the required holders of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock shall have executed and delivered the Voting Agreement.

5.7 RESTATED CERTIFICATE. The Restated Certificate filed with the Secretary of State of Delaware prior to the Closing shall be in full force and effect.

5.8 COLLABORATION AGREEMENT. The Company and the Investor shall have executed and delivered to each other the Collaboration Agreement and such Collaboration Agreement shall not have been terminated.

5.9 HART-SCOTT-RODINO. No order to restrain, enjoin or otherwise prevent the consummation of this Agreement, or the transactions contemplated hereby or by the Collaboration Agreement, shall have been entered by any court or administrative body, and all applicable waiting periods under the HSR Act shall have expired or terminated.

6. COVENANTS OF THE INVESTOR.

6.1 TRADING RESTRICTIONS.

(a) PURCHASES OF COMPANY STOCK.

(i) The Investor agrees that neither it nor any of its affiliates (for purposes of this Section 6, collectively, the "Investor") will, for a period (the "No-Buy Period")

commencing on the date hereof and ending three (3) years after the closing of the first firm commitment public offering of Common Stock of the Company to the general public pursuant to an effective registration statement filed with the SEC under the Securities Act (the "IPO"), acquire in any manner, directly or indirectly, any securities of the Company, except pursuant to a transaction approved by the Board of Directors of the Company, provided that, for a period of 10 years after the expiration of the No-Buy Period, the Investor shall under no circumstances, directly or indirectly, acquire any equity securities of the Company that would cause the Investor's holdings of the Company's equity securities, on an as-converted basis, to exceed the percentage of the Company's fully diluted outstanding equity securities represented by the as-converted Stock immediately after the closing of the IPO.

(ii) TENDER OFFERS.

(1) Notwithstanding anything to the contrary in this Section 6.1(a), if a third party initiates an unsolicited offer to purchase 30% or more of any class or series of the Company's publicly traded securities (a "Hostile Tender Offer"), the Investor may purchase the Company's securities that are the subject of the Hostile Tender Offer without regard to the restrictions on the Investor set forth in this Section 6.1(a).

(2) Notwithstanding anything to the contrary in this Section 6.1(a), if the Board of Directors of the Company approves an Acquisition, as defined below in Section 6.2(b)(i), after the Research Term (as such term is defined in the Collaboration Agreement, but not to include any extensions of the initial Research Term (the "Restriction Term")), the Investor may offer to purchase, and consummate the purchase of, all, but not less than all, of the Company's outstanding securities without regard to the restrictions on the Investor set forth in this Section 6.1(a).

(b) SALES OF COMPANY STOCK.

(i) In addition to the foregoing, the Investor agrees that during the Restriction Term, the Investor shall not offer,

sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of in any manner, either directly or indirectly ("Sale" or "Sell"), any securities of the Company held by Investor ("Covenant Shares"), provided that, nothing in the foregoing sentence shall prevent the Investor from participating in, and selling the Covenant Shares through, registrations of the Company's Common Stock ("Common Stock") pursuant to the provisions of Section 1.3 of the Investors' Rights Agreement.

(ii) After the expiration of such Restriction Term the Investor and the Company agree and acknowledge that it is in their mutual interest that disposition of the Covenant Shares be accomplished in a manner that does not disrupt or undermine the trading market for Common Stock (including any undue adverse reaction to the fact of sale of Covenant Shares by the investor as a research collaborator of the Company), and the parties will work together to explore methods of disposition in order to achieve such goal.

(iii) Notwithstanding anything to the contrary in this Section 6.1(b), after the IPO of the Company, the Investor may sell shares of Common Stock if (i) the publicly traded fair market value per share of publicly traded shares of Common Stock, at the time of the sale by the Investor of Common Stock, is greater than two and a half times the per share price (as adjusted for combination, stock splits, stock dividends, subdivisions or split-ups) that shares of Common Stock were initially offered to the public in the IPO (the "IPO Price") and (ii) no sales by the Investor of shares of Common Stock are at a price per share less than two and a half times (as adjusted for combination, stock splits, stock dividends, subdivisions or split-ups) the IPO Price, provided that, the aggregate gross proceeds to the Investor of all sales of Common Stock pursuant to this Section 6.1(b)(iii) shall not exceed $14,000,004. If the Investor intends to sell any shares of Common Stock held by it pursuant to the provisions of this Section 6.1(b)(iii), the Investor and the Company agree and acknowledge that it is in their mutual interest that disposition of the Covenant Shares be accomplished in a manner that does not disrupt or undermine the trading market for the Company's Common Stock (including any undue adverse reaction to the fact of sale of Covenant Shares by the investor as a research collaborator of the Company), and the parties will work together to explore methods of disposition in order to achieve such goal.

6.2 COME-ALONG.

(a) COME-ALONG. The Investor hereby agrees that at any meeting of the stockholders of the Company, however called, and in any written action by consent of stockholders of the Company, the Investor shall vote all Covenant Shares of the Company entitled to vote directly or indirectly held by the Investor as directed by the holders of a majority of the outstanding Registrable Securities, as such term is defined in the Investor Rights Agreement, in connection with the approval of any matter upon which the Registrable Securities may vote. The Investor shall not directly or indirectly enter into any agreement or understanding with any person or entity, other than the Company, to vote or give instructions in any manner inconsistent with the preceding sentence. In the event the Investor fails to vote in accordance herewith, the Investor shall be deemed to have irrevocably appointed such person or persons as may be designated by the Board of Directors of the Company as proxy to vote the Investor's stock in accordance herewith.

(b) DISSENTERS' RIGHTS.

(i) For purposes of this Section 6, the term "Acquisition" shall mean any transaction pursuant to which the Company proposes to (A) sell, lease, convey, or otherwise dispose of all or substantially all of its property or business, (B) merge into or consolidate with any other corporation or other entity or person or (C) effect any other transaction or series of related transactions or other corporate reorganization as a result of which the Company's stockholders of record as constituted

immediately prior to such transaction will, immediately after such transaction (by virtue of securities issued as consideration for the Corporation's acquisition or sale or otherwise) hold less than 50% of the voting power of the surviving or acquiring entity.

(ii) Notwithstanding anything to the contrary in this Section 6.2, the Investor may vote any Covenant Shares held by it at any meeting of the stockholders of the Company in favor of or against any Acquisition if the Investor shall receive, pursuant to such

Acquisition, in exchange for its Covenant Shares cash or publicly traded securities (the "Consideration") whose aggregate value (as reasonably determined by the Company's Board of Directors, the "Aggregate Value") is less than the Covenant Price, provided that, if the Aggregate Value of the Consideration is greater than or equal to the Covenant Price, the Investor may only vote against such proposed Acquisition if, prior to such vote, the Investor executes and delivers to the Company a written agreement with the Company stating that the Investor will not take any action to assert any dissenters' rights pursuant to Chapter 13 of the Corporations Code of California or any appraisal rights pursuant to Section 262 of the Delaware General Corporation Law (or any similar dissenters rights pursuant to any other applicable state's corporate law). For purposes of this Section 6.2(b)(ii), the term "Covenant Price" shall mean the aggregate original purchase price paid by the Investor for Covenant shares then held by the Investor at the record date for determination of shares entitled to vote on any Acquisition, compounded annually at a rate of 6% per year.

6.3 COMPANY'S RIGHT OF FIRST REFUSAL.

(a) RIGHT OF FIRST REFUSAL. Notwithstanding anything to the contrary in this Section 6, in the event that the Investor desires to directly or indirectly sell (or otherwise transfer), and has received a bona fide offer in writing from a third party to buy, any Covenant Shares (a "Transfer"), the Investor shall notify the Company in writing of the proposed sale (a "Transfer Notice"). Each Transfer Notice shall contain all material terms of the proposed sale (or transfer), including, without limitation, a copy of the written offer received, the name and address of the prospective purchaser (or transferee), the purchase price and terms of payment, the date and place of the proposed sale (or transfer), and the number and description of the Covenant Shares proposed to be sold (or transferred) by the Investor (the "Offered Shares"). The Company shall have an option for a period of thirty (30) days from receipt of the Transfer Notice to elect to purchase the Offered Shares at the same price and subject to the same material terms and conditions as described in the Transfer Notice (or terms and conditions as similar as reasonably possible). The Company may exercise such purchase option and, thereby, purchase all (or a portion of) the Offered Shares by notifying the Investor in writing before expiration of the such thirty (30) day period as to the number of such shares that it wishes to purchase. If the Company gives the Investor notice that it desires to purchase such shares, then payment for the Offered Shares shall be by check or wire transfer, against delivery of the Offered Shares to be purchased at a place agreed upon between the parties and at the time of the scheduled closing therefor, which shall be no later than the later of (i) forty-five (45) days after the Company's receipt of the Transfer Notice or (ii) the date contemplated in the Transfer Notice for the closing with the prospective third party transferee(s). To the extent that the Company, or any assignee of the Company, has not exercised its rights of first refusal as to the Offered Shares within the time periods specified in this Section 6.3 the Investor shall be free to sell the stock to such prospective purchaser (or transferee) on the same terms and conditions as outlined in the Transfer Notice, provided that in the event such Covenant Shares are not sold within ninety (90) days of the date of the notice they shall once again be subject to this the right of first refusal.

(b) ASSIGNMENT. Notwithstanding anything to the contrary in this Agreement, prior to the IPO the Company's rights under this Section 6.3 shall be assignable, in whole or in part,

in the sole discretion of the Company to any holder, or number of holders, of securities of the Company.

(c) TERMINATION. The right of first refusal in this Section 6.3 shall terminate upon the earlier of (i) the closing of the IPO, or (ii) an Acquisition in which the Company's stockholders receive cash or publicly traded securities.

6.4 SUBSEQUENT RIGHTS. In the event that the Company shall enter into a strategic alliance during the Restriction Term with a third party similar to the Collaboration Agreement, and pursuant to which the Company shall issue equity to such third party and in connection therewith impose covenants on such third party with regard to the matters set forth in this Section 6 that are materially less restrictive, when taken as a whole, than the restrictions on the Investor set forth in this Section 6 (the "Third Party Restrictions"), the provisions of this Section 6 shall thereafter be superceded and replaced by the terms of the Third Party Restrictions, and the Investor shall thereby become obligated under such Third Party Restrictions, to the extent that the Third Party Restrictions are materially less restrictive to the third party than the terms contained in this Section 6 are to the Investor.

6.5 INVALID TRANSFERS. Any sale, assignment or other transfer of Covenant Shares by the Investor contrary to the provisions of this Section 6 shall be null and void, and the transferee shall not be recognized by the Company as the holder or owner of the Covenant Shares sold, assigned, or transferred for any purpose (including, without limitation, voting or dividend rights), unless and until the Investor has satisfied the requirements of this Section 6 with respect to such sale. The Investor shall provide the Company with written evidence that such requirements have been met or waived, and the proposed transferee must acknowledge in writing to the Company that such proposed transferee is bound by the provisions of Section 6 of this Agreement, prior to consummating any sale, assignment or other transfer of securities, and no Stock shall be transferred on the books of the Company until such written evidence has been received by the Company from the Investor and any such proposed transferee.

7. MISCELLANEOUS.

7.1 SURVIVAL OF WARRANTIES. Notwithstanding the provisions of Section 3.3 or any provision to the contrary contained in this Agreement, all warranties, representations and covenants made by the Company in or pursuant to this Agreement shall be considered to have been relied upon by the Investor and except as otherwise set forth in this Agreement, the representations, warranties and covenants of the Company and the Investor contained in or made pursuant to this Agreement shall survive the execution and delivery of this Agreement, the Effective Date and the Closing (regardless of any investigation made by the Investor or on its behalf).

7.2 TRANSFER; SUCCESSORS AND ASSIGNS. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies,

obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

7.3 GOVERNING LAW. This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of California, without giving effect to principles of conflicts of law.

7.4 COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

7.5 TITLES AND SUBTITLES. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

7.6 NOTICES. All notices, requests and communications hereunder shall be in writing and shall be personally delivered or sent by facsimile transmission (confirmed by prepaid registered or certified mail, return receipt requested or by international express delivery service) (e.g., Federal Express), mailed by registered or certified mail (return receipt requested), postage prepaid, or sent by international express courier service, and shall be deemed to have been properly served to the addressee upon receipt of such written communication, to following addresses of the parties, or such other address as may be specified in writing to the other party hereto:

IF TO THE COMPANY,

ADDRESSED TO: CYTOKINETICS, INC.
280 East Grand Avenue
South San Francisco, California 94080
Attention: Robert Blum,
Vice President, Business Development
Telephone: (650) 624-3002
Telecopy: (650) 624-3010

WITH COPY TO: WILSON SONSINI GOODRICH & ROSATI
PROFESSIONAL CORPORATION
650 Page Mill Road
Palo Alto, CA 94304-1050
Attention: Michael O'Donnell, Esq.
Telephone: (650) 493-9300
Telecopy: (650) 493-6811

IF TO INVESTOR,

ADDRESSED TO: GLAXO WELLCOME INTERNATIONAL B.V.
Huis Ter Heideweg 62

3705 Zeist
The Netherlands
Attention: Chief Financial Officer
Telephone: 011-31-30-6938100
Telecopy: 011-31-30-6938293

WITH A COPY TO: GLAXOSMITHKLINE
Corporate Legal Department
One Franklin Plaza
200 N. 16th Street / FP 2355
Philadelphia, PA 19102
Attention: Donald F. Parman, Vice President
and Associate General Counsel
Telephone: 215-751-7633
Telecopy: 215-751-5349

7.7 FINDER'S FEE. Each party represents that it neither is nor will be obligated for any finder's fee or commission in connection with this transaction. The Investor agrees, to indemnify and to hold harmless the Company from any liability for any commission or compensation in the nature of a finder's fee (and the costs and expenses of defending against such liability or asserted liability) for which the Investor or any of its officers, employees, or representatives is responsible. The Company agrees to indemnify and hold

harmless the Investor from any liability for any commission or compensation in the nature of a finder's fee (and the costs and expenses of defending against such liability or asserted liability) for which the Company or any of its officers, employees or representatives is responsible.

7.8 ATTORNEY'S FEES. If any action at law or in equity (including arbitration) is necessary to enforce or interpret the terms of any of the Agreements, the prevailing party shall be entitled to reasonable attorney's fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

7.9 AMENDMENTS AND WAIVERS. Any term of this Agreement may be amended or waived only with the written consent of the Company and the Investor. Any amendment or waiver effected in accordance with this Section 7.9 shall be binding upon the Investor and each transferee of the Stock (or the Common Stock issuable upon conversion thereof), each future holder of all such securities, and the Company. Notwithstanding the foregoing, the Company may waive any of the restrictions imposed by the Company on the Investor pursuant to Section 6 herein by delivering to the Investor a written instrument of waiver, certified by the Secretary or Chief Financial Officer of the Company ("Waiver"), setting forth the terms of such Waiver and certifying that such Waiver was duly approved by the Board of Directors of the Company.

7.10 EXPENSES. Each of the Company and the Investor shall bear its own expenses incurred on its behalf with respect to this Agreement and the transactions contemplated hereby.

7.11 SEVERABILITY. If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (a) such provision shall be excluded from this Agreement, (b) the balance of the Agreement shall be interpreted as if such provision were so excluded and (c) the balance of the Agreement shall be enforceable in accordance with its terms.

7.12 DELAYS OR OMISSIONS. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

7.13 ENTIRE AGREEMENT. This Agreement, and the documents referred to herein constitute the entire agreement between the parties hereto pertaining to the subject matter hereof, and any and all other written or oral agreements relating to the subject matter hereof existing between the parties hereto are expressly canceled.

7.14 CORPORATE SECURITIES LAW. THE SALE OF THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF THE SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO THE QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM THE QUALIFICATION BY SECTION 25100, 25102 OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED UNLESS THE SALE IS SO EXEMPT.

7.15 CONFIDENTIALITY. Each party hereto agrees that, except, (i) as required by applicable law (provided that if so required, the disclosing party will provide written notice to the affected party regarding such potential disclosure, and use commercially reasonable efforts to limit such disclosure and prevent any further disclosure), or (ii) with the prior written permission of the affected party, it shall at all times keep confidential and not divulge, furnish or make accessible to anyone any confidential information, knowledge or data concerning or relating to the business or financial affairs of the other parties to which such party has been or shall become privy by reason of this Agreement, discussions or negotiations relating to this Agreement, the performance of its obligations hereunder (except the obligations contained in Section 6 of this Agreement which may be disclosed to shareholders of the Company, or a bona fide proposed transferee of Covenant Shares)

or the ownership of Stock purchased hereunder. The provisions of this Section 7.15 shall be in addition to, and not in substitution for, the provisions of (i) any separate nondisclosure agreement executed by the parties hereto with respect to the transactions contemplated hereby, or (ii) the confidentiality provisions contained in the Collaboration Agreement, or in any document or agreement related thereto.

7.16 QUALIFICATIONS. All authorizations, filings, approvals, or permits, if any, of any governmental authority or regulating body of the United States or of any state that are required to be filed within, or prior to, the period of 30 days from the date of the Closing, (the "Period") in connection with the lawful issuance and sale of the Stock pursuant to this Agreement shall be obtained or filed by or on behalf of the Company prior to the expiration of such Period.

[Signature Pages Follow]

The parties have executed this Series D Preferred Stock Purchase Agreement as of the date first written above.

COMPANY:

CYTOKINETICS, INCORPORATED

By:_____

Name:_____

Title:_____

INVESTOR:

GLAXO WELLCOME INTERNATIONAL B.V.

By:_____

Name:_____

Title:_____

EXHIBIT A

FOURTH AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

CYTOKINETICS, INCORPORATED

EXHIBIT B

SCHEDULE OF EXCEPTIONS

ATTACHMENT A

FINANCIAL STATEMENTS

ATTACHMENT B

FINANCIAL STATEMENTS

EXHIBIT C

FORM OF THIRD AMENDED AND RESTATED

INVESTORS' RIGHTS AGREEMENT

EXHIBIT D

FORM OF THIRD AMENDED AND RESTATED

VOTING AGREEMENT

EXHIBIT E

FORM OF LEGAL OPINION

CYTOKINETICS, INCORPORATED

SERIES D PREFERRED STOCK PURCHASE AGREEMENT

June 20, 2001

Exhibit 10.27

CYTOKINETICS, INCORPORATED

AMENDMENT NO. 1 TO
SERIES D PREFERRED STOCK PURCHASE AGREEMENT

THIS AMENDMENT is made this 2nd day of April, 2003, between Cytokinetics, Incorporated, a Delaware corporation (the "Company"), Glaxo Wellcome International B.V., a Netherlands corporation ("GWI"), and Glaxo Group Limited, a private limited company organized under the laws of England and Wales ("GGL"):

WHEREAS the Company and GWI entered into that certain Series D Preferred Stock Purchase Agreement, dated as of June 20, 2001 (the "Agreement"), for the purchase of 2,333,334 shares of Series D Preferred Stock of the Company by GWI;

WHEREAS Section 6 of the Agreement calls for certain restrictions on GWI and its affiliates including, among other restrictions, purchasing additional shares of capital stock of the Company;

WHEREAS GGL is an affiliate of GWI and desires to purchase 600,000 shares of the Company's Series E Preferred Stock pursuant to that certain Series E Preferred Stock Purchase Agreement, dated as of March 21, 2003 (the "Series E Shares");

WHEREAS the Company desires to sell the Series E Shares to GGL;

WHEREAS the Company and GWI desire to amend Section 6.1(b)(iii) of the Agreement as set forth herein;

WHEREAS Section 7.9 of the Agreement allows such Agreement to be amended only with the written consent of the Company and GWI; and

WHEREAS GGL desires to be bound to the rights and obligations of the Agreement, including, without limitation, Section 6 of the Agreement, as if GGL were, in addition to GWI, the Investor thereunder, as such term is defined in the Agreement.

NOW, THEREFORE, in consideration of the purchase of the Series E Shares by GGL, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. COMPANY APPROVAL OF PURCHASE BY GGL OF THE SERIES E SHARES. The Company hereby represents that the Board of Directors of the Company approved the sale of the Series E Shares to GGL at the meeting of the Board of Directors held on March 19, 2003.

2. AMENDMENT OF AGREEMENT.

(a) Section 6.1(b)(iii) of the Agreement shall be amended and restated in its entirety to read as follows:

"(iii) Notwithstanding anything to the contrary in this Section 6.1(b), after the IPO of the Company, the Investor may sell shares of Common Stock if (i) the publicly traded fair market value per share of publicly traded shares of Common Stock, at the time of the sale by the Investor of Common Stock, is greater than two and a half times the per share price (as adjusted for combination, stock splits, stock dividends, subdivisions or split-ups) that shares of Common Stock were initially offered to the public in the IPO (the "IPO Price") and (ii) no sales by the Investor of shares of Common Stock are at a price per share less than two and a half times (as adjusted for combination, stock splits, stock dividends, subdivisions or split-ups) the IPO Price, provided that, the aggregate gross proceeds to the Investor of all sales of Common Stock pursuant to this Section 6.1(b)(iii) shall not exceed $17,000,004. If the Investor intends to sell any shares of Common Stock held by it pursuant to the provisions of this Section 6.1(b)(iii), the Investor and the Company

agree and acknowledge that it is in their mutual interest that disposition of the Covenant Shares be accomplished in a manner that does not disrupt or undermine the trading market for the Company's Common Stock (including any undue adverse reaction to the fact of sale of Covenant Shares by the investor as a research collaborator of the Company), and the parties will work together to explore methods of disposition in order to achieve such goal."

(b) The Company and GWI hereby consent to the amendment and restatement of Section 6.1(b)(iii) as set forth herein.

3. AGREEMENT TO BE BOUND. GGL hereby agrees to be bound to the terms of the Agreement and the rights and obligations of GWI thereunder, as if GGL were the "Investor" thereunder, as such term is defined in the Agreement, including, without limitation, the special definition of "Investor" set forth in Section 6.1(a)(i). GGL hereby acknowledges that the Series E Shares, and all other shares of capital stock of the Company acquired by GGL and GGL's affiliates (either from GWI or otherwise) are hereby bound by the rights and restrictions set forth in Section 6 of the Agreement as if GGL were the "Investor" thereunder, as defined in the Agreement, including, without limitation, the special definition of "Investor" set forth in Section 6.1(a)(i). The parties hereto hereby agree: (i) that nothing in this Amendment shall be construed to replace GWI with GGL as a party to the Agreement; (ii) that both GWI and GGL shall be bound by the terms of the Agreement as the "Investor" thereunder, and (iii) that the rights and obligations of GGL under Section 6 of the Agreement shall be aggregated with, and not be in addition to, the rights and obligations of GWI as if GWI and GGL were the "Investor" thereunder.

4. MISCELLANEOUS.

(a) GOVERNING LAW. This Amendment and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of California, without giving effect to principles of conflicts of law.

[Signature Page to Amendment No.1 to Series D
Preferred Stock Purchase Agreement]

(b) COUNTERPARTS. This Amendment may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

(c) TITLES AND SUBTITLES. The titles and subtitles used in this Amendment are used for convenience only and are not to be considered in construing or interpreting this Amendment.

(d) AMENDMENTS AND WAIVERS. Any term of this Amendment may be amended or waived only with the written consent of the Company, GWI and GGL, provided that at such time as GWI has transferred record ownership of all the securities of the Company held by GWI to GGL, any term of this Amendment may be amended or waived only with the written consent of the Company and GGL. Any amendment or waiver effected in accordance with this Section 4(d) shall be binding upon the GWI and GGL, each transferee of the securities of the Company held by GWI or GGL, each future holder of all such securities, and the Company.

(e) SEVERABILITY. If one or more provisions of this Amendment are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (a) such provision shall be excluded from this Amendment, (b) the balance of the Amendment shall be interpreted as if such provision were so excluded and (c) the balance of the Amendment shall be enforceable in accordance with its terms.

[Signature Page Follows]

Preferred Stock Purchase Agreement]

IN WITNESS WHEREOF, the parties have duly executed this Amendment as of the day and year first set forth above.

COMPANY:

CYTOKINETICS, INCORPORATED

By: _____

Name: James Sabry
_____

Title: President & CEO
_____

[Signature Page to Amendment No.1 to Series D
Preferred Stock Purchase Agreement]

GWI:

GLAXO WELLCOME INTERNATIONAL B.V.

By: _____

Name: Donald F. Parman
_____

Title: Attorney-in-Fact
_____

[Signature Page to Amendment No.1 to Series D
Preferred Stock Purchase Agreement]

GGL:

GLAXO GROUP LIMITED

By: _____

Name: Donald F. Parman
_____

Title: Attorney-in-Fact
_____

[Signature Page to Amendment No.1 to Series D
Preferred Stock Purchase Agreement]

Exhibit 10.28

[*] CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 406 OF THE SECURITIES EXCHANGE ACT OF 1933, AS AMENDED.

EXCLUSIVE LICENSE AGREEMENT

BETWEEN

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA,

THE BOARD OF TRUSTEES OF THE
LELAND STANFORD JUNIOR UNIVERSITY

AND

CYTOKINETICS, INCORPORATED

FOR

[*]

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

TABLE OF CONTENTS

EXCLUSIVE LICENSE AGREEMENT

This License Agreement (the "Agreement") is made effective this 21st day of April, 1998 (the "Effective Date") between THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, a California corporation having offices at 900 Welch Road, Suite 350, Palo Alto CA, 94304, ("Stanford") and THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, a California corporation having its statewide administrative offices at 300 Lakeside Drive, 22nd Floor, Oakland, California 94612-3550, ("The Regents"), both being represented by the University of California, San Diego campus having its office at 9500 Gilman Drive, La Jolla, CA 92093-0910, ("UCSD"), and CYTOKINETICS, INCORPORATED ("Licensee" or "CYTOKINETICS"), a Delaware corporation having offices at 2800 Sand Hill Road, Suite 250, Menlo Park, CA 94025. Stanford and The Regents are collectively referred to herein as "Licensor."

WHEREAS

1. Certain inventions, generally characterized as "[*]," as more specifically described in (a) UCSD Case Nos. SD97-051, SD98-001, SD98-010 and SD98-011; (b) UCSF Case No. SF 98-027 (Attorney Docket Number 18557B-000500); and (c) Stanford Case No. S97-052 (collectively the "Invention"), were made in the course of research at the UCSD, the University of California, San Francisco ("UCSF"), and Stanford and are covered by Licensor Patent Rights as defined herein;

2. The development of the Invention was sponsored in part by The National Institutes of Health and The National Science Foundation, and as a consequence, this license is subject to overriding obligations to the Federal Government under 35 U.S.C. 200-212 and applicable regulations;

3. The inventors are employees of The Regents or Stanford and have assigned their rights to The Regents or Stanford, respectively;

4. Licensee has evaluated the Invention under a Secrecy Agreements with The Regents (UC Control Numbers 98-20-0009, 98-20-0010, 98-20-0019 and 98-20-0081), and has communicated its evaluation to The Regents;

5. Licensee and The Regents have executed a Letter of Intent dated 7 July, 1997, Control Number 98-30-0012;

6. Licensee wishes to obtain rights from Licensor for the commercial development, use, and sale of products from the Invention and certain additional technologies as described in this Agreement, and Licensor is willing to grant those rights so that the

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Invention and certain future technologies may be developed to their fullest and the benefits enjoyed by the general public; and

7. Licensee is a "small business firm" as defined in 15 U.S.C. 632;

8. The parties recognize and agree that royalties due under this Agreement will be paid on both pending patent applications and issued patents;

9. Stanford and The Regents have entered into Interinstitutional Agreements, attached as APPENDIX A and APPENDIX B ("Interinstitutional Agreements"), pursuant to which the University of California, San Diego ("UCSD") became authorized to administer the Invention. UCSD's office is located at 9500 Gilman Drive, La Jolla, CA 92093-0910. The Interinstitutional Agreement between Stanford and The Regents set forth in APPENDIX A has been amended by the parties thereto; the amendment is included in APPENDIX A.

10. The development of the Invention was sponsored in part by the Howard Hughes Medical Institute ("HHMI"). The Regents acquired the right to

license the Invention from HHMI, under the terms of the Interinstitutional Agreement between HHMI and The Regents, UC Control No. 86-18-0017. The Regents are required under the terms of the Interinstitutional Agreement, UC Control No. 86-18-0017, to grant HHMI a paid-up, non-exclusive, royalty-free irrevocable license to use the Invention for its non-commercial purposes, but with no right on the part of HHMI to sublicense.

In view of the foregoing, the parties agree:

1. DEFINITIONS

1.1 "Affiliate" means any corporation or other business entity in which Licensee owns or controls, directly or indirectly, at least twenty percent (20%) of the outstanding stock or other voting rights entitled to elect directors, or which owns or controls directly or indirectly at least twenty percent (20%) of the outstanding stock or other voting rights entitled to elect directors of Licensee; but in any country where the local law does not permit foreign equity participation of at least twenty percent (20%), then an "Affiliate" includes any company in which Licensee owns or controls or is owned or controlled by, directly or indirectly, the maximum percentage of outstanding stock or voting rights permitted by local law.

1.2 "Collaborating Partner" means any third party, including without limitation, a pharmaceutical or biotechnology company, with which Licensee or an Affiliate has a contractual relationship relating to the Invention (i.e., a contractual relationship pursuant to which Licensee or the Affiliate may grant sublicense rights to the third party with respect to all or any portion of Licensee's license rights under Section 2.1 of this Agreement), where any one or more of the following applies: (i) the third party grants to Licensee or the Affiliate any right to develop, make, have made, use, import, sell, have sold or distribute any technology, intellectual property or products; (ii) the third party makes or may become

obligated to make payments to Licensee or the Affiliate, or Licensee or the Affiliate makes or may become obligated to make payments to the third party on account of research, development or distribution activities or expenses; or (iii) the third party and Licensee or the Affiliate collaborate in connection with drug discovery, including without limitation, an arrangement in which the agreement between the third party and Licensee or the Affiliate creates a joint research committee, joint development committee or similar body that has members from both the third party and Licensee or the Affiliate, or an arrangement in which the third party agrees to contribute or use its own products, technology or intellectual property in conjunction with rights the third party obtains from Licensee or the Affiliate.

1.3 "Device" means an instrument, machine or kit (including screening or reagent kits and biological materials specifically claimed in Licensor Patent Rights, but excluding all other biological materials, drugs, compounds, computer hardware, computer software or computer-robot interfaces) where all of the following apply: (i) the instrument, machine or kit is designed for use in and is used in the Field of Use; (ii) the instrument, machine or kit is sold by Licensee, an Affiliate or a Sublicensee to a third party that is not a Collaborating Partner; (iii) the instrument, machine or kit is a Licensed Product; and (iv) the sale or transfer of the instrument, machine or kit by Licensee, the Affiliate or Sublicensee would constitute, but for the license granted to Licensee under this Agreement, an infringement of any pending or issued claim within Licensor Patent Rights.

1.4 "Field of Use" means all uses in humans or animals, including all therapeutic and diagnostic uses, but excludes agricultural uses such as herbicides or pesticides.

1.5 "First Market Introduction" means the first commercial sale or commercial transfer to any third party after approval of a New Drug Application

("NDA") by the United States Food and Drug Administration ("FDA") of any Device, Royalty-Bearing Product or Service.

1.6 "IND" means an Investigational New Drug Application relating to any drug resulting from the use of a Licensed Product, Licensed Method or Technology and approved by the U.S. Food and Drug Administration.

1.7 "Licensed Method" means any method that is covered by Licensor Patent Rights, or the use of which would constitute, but for the license granted to Licensee under this Agreement, an infringement of any pending or issued claim within Licensor Patent Rights.

1.8 "Licensed Product" means any product that is covered by Licensor Patent Rights, that is produced by the Licensed Method, or the use of which would constitute, but for the license granted to Licensee under this Agreement, an infringement of any pending or issued claim within Licensor Patent Rights.

1.9 "Licensor Patent Rights" means Regents' Patent Rights and Stanford Patent Rights.

1.10 "Net Sales" means the total of the gross prices actually received by Licensee or an Affiliate on account of the sale or transfer of Devices, Royalty-Bearing Products or Services by Licensee, an Affiliate or a Sublicensee, less the sum of the following actual deductions where applicable: customary cash, trade, or quantity discounts; sales, use, tariff, import/export duties or other excise taxes imposed on particular sales; transportation charges and allowances; and credits to customers because of rejections or returns. For purposes of calculating Net Sales: (i) if Licensee sells or transfers a Device, Royalty-Bearing Product or Service to an Affiliate and the Affiliate sells or transfers such Device, Royalty-Bearing Product or Service, then only the sale by the Affiliate shall be included in Net Sales, less the deductions described above (and the sale or transfer by Licensee shall not be included in Net Sales); and (ii) if Licensee or an Affiliate sells or transfers a Device, Royalty-Bearing Product or Service to a Sublicensee, then only the sale by the Sublicensee shall be included in Net Sales, less the deductions described above (and the sale or transfer by Licensee or the Affiliate shall not be included in Net Sales).

1.11 "Phase II Trials" means clinical trials conducted by Licensee on a limited patient population to determine the effectiveness of the applicable pharmaceutical for specific targeted indications, to determine dosage tolerance and optimal dosage and to identify possible adverse side effects and safety risks.

1.12 "Regents' Patent Rights" means any subject matter claimed in or covered by any of the following:

a. Case No. SD97-051 - "[*]," Serial [*];

b. Case No. SD98-001 - "[*]," Serial [*];

c. Case No. SD98-010 - "[*]," Serial [*];

d. Case No. SD98-011 - "[*]," Serial [*];

e. Case No. SF98-027 - "[*]," Serial number pending (filed by UCSF on April 14, 1998; Attorney Docket Number 18557B-000500);

and continuing applications thereof including divisions, substitutions and continuation-in-part applications supported by the original application or a division or substitution (but excluding continuation-in-part applications not supported by the original application or a division or substitution thereof); any patents issuing on said applications including reissues, reexaminations and

extensions; and any corresponding foreign applications or patents.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

1.13 "Rights" means Licensed Products and Licensor Patent Rights.

1.14 "Royalty-Bearing Product" means a Licensed Product that incorporates drug raw material discovered by Licensor and licensed to Licensee under this Agreement, and excludes, without limitation, Licensed Products discovered by Licensee, an Affiliate or sublicensee in whole or in part through the use of a Licensed Method.

1.15 "Service" means the screening of compounds by Licensee, an Affiliate, or Sublicensee as a service for a third party where all of the following apply: (i) the compounds are supplied by a third party, and Licensee, the Affiliate or Sublicensee provides to the third party the results of the screening in exchange for payment by the third party to Licensee, the Affiliate or Sublicensee; (ii) the third party to whom Licensee is providing the service is not a Collaborating Partner; and (iii) the screening by Licensee, the Affiliate or Sublicensee would constitute, but for the license granted to Licensee under this Agreement, an infringement of any pending or issued claim within Licensor Patent Rights.

1.16 "Sublicense" means a sublicense granted by Licensee to a Sublicensee of Licensee's license rights under Section 2.1 of this Agreement.

1.17 "Sublicensee" means a third party, other than an Affiliate or a Collaborating Partner, to which Licensee grants sublicense rights with respect to Licensee's license rights under Section 2.1 of this Agreement to develop, make, have made, import, sell, have sold and distribute Licensed Products.

1.18 "Stanford Patent Rights" means any subject matter claimed in or covered by Stanford Case No. S97-052 - "[*]," Serial [*], and continuing applications thereof including divisions, substitutions and continuation-in-part applications supported by the original application or a division or substitution (but excluding continuation-in-part applications not supported by the original application or a division or substitution thereof); any patents issuing on said applications including reissues, reexaminations and extensions; and any corresponding foreign applications or patents.

1.19 "Technology" means all existing information of Licensor (as reasonably determined by Licensor) relating to Rights to the extent applicable to the Field of Use, including but not limited to (a) Data of a technical nature relating to Rights, (b) useful pre-clinical, clinical and other data respecting the safety and efficacy of Licensed Products, and (c) information that is necessary or useful in connection with research or development activities, or in connection with the manufacture, use or sale of Licensed Products or obtaining governmental approvals relating to Licensed Products.

2. EXCLUSIVE GRANT OF LICENSE

2.1 Subject to the limitations set forth in this Agreement, Licensor grants to Licensee a world-wide license under Licensor Patent Rights to develop, make, have made,

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

use, import ??, have sold and distribute Licensed Products and products or services that arise from ?? of or use Licensed Products, Licensed Methods and Technology; to practice Licensed Methods; and to use Technology.

2.2 Except as otherwise provided in this Agreement, the license granted in Section 2.1 with ?? to Licensor Patent Rights is exclusive for the life of the Agreement. The license granted in Section 2.1 with respect to Technology is non-exclusive for the life of this Agreement.

2.3 The license granted in Sections 2.1 and 2.2 is subject to all the applicable provisions ?? license to the United States Government executed by UCSD and is subject to the ?? obligations to the U.S. Government under 35 U.S.C. 200-212 and applicable government ?? regulations.

2.4 The licenses granted in Sections 2.1 and 2.2 are limited to the Field of Use. Licensee ?? license under this Agreement outside the Field of Use. Subject to restrictions imposed by ?? on The Regents, Licensee shall have the first right to negotiate a license from The ?? future improvements to the Invention in the Field of Use, provided: (i) such improvements arise from research funded by Licensee or an Affiliate and performed by the very ?? of the Invention on a campus governed by the Regents; (ii) such improvements are solely ?? by The Regents; (iii) the licenses granted in Sections 2.1 and 2.2 remain exclusive; ?? (iv) this Agreement has not been terminated. Such "first right to negotiate" shall ?? the date Licensee is informed by The Regents of the improvement and shall terminate ?? therefrom.

2.5 The Regents and Stanford reserve all rights to use the Invention and Technology ?? educational and research purposes.

3. ?? SUBLICENSES

3.1 Licensor also grants to Licensee the right to issue sublicenses to third parties under Licensor Patent Rights to make, have made, use, import and sell and have sold Licensed Products, to practice the Licensed Method and to use Technology, as long as Licensee has ?? exclusive rights thereto in the Field of Use under this Agreement. To the extent applicable, Sublicenses must include all of the rights and obligations due to The Regents (and, if applicable, the United States Government, HHMI and Stanford) and contained in this Agreement; provided, however, that sublicensees shall not be obligated to make any payments to Licensor under Sections 4, 5, 6, 7 or 19.5 of this Agreement (Licensee shall be responsible for complying with any payment obligations as described in Sections 4, 5, 6, 7 and 19.5).

3.2 Licensee shall promptly provide Licensor with a copy of each sublicense issued and summarize and deliver all reports due Licensor from sublicensees.

3.3 Upon termination of this Agreement for any reason, Licensor, at its sole discretion, shall determine whether Licensee shall cancel or assign to Licensor any and all unexpired sublicenses.

4. PAYMENT TERMS

4.1 Royalties are payable on Devices, Royalty-Bearing Products and Services covered by both pending patent applications and issued patents. Royalties generated will accrue in each country for the duration of Licensor Patent Rights in that country and are payable to UCSD when Licensee (or, in the case of sales by Affiliates, when the Affiliate) receives payment for Royalty-Bearing Products from a third party.

4.2 Licensee shall pay earned royalties quarterly on or before February 28, May 31, August 31 and November 30 of each calendar year. Each payment will be for earned royalties accrued within Licensee's most recently

completed calendar quarter.

4.3 All payments due The Regents are payable in United States Dollars. When Devices, Royalty-Bearing Products and Services are sold for currencies other than United States Dollars, Licensee shall first determine the earned royalty in the currency of the country in which Royalty-Bearing Products were sold and then convert the amount into equivalent United States Dollars, using the exchange rate quoted in the Wall Street Journal on the last business day of the calendar quarter when payment was received by Licensee (or, in the case of sales by Affiliates, when payment was received by the Affiliate).

4.4 If at any time legal restrictions prevent the remittance of payments due within 180 days to Licensee from any country where a Device, Royalty-Bearing Product or Service is sold, Licensee shall pay The Regents payments owed directly from its U.S. source of funds.

4.5 If any patent or patent claim within Licensor Patent Rights is held invalid by a court of competent jurisdiction and last resort and from which no appeal has or can be taken, all obligation to pay royalties based on that patent or claim or any claim patentably indistinct therefrom will cease as of the date of final decision. Licensee will not, however, be relieved from paying any royalties that accrued and were received before the final decision or that are based on another patent or claim included within Licensor Patent Rights that is not involved in the final decision.

4.6 In the event payments, patent cost reimbursements or fees are not received by The Regents when due, Licensee shall pay to Licensor interest charges at a rate of [*] percent ([*]%) per annum. Interest is calculated from the date payment was due until actually received by The Regents.

5. LICENSE-ISSUE AND PARTNERSHIP FEE

5.1 Licensee shall pay to Licensor a license-issue fee of: (i) [*] ($[*]) within [*] days of the execution of this License Agreement; (ii) [*]

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Dollars ($[*]) on the [*] of the Effective Date; and (iii) [*] Dollars ($[*]) on the [*] of the Effective Date. This fee is non-refundable, non-cancelable, and is not an advance against royalties. All payments due by Licensee to Licensor hereunder shall be paid to UCSD. Licensee shall have no liability and Licensee's rights under this Agreement shall not be affected on account of the failure of UCSD to pay to Stanford or UCSF amounts due to Stanford or UCSF.

5.2 Within ten (10) days after receipt by Licensee from a Collaborating Partner, pursuant to an agreement between Licensee and the Collaborating Partner in which Licensee (i) grants to the Collaborating Partner rights to sell, distribute or develop Licensed Products, or (ii) agrees to collaborate with the Collaborating Partner in drug discovery for use in the Field of Use using Licensed Products or Licensed Methods, of consideration in the form of cash, stock purchase or equity investment in Licensee, with a cumulative value equal to or grater than [*] Dollars ($[*]) but less than [*] Dollars ($[*]), Licensee shall pay UCSD a partnership fee equal to $[*]. Thereafter, on February 28 of each year Licensee shall pay UCSD an annual license fee equal to $[*] for each such collaboration agreement so long as the agreement with the Collaborative Partner has not been terminated and the Collaborative Partner continues to actively market and sell Licensed Products. With respect to any Collaborating Partner, the $[*] fees described above shall be increased to [*] U.S. Dollars ($[*]) when the cumulative consideration described above received from such Collaborating Partner equals or exceeds [*] U.S. Dollars ($[*]).

6. MILESTONE PAYMENTS

Licensee shall pay to Licensor milestone payments in the following amounts within thirty (30) days following the achievement of the specified events:

6.1 Within ten (10) days after the filing with the FDA of any IND for a product discovered using Licensed Products by Licensee, an Affiliate or a Sublicensee, $[*].

6.2 Within ten (10) days after the completion of Phase II Trials (which will not be deemed to be complete until a Final Report for Phase II has been submitted to and approved by the FDA) by Licensee, an Affiliate or a Sublicensee for the first Royalty-Bearing Product, $[*]. Licensee shall only be obligated to make one milestone payment under this Section 6.2.

6.3 Within ten (10) days after approval by the FDA of an NDA for a product discovered using Licensed Products filed by Licensee, an Affiliate or a Sublicensee, $[*].

6.4 Within ten (10) days after approval by the FDA of an NDA for a product discovered using Licensed Products filed by a Collaborating Partner, $[*].

All Milestone Payments made to Licensor prior to First Market Introduction of any Device, Royalty-Bearing Product or Service shall be credited against royalties owed to Licensor on

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account of such Device, Royalty-Bearing Product or Service. Thereafter, milestone payments shall not be credited against royalties owed by Licensee to Licensor.

7. EARNED ROYALTIES AND MINIMUM ANNUAL ROYALTIES

7.1 a. Devices. Licensee shall pay to Licensor a royalty equal to: (i) [*] percent ([*]%) of annual worldwide Net Sales by Licensee, an Affiliate or a Sublicensee of Devices that do not contain computer hardware, computer software or computer-robot interfaces; and (ii) [*] percent ([*]%) of annual worldwide Net Sales by Licensee, an Affiliate or a Sublicensee of Devices that contain computer hardware, computer software or computer-robot interfaces.

b. Royalty-Bearing Products. Licensee shall pay to Licensor a royalty calculated on annual worldwide Net Sales of Royalty-Bearing Products by Licensee, an Affiliate or a Sublicensee according to the following schedule:

1) [*]% on annual Net Sales of less than $[*];

2) [*]% on annual Net Sales greater than $[*], but less than $[*];

3) [*]% on annual Net Sales greater than $[*], but less than $[*];

4) [*]% on annual Net Sales greater than $[*], but less than $[*];

5) [*]% on annual Net Sales greater than $[*].

The royalty schedule described above shall be calculated based upon Net Sales of Royalty-Bearing Products generated during each calendar year, so that aggregate Net Sales are separately computed for each calendar year.

c. Services. Licensee shall pay to Licensor a royalty equal to [*] percent ([*]%) of annual worldwide Net Sales of Services by Licensee, an Affiliate or a Sublicensee.

Except for Devices, Royalty-Bearing Products and Services, no royalties shall be payable with respect to the sale of Licensed Products, including without limitation Licensed Products based on drug raw materials discovered in whole or in part through the use of Licensed Methods such as screens, assays and molecular targets such as molecular motors and their regulatory elements.

7.2 Licensee shall have the right to grant sublicenses under this Agreement for all purposes and indications within the Field of Use. Licensee shall pay The Regents "Licensor's Share" (defined below) of any "Qualified Sublicense Payments" (defined below). "Qualified

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Sublicense Payments" shall mean up-front payments, milestone payments and the premium portion over the then-fair market value of any purchase by the Sublicensee of equity of Licensee, made by a Sublicensee to Licensee during the term of this Agreement and the term of the applicable Sublicense, to the extent made on account of the sublicense by Licensee of Licensor Patent Rights, but shall not include: (i) payments made for the purchase of equity of Licensee to the extent that the purchase is made at the then-fair market value of the equity, as determined in good faith by the Board of Directors of Licensee; (ii) royalties; and (iii) payments made for the purchase of products or services. If the only license rights granted by Licensee to the Sublicensee consist of Licensor Patent Rights and/or Licensed Methods (and no other rights, technology or intellectual property), then "Licensor's Share" shall be [*] percent ([*]%) of the Qualified Sublicense Payment. If the license rights granted by Licensee to the Sublicensee include rights, technology or intellectual property in addition to Licensor Patent Rights and/or Licensed Methods, then "Licensor's Share" shall be [*] percent ([*]%) of the Qualified Sublicense Payment. Any Qualified Sublicense Payments made by Sublicensee in a form other than cash shall be valued at the then-fair market value of such Qualified Sublicense Payments. If the parties cannot agree on the fair market value of such non-cash Qualified Sublicense Payments, the parties agree to meet and negotiate in good faith such fair market value.

7.3 Licensee shall pay to Licensor a minimum annual royalty of [*] Dollars ($[*]) for the life of Licensor Patent Rights, beginning with the year of the First Market Introduction of any Device, Royalty-Bearing Product or Service, but no later than February 28 of the first full calendar year beginning after the [*] year anniversary of the Effective Date. For the first year of commercial sales, if earlier than the [*] year anniversary of the Effective Date, Licensee's obligation to pay the minimum annual royalty will be pro-rated for the number of months remaining in that calendar year when commercial sales commence and will be due the following February 28, to allow for crediting of the prorated year's earned royalties. For subsequent years, the minimum annual royalty will be paid to Licensor by February 28 of the year immediately following the applicable year, and will be credited against the earned royalty due for the calendar year in which the minimum payment was made.

8. DUE DILIGENCE

8.1 Licensee, on execution of this Agreement, shall itself or through one or more third parties diligently proceed with the development, manufacture and sale of Licensed Products and shall itself or through one or more third parties earnestly and diligently endeavor to market the same within a reasonable time after execution of this Agreement and in quantities sufficient to meet market demands. Licensee shall develop one or more [*] incorporating some portion of the Invention within [*] ([*]) months after the Effective Date.

Within [*] ([*]) months after the Effective Date, some combination of Licensee and/or one or more sublicensees or partners of Licensee shall have initiated at least [*] ([*]) [*] which [*] shall address at least [*] ([*]) of the following [*]: [*] that Licensee informs Licensor are suitable [*]

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[*]. Licensor expects that the first sale of Licensed Products shall occur within [*] ([*]) years of the execution date of this Agreement, unless the first sale of Licensed Products is delayed by the process of regulatory approval by federal, state or foreign national agencies or by the occurrence of other events beyond the reasonable control of Licensee.

8.2 Licensee shall itself or through one or more third parties endeavor to obtain all necessary governmental approvals for any manufacture, use or sale of Licensed Products, or shall certify to UCSD in writing that none are needed.

8.3 If Licensee (or an Assignee or sublicensee) fails to either: (1) submit [*] to the [*] within [*] ([*]) years from the Effective Date of this Agreement; or (2) begin to [*] the [*] within [*] ([*]) months after receiving [*] of the [*] for such [*]; then UCSD has the right and option to either terminate this Agreement or reduce Licensee's exclusive license to a nonexclusive license. This right, if exercised by UCSD, supersedes the rights granted in Article 2 (GRANT), and shall be exercised, if at all, by written notice delivered to Licensee within thirty (30) days after the applicable date described above.

8.4 In addition to the obligations set forth above, Licensee and its partners, Affiliates and sublicensees shall collectively spend: (i) [*] $[*] for the [*] during the [*] ([*]) [*] of this Agreement, and (ii) beginning with the [*] and continuing through and including the [*], [*] $[*] for any [*] ([*]) [*].

9. PROGRESS AND ROYALTY REPORTS

9.1 Beginning February 28, 1998 and semi-annually thereafter, Licensee shall submit to UCSD a progress report covering Licensee's (and any Affiliate's) activities related to the development and testing of all Devices, Royalty-Bearing Products or Services arising from the use of a Licensed Product, a Licensed Method or the Technology and the obtaining of the governmental approvals necessary for marketing. Progress reports are required for each Device, Royalty-Bearing Product or Service until the first commercial sale of that Device, Royalty-Bearing Product or Service occurs in the United States.

9.2 Progress reports submitted under Paragraph 9.1 should include, but are not limited to, the following topics related to the Device, Royalty-Bearing Product or Service that arise from the use of a Licensed Product, a Licensed Method or the Technology:

- summary of work completed

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- key scientific discoveries

- summary of work in progress

- current schedule of anticipated events or milestones

- market plans for introduction of Devices, Royalty-Bearing Products or Services arising from the use of a Licensed Product, a Licensed Method or the Technology, and

- a summary of resources (dollar value) spent in the reporting period.

9.3 Licensee has a responsibility to inform UCSD of any change in its status (or the status of any Affiliate that performs any activities in connection with this Agreement) as a small business entity (as defined by the United States Patent and Trademark Office).

9.4 Licensee shall report to UCSD in its immediately subsequent progress and royalty report the date of first commercial sale of a Device, Royalty-Bearing Product or Service in each country.

9.5 After the first commercial sale of a Royalty-Bearing Product anywhere in the world, Licensee shall make quarterly royalty reports to UCSD on or before each February 28, May 31, August 31 and November 30 of each year. Each royalty report will cover Licensee' most recently completed calendar quarter and will show (a) the gross sales and Net Sales of Devices, Royalty-Bearing Products and Services sold during the most recently completed calendar quarter; (b) the number of each type of Device, Royalty-Bearing Product or Service sold; (c) the royalties, in U.S. dollars, payable with respect to sales of Devices, Royalty-Bearing Products or Services; (d) the method used to calculate the royalty; and (e) the exchange rates used.

9.6 If no sales of Devices, Royalty-Bearing Products or Services have been made during any reporting period, a statement to this effect is required.

10. BOOKS AND RECORDS

10.1 Licensee shall keep accurate books and records showing all Devices, Royalty- Bearing Products and Services manufactured, used, and/or sold under the terms of this Agreement. Books and records must be preserved for at least five (5) years from the date of the royalty payment to which they pertain.

10.2 Licensee' books and records relating to Net Sales must be open to inspection by representatives or agents of Licensor at reasonable times. UCSD shall bear the fees and expenses of examination but if an error in royalties of more than [*] percent ([*]%) of the total royalties due for any year is discovered in any examination then Licensee shall bear the reasonable fees and expenses of that examination. Licensor agrees to keep confidential any information discovered pursuant this Section 10.2 or Sections 9.1 or 9.2.

11. LIFE OF THE AGREEMENT

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11.1 Unless otherwise terminated by operation of law or by acts of the parties in accordance with the terms of this Agreement, this Agreement will be in force from the Effective Date until: (1) if a patent that is included within Licensor Patent Rights is issued, the expiration of the last-to-expire patent licensed under this Agreement; (2) if no patent that is included within Licensor Patent Rights is issued, [*] ([*]) years from the date of this Agreement, unless all patent applications licensed under this Agreement have been abandoned as of the [*] anniversary of this Agreement (and Licensor has

complied with its obligations in Article 17), in which case this Agreement shall terminate on the [*] anniversary of this Agreement.

11.2 Any termination of this Agreement will not affect the rights and obligations set forth in the following Articles:

Article 10	Books and Records
Article 14	Disposition of Licensed Products on Hand on Termination
Article 15	Use of Names and Trademarks
Article 20	Indemnification
Article 24	Failure to Perform
Article 29	Secrecy

12. TERMINATION BY UCSD

If Licensee fails to perform or violates any material term of this Agreement, then UCSD may give written notice of default ("Notice of Default") to Licensee. If Licensee fails to repair the default within sixty (60) days of the effective date of Notice of Default (or, with respect to a default that is not reasonably curable within sixty (60) days, such additional reasonable period of time as may be required under the circumstances to cure the default, which additional period of time in no event shall exceed one hundred eighty (180) days), UCSD may terminate this Agreement and its licenses by a second written notice ("Notice of Termination"). If a Notice of Termination is sent to Licensee, this Agreement will automatically terminate on the effective date of that notice. Termination will not relieve Licensee of its obligation to pay any fees owing at the time of termination and will not impair any accrued right of UCSD. These notices are subject to Article 19 (Notices).

13. TERMINATION BY LICENSEE

13.1 Licensee has the right at any time to terminate this Agreement in whole or as to any portion of Licensor Patent Rights by giving notice in writing to UCSD. Notice of termination will be subject to Article 19 (Notices) and termination of this Agreement will be effective ninety (90) days from the effective date of notice.

13.2 Any termination under the above paragraph does not relieve Licensee of any obligation or liability accrued under this Agreement prior to termination or rescind any payment made to UCSD or anything done by Licensee prior to the time termination becomes

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effective. Termination does not affect in any manner any rights of UCSD arising under this Agreement prior to termination.

14. DISPOSITION OF LICENSED PRODUCTS ON HAND UPON TERMINATION

Upon termination of this Agreement Licensee is entitled to dispose of all previously made or partially made Licensed Products, but no more, within a period of [*] ([*]) days provided that the sale of those Licensed Products is subject to the terms of this Agreement, including but not limited to the rendering of reports and payment of royalties required under this Agreement.

15. USE OF NAMES AND TRADEMARKS

Nothing contained in this Agreement confers any right to use in advertising, publicity, or other promotional activities any name, trade name, trademark, or other designation of either party hereto (including contraction, abbreviation or simulation of any of the foregoing). Unless required by law, the use by Licensee of the names Stanford University, HHMI, UCSD, UCSF or any other campus of The Regents is prohibited.

16. LIMITED WARRANTY

16.1 The persons executing this Agreement on behalf of the constituent members of Licensor warrant that they are duly authorized to do so. Each constituent member of Licensor warrants that this Agreement constitutes the binding obligation of such constituent member and is enforceable in accordance with its terms. UCSD has separately provided to Licensee the Interinstitutional Agreements. The Interinstitutional Agreements shall not be terminated, and may not be amended in a manner that adversely affect Licensee's rights hereunder.

16.2 This license and the associated Invention are provided WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED. LICENSOR MAKES NO REPRESENTATION OR WARRANTY THAT THE LICENSED PRODUCTS OR LICENSED METHODS WILL NOT INFRINGE ANY PATENT OR OTHER PROPRIETARY RIGHT.

16.3 IN NO EVENT MAY LICENSOR BE LIABLE FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES RESULTING FROM EXERCISE OF THIS LICENSE OR THE USE OF THE INVENTION OR LICENSED PRODUCTS.

16.4 Nothing in this Agreement:

16.4.1 is a warranty or representation by Licensor as to the validity or scope of any Licensor Patent Rights;

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16.4.2 is a warranty or representation that anything made, used, sold or otherwise disposed of under any license granted in this Agreement is or will be free from infringement of patents of third parties;

16.4.3 is an obligation to bring or prosecute actions or suits against third parties for patent infringement except as provided in Article 19;

16.4.4 confers by implication, estoppel or otherwise any license or rights under any patents of Licensor other than Licensor Patent Rights as defined in this Agreement, regardless of whether those patents are dominant or subordinate to Regent's Patent Rights; or

16.4.5 is an obligation to furnish any know-how not provided in Regents' Patent Rights except as otherwise required under this Agreement.

17. PATENT PROSECUTION AND MAINTENANCE

17.1 As long as Licensee has paid patent costs as provided for in Paragraph 17.6, Licensor shall diligently endeavor to prosecute and maintain the United States and foreign patents comprising Licensor Patent Rights, using counsel of its choice selected from those approved by Licensee from the list approved by Licensor. Licensor shall provide Licensee with copies of all relevant documentation so that Licensee may be informed of the continuing

prosecution and Licensee agrees to keep this documentation confidential. Licensor's counsel will take instructions only from Licensor, considering input from Licensee after these instructions have been approved in writing by Licensor, and all patents and patent applications under this Agreement will be assigned solely to Licensor.

17.2 Licensor shall give thirty (30) days advance notice to Licensee of any intention or decision to abandon or to otherwise cease preparation, filing, prosecution or maintenance of any patent or patent application relating to the Licensor Patent Rights (a "Proposed Discontinued Patent"); provided, however, that abandonment of a patent application in favor of a continuation or continuation-in-part thereof shall not constitute discontinuance or abandonment of the parent application. In such case, Licensee may elect at its sole discretion to cause Licensor to continue the preparation, filing, prosecution or maintenance of the Proposed Discontinued Patent, so long as Licensee agrees to pay all reasonable costs of Licensor in connection with such preparation, filing, prosecution or maintenance at its sole expense. Discontinuance may be on a country-by-country basis or for a patent application or patent series in total.

17.3 Licensor shall use all reasonable efforts to amend any patent application to include claims reasonably requested by Licensee and to file patent applications reasonably requested by Licensee to protect the products contemplated to be sold under this Agreement.

17.4 Licensee may apply for an extension of the term of any patent included within Licensor Patent Rights, if appropriate. Licensee shall prepare all documents, and UCSD agrees to execute the documents and to take additional action as Licensee reasonably requests in connection therewith.

17.5 If either party receives notice pertaining to infringement or potential infringement of Licensor Patent Rights, that party shall notify the other party within ten (10) days after receipt of notice of infringement, and the terms of Paragraph 19 of this Agreement shall apply.

17.6 Licensee shall reimburse UCSD for all the reasonable costs of preparing, filing, prosecuting and maintaining all United States and foreign patent applications contemplated by this Agreement and requested by Licensee. Relevant costs billed by UCSD's counsel will be rebilled to Licensee and are due within 30 days of rebilling by UCSD. These costs include: (a) patent prosecution costs for the Invention incurred by UCSD prior to the execution of this Agreement; (b) any patent prosecution costs that may be incurred for patentability opinions, re-examination, re-issue, interferences, or inventorship determinations; and (c) an additional amount equal to [*]% of the amount properly billed to Licensee under this paragraph with respect to amounts incurred by Licensor after the Effective Date. Prior costs relating to the filing of patents requested by Licensee will be due ninety (90) days after execution of this Agreement and billing by UCSD.

17.7 Licensee may request Licensor to obtain patent or other patent protection on the Invention or Licensor Patent Rights, as they relate to the Field of Use in foreign countries, if" available, Licensor shall diligently endeavor to obtain such patents or patent protection. If Licensee desires Licensor to obtain such protection, Licensee shall notify Licensor of Licensee' decision to have Licensor obtain or maintain foreign patents not less than sixty (60) days prior to the deadline for any payment, filing, or action to be taken in connection therewith. This notice concerning foreign filing must be in writing, must identify the countries desired, and must reaffirm Licensee's obligation to underwrite the costs thereof. The absence of such a notice from Licensee to Licensor will be considered an election not to obtain or maintain such foreign rights.

17.8 Licensee's obligation to underwrite and to pay patent prosecution costs will continue for so long as this Agreement remains in effect,

but Licensee may terminate its obligations with respect to any given patent application or patent upon three (3) months written notice to UCSD. Licensor will use its best efforts to curtail patent costs when a notice of termination is received from Licensee. Licensor may prosecute and maintain such application(s) or patent(s) at its sole discretion and expense, but Licensee will have no further right or licenses thereunder. Non-payment of patent costs may be deemed by UCSD as an election by Licensee not to the maintain application(s) or patent(s) for which payment was not made, provided that UCSD notifies Licensee in writing prior to the time UCSD ceases maintenance of any patent or patent application and Licensee has not made payment within ten (10) days after receipt of such notice.

17.9 If Licensee terminates its obligation to pay patent prosecution costs pursuant to Section 17.8, UCSD may, after notification of Licensee, file, prosecute or maintain patent applications at its own expense in any country in which Licensee has elected to terminate its payment obligation pursuant to Section 17.8, and such applications and resultant patents will not be subject to this Agreement.

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18. PATENT MARKING

Licensee shall mark all Licensed Products made, used or sold under the terms of this Agreement, or their containers, in accordance with the applicable patent marking laws.

19. PATENT INFRINGEMENT

19.1 If Licensee learns of the substantial infringement of any patent licensed under this Agreement, Licensee shall call UCSD's attention thereto in writing and provide UCSD with reasonable evidence of infringement. Neither party will notify a third party of the infringement of any of Licensor Patent Rights without first obtaining consent of the other party, which consent will not be unreasonably denied or delayed. Both parties shall use their best efforts, including but not limited to arbitration, in cooperation with each other to terminate infringement without litigation.

19.2 Licensee may request that Licensor take legal action against the infringement of Licensor Patent Rights. Request must be in writing and must include reasonable evidence of infringement. If the infringing activity has damaged or reasonably threatens to damage Licensee and has not abated within seventy-five (75) days following the effective date of request, Licensor then has the right to:

19.2.1 commence suit; or

19.2.2 refuse to participate in the suit.

UCSD shall give notice of Licensor's election in writing to Licensee by the end of the seventy-fifth (75th) day after receiving notice of written request from Licensee. Licensee may thereafter bring suit for patent infringement, at its own expense, if and only if Licensor elects not to commence suit and if the infringement occurred, at least in part, during the period and in a jurisdiction where Licensee had exclusive rights under this Agreement. If Licensor elects to commence suit, then Licensee may elect to share equally in the expense of such litigation, subject to its right at any later time to discontinue sharing in the expenses of the litigation. If, however, Licensee elects to bring suit in accordance with this paragraph, Licensor may thereafter join that suit at its own expense.

19.3 Legal action as is decided on will be at the expense of the

party bringing suit (subject to the election of Licensee to share equally in the expenses of the legal action as described above). Subject to Section 19.5, all recoveries recovered thereby will be shared between Licensor and Licensee pro rata in accordance with the expenses paid by each party in connection with the litigation (expenses paid by Licensor pursuant to the last sentence of Section 19.2 shall not be included in the determination of the pro rata share).

19.4 Each party shall reasonably cooperate with the other in litigation proceedings instituted hereunder, but at the reasonable expense of the party bringing suit. Litigation will

be controlled by the party bringing the suit, except that Licensor may be represented by counsel of its choice and at its expense in any suit brought by Licensee.

19.5 Any recovery actually obtained by Licensee in a patent infringement action against a third party in excess of litigation costs will, only to the extent that such recovery is attributable to Devices, Royalty-Bearing Products or Services sold by the third party infringer, be shared with Licensor as follows:

a) any payment for past sales by the third party infringer of Devices, Royalty-Bearing Products or Services will be deemed Net Sales and Licensee will pay Licensor royalties thereon at the rates specified in Article 7.1.

b) any payment which covers future sales of Devices, Royalty-Bearing Products or Services will be deemed a sublicense to a partnership project, and monies will be shared as specified in Sections 5.6 and 5.7, to a maximum of $[*] per each infringer's infringing product or [*]% of the total payments made by the third party infringer to Licensee in connection with the litigation, whichever is the lesser.

c) Licensee and Licensor agree to negotiate in good faith appropriate compensation to Licensor for any non-cash settlement or cross-license settlement with an infringer; provided that (i) the compensation shall only be provided to the extent such non-cash settlement or cross-license settlement is attributable to the sale by the third party infringer of Devices, Royalty-Bearing Products or Services; (ii) with respect to any non-cash or cross-license settlement, Licensee shall pay to Licensor an amount equal to the then fair market value of the non-cash or cross-license consideration received by Licensee from the third party infringer.

d) Licensor will not share in any portion of the recovery by Licensee that is payment for willful infringement or is not paid with respect to the sale by the third party infringer of Devices, Royalty-Bearing Products or Services.

20. INDEMNIFICATION

20.1 Licensee shall indemnify, hold harmless and defend Licensor, its officers, employees, and agents; the sponsors of the research that led to the Invention; and the inventors of the patents and patent applications in Licensor Patent Rights and their employers against any and all claims, suits, losses, damage, costs, fees, and expenses resulting from or arising out of exercise of this license or any sublicense. This indemnification includes, but is not limited to, any product liability, but shall exclude any breach of this Agreement or any gross negligence or intentional misconduct by Licensor.

20.2 Within ninety (90) days after the Effective Date, Licensee, at its sole cost and expense, shall insure its activities in connection with the work under this Agreement and obtain, keep in force and maintain insurance as follows, or an equivalent program of self insurance:

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Comprehensive or commercial form general liability insurance (contractual liability included) with limits as follows:

- Each Occurrence $[*] (to be increased to $[*] at any time when Licensee is conducting human clinical trials)
- Products/Completed Operations Aggregate $[*]
- Personal and Advertising Injury $[*]
- General Aggregate (commercial form only) $[*]

The coverage and limits referred to under the above do not in any way limit the liability of Licensee. Within ninety (90) days after the Effective Date, Licensee shall furnish UCSD with certificates of insurance showing compliance with all requirements. Certificates must:

- Provide for thirty (30) day advance written notice to UCSD and Stanford of any modification.
- Indicate that UCSD and Stanford has been endorsed as an additional Insured under the coverage referred to under the above.
- Include a provision that the coverage will be primary and will not participate with nor will be excess over any valid and collectable insurance or program of self-insurance carried or maintained by UCSD and Stanford.

20.3 UCSD shall promptly notify Licensee in writing of any claim or suit brought against ?? respect of which UCSD intends to invoke the provisions of this Article. Licensee shall ?? UCSD informed on a current basis of its defense of any claims under this Article.

21. NOTICES

Any ?? or payment required to be given to either party is properly given and effective on the ?? received. Notices shall be sent to the respective addresses given below, or to another ?? as is designated by written notice given to the other party.

In the case of Licensee:

Cytokinetics, Incorporated
2800 Sand Hill Road, Suite 250
Menlo Park, CA 94025
Attn: Dr. James Sabry, President and CEO

In the case of Licensor or UCSD:

THE UNIVERSITY OF CALIFORNIA, SAN DIEGO
Technology Transfer Office
9500 Gilman Drive
La Jolla, California 92093-0910

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Attention: Director;
Referring to: UCSD Case Nos. SD97-051,
SD98-001, SD98-010, SD98-011

22. ASSIGNABILITY

This Agreement may be assigned by Licensor, but may be assigned by Licensee only with the written consent of UCSD, which consent will not be unreasonably withheld or delayed. Notwithstanding the foregoing, a merger or sale of stock involving Licensee shall not be deemed to be an assignment of this Agreement, and an assignment of this Agreement by Licensee in connection with a sale of substantially all of Licensee's assets shall not require the consent of UCSD. If Licensor assigns this Agreement, the assignee will agree in a written agreement delivered to Licensee to be bound by the terms of this Agreement, and Licensor shall continue to be bound by the terms of Articles 2 and 3, Section 16.1, Articles 17, 19, 21, 24, 25 and 30.

23. NO WAIVER

No waiver by either party of any default of this Agreement may be deemed a waiver' of any subsequent or similar default.

24. FAILURE TO PERFORM

In either party finds it necessary to undertake legal action against the other on account of failure of performance due under this Agreement, then the prevailing party is entitled to reasonable attorney's fees in addition to costs and necessary disbursements.

25. GOVERNING LAWS

THIS AGREEMENT WILL BE INTERPRETED AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, UNITED STATES OF AMERICA, WITH JURISDICTION IN COURTS OF THE STATE OF CALIFORNIA, but the scope and validity of any patent or patent application will be governed by the applicable laws of the country of the patent or patent application.

26. [Intentionally Omitted.]

27. GOVERNMENT APPROVAL OR REGISTRATION

If this Agreement or any associated transaction to which Licensee becomes a party is required by the law of any nation to be either approved or registered with any governmental agency, Licensee shall assume all legal obligations to do so.

28. EXPORT CONTROL LAWS

Licensee shall observe all applicable United States and foreign laws with respect to the transfer of Licensed Products and related technical data to foreign countries, including, without limitation, the International Traffic in Arms Regulations (ITAR) and the Export Administration Regulations. This may include a requirement that Licensee manufacture in the United States Licensed Products that are to be sold in the United States.

29. SECRECY

29.1 With regard to confidential information ("Data") supplied by one party to another, which Data can be oral or written or both, both Licensee

and The Regents agree:

29.1.1 not to use the Data except for the sole purpose of performing under the terms of this Agreement;

29.1.2 to safeguard Data against disclosure to others with the same degree of care as it exercises with its own data of a similar nature;

29.1.3 not to disclose Data to others (except by Licensee to its actual or prospective employees, agents, consultants, contractors, investors, sublicensees, partners or regulatory agencies who are bound to Licensee by a like obligation of confidentiality) without the express written permission of the other party (which shall not be unreasonably withheld or delayed), except that neither party is prevented from using or disclosing any of the Data that:

29.1.3.1 such party can demonstrate by written records was previously known to it;

29.1.3.2 is now, or becomes in the future, public knowledge other than through acts or omissions of such party;

29.1.3.3 is lawfully obtained by Licensee from sources independent of the other party; or

29.1.3.4 is required to be disclosed by law, court order or process or by any governmental regulatory body (including, without limitation, the United States Securities and Exchange Commission); and

29.1.4 that the secrecy obligations of both parties with respect to Data will continue for a period ending five (5) years from the termination date of this Agreement.

29.2 With regard to biological material received by Licensee from The Regents or Stanford, if any, including any cell lines, vectors, genetic material, derivatives, products, progeny or material derived therefrom ("Biological Material"), Licensee agrees:

29.2.1 not to use Biological Material except for the sole purpose of performing under the terms of this Agreement;

29.2.2 not to transfer Biological Material to others (except to its actual or prospective employees, agents, consultants, contractors, investors, partners, sublicensees, agents or regulatory agencies who are bound to Licensee by like obligations conditioning and restricting access, use and continued use of Biological Material, including appropriate Material Transfer Agreements with Licensee) without the express written permission of UCSD, UCSF or Stanford, except that Licensee is not prevented from transferring Biological Material that:

29.2.2.1 becomes publicly available other than through acts or omissions of Licensee, or

29.2.2.2 is lawfully obtained by Licensee from sources independent of The Regents or Stanford;

29.2.3 to safeguard Biological Material against disclosure and transmission to others with the same degree of care as

it exercises with its own biological materials of a similar nature;

29.2.4 to destroy all copies of Biological Material at the termination of this Agreement.

30. MISCELLANEOUS

31.1 The headings of the several Paragraphs are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

31.2 This Agreement is not binding on the parties until it has been signed below on behalf of each party. It is then effective as of the Effective Date.

31.3 No amendment or modification of this Agreement is valid or binding on the parties unless made in writing and signed on behalf of each party.

31.4 This Agreement embodies the entire understanding of the parties and supersedes all previous communications, representations or understandings, either oral or written, between the parties relating to the subject matter hereof. The Secrecy Agreements referenced in Section 4 of the recitals of this Agreement are hereby terminated.

31.5 In case any of the provisions contained in this Agreement is held to be invalid, illegal, or unenforceable in any respect, that invalidity, illegality or unenforceability will cot affect any other provisions of this Agreement, and this Agreement will be construed as if the invalid, illegal, or unenforceable provisions had never been contained in it.

IN WITNESS WHEREOF, both UCSD and Licensee have executed this Agreement, in duplicate originals, by their respective and duly authorized officers on the day and year written.

CYTOKINETICS, INCORPORATED

By: /s/ James Sabry
(Signature)

Name: JAMES SABRY
Dr. James Sabry

Title: President and Chief Executive Officer

Date: 5/4/98

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By: /s/ Alan S. Paau
(Signature)

Name: Alan S. Paau

Title: Director, Technology Transfer Office

Date: 4/21/98

THE BOARD OF TRUSTEES OF THE STANFORD JUNIOR UNIVERSITY

By: The Regents of The University of California, as attorney-in-fact

By: /s/ Alan S. Paau

Name: Alan S. Paau

Title: Director, Technology

Transfer Office

Date: 4/21/98

[SIGNATURE PAGE TO EXCLUSIVE LICENSE AGREEMENT]

Exhibit 10.29

MODIFICATION AGREEMENT

This agreement ("Agreement") is made on September 1, 2000 ("Effective Date") by and between THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, a California corporation having offices at 900 Welch Road, Suite 350, Palo Alto, CA 94304 ("Stanford") and THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, a California corporation having its statewide administrative offices at 1111 Franklin Street, 12th Floor, Oakland, CA 94607-2500, ("The Regents") both being represented by the University of California, San Diego campus having its office at 9500 Gilman Drive, La Jolla, CA 92093-0910, ("UCSD"), and CYTOKENETICS INCORPORATED ("Licensee" or "COMPANY"), a Delaware corporation having offices at 280 East Grand Avenue, Suite 2, South San Francisco, CA 94080. Stanford and The Regents are collectively referred to herein as "Licensor".

RECITALS

WHEREAS, COMPANY and Licensor have entered into an Exclusive License Agreement, dated 21, April 1998 ("Original Agreement"); and

WHEREAS, COMPANY and Licensor wish to modify certain terms of the Original Agreement for the purpose of including standard HHMI language.

NOW, THEREFORE, the parties agree:

1. RELATIONSHIP OF THE PARTIES. The provisions of the Original Agreement shall continue in effect except as modified in Articles 2.1 and 20.1. A copy of the Original Agreement is attached hereto and incorporated herein by reference.

2. MODIFICATION PERMITTED IN ORIGINAL AGREEMENT. Section 3 of Article 31 of the Original Agreement provides that there shall be no amendments or modifications to the Original Agreement, except by a written document which is signed by both parties. This Agreement is a modification of the Original Agreement.

3.a. MODIFICATION: Section 2.1 of the Original Agreement shall be modified to read:

2.1 Subject to the limitations set forth in this Agreement and subject to the license granted to the U.S. Government and the HHMI as set forth in the Recitals above, Licensor hereby grants to the Licensee, a world-wide license under Licensor Patent Rights to develop, make, have made, use, import, sell, have sold and distribute Licensed Products and products or services that arise from the use of or use Licensed Products, Licensed Methods and Technology, to practice Licensed Methods and to use Technology.

3.b. MODIFICATION: Section 20.1 of the Original Agreement shall be modified to read:

20.1 Licensee shall indemnify, hold harmless and defend Licensor, its officers, employees, agents, HHMI and its trustees, and the sponsors of the research that led to the Invention; and the inventors of the patents and patent applications in Licensor Patent Rights and

their employees against any and all claims, suits, losses, damage, costs, fees, and expenses resulting from or arising out of exercise of this license or any sublicense. This indemnification includes, but is not limited to, any product liability, but shall exclude any breach of this Agreement or any gross negligence or intentional misconduct by Licensor.

4. TERM OF AGREEMENT. This Agreement shall be effective on the Effective Date provided herein and shall terminate when the Original Agreement terminates, unless otherwise provided herein.

5. CONSTRUCTION. In the event of any conflict or inconsistency between the provisions of this Agreement and the Original Agreement, the provisions of

this Agreement shall control in all respects.

IN WITNESS WHEREOF, both Licensor and Licensee have executed this Agreement, in duplicate originals, by their respective and duly authorized officers on the day and year written below.

CYTOKINETICS:

By /s/ Robert I. Blum
(Signature)

Name: Robert I. Blum

Title Vice President, Business Development

Date 9/1/00

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA:

By /s/ Alan S. Paau
(Signature)

Alan S. Paau, MBA, Ph.D.

Director, UCSD Technology Transfer and Intellectual Property Services

Date 8/30/2000

THE BOARD OF TRUSTEES OF THE STANFORD JUNIOR UNIVERSITY:

By: The Regents of The University of California, as attorney-in-fact

By /s/ Alan S. Paau
(Signature)
Alan S. Paau, MBA, Ph.D.
Director, UCSD Technology Transfer and Intellectual Property Services
Date 8/30/2000

Exhibit 10.30

[*] CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 406 OF THE SECURITIES EXCHANGE ACT OF 1933, AS AMENDED.

AZ AND CK CONFIDENTIAL

COLLABORATION AND LICENSE AGREEMENT

THIS COLLABORATION AND LICENSE AGREEMENT (this "AGREEMENT") is made and entered into as of the 15th day of December, 2003 (the "EFFECTIVE DATE") by and between Cytokinetics, Inc. a Delaware corporation, having a place of business at 280 East Grand Avenue, South San Francisco, CA 94080 ("CK") and AstraZeneca AB, a company incorporated in Sweden under no. 556011-7482 with offices at S-151 85 Sodertalje, Sweden ("AZ"). CK and AZ are each referred to herein by name or as a "PARTY" or, collectively, as "PARTIES."

RECITALS

A. WHEREAS CK has developed Cytometrix(TM)* cellular phenotyping technologies for compound profiling (the "CM SYSTEM," as further defined below);

B. WHEREAS AZ is performing internal projects aimed at the discovery and development of novel therapeutic products; and

C. WHEREAS CK and AZ wish to collaborate on a research program utilizing AZ and CK's knowledge, skills, and proprietary technology to develop a module of the CM System for use as an in vitro predictor of hepatotoxicity.

NOW, THEREFORE, in consideration of the promises and mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

ARTICLE I - DEFINITIONS

Unless otherwise specifically provided in this Agreement, the following capitalized terms shall have the following meanings as used in this Agreement:

1.1 "AFFILIATE" means, with respect to a Person, any Person that Controls, is Controlled by or is under common Control with such first Person. For purposes of this Section 1.1 only, "CONTROL" means (a) to possess, directly or indirectly, the power to direct the management or policies of a Person, whether through ownership of voting securities or by contract relating to voting rights or corporate governance, or (b) to own, directly or indirectly, fifty percent (50%) or more of the outstanding voting securities or other ownership interest of such Person; provided

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*Cytometrix(TM) is a trademark of Cytokinetics, Inc

AZ AND CK CONFIDENTIAL

that, if local law in any country other than the United States requires a maximum percentage of local ownership such that the maximum percentage that may, under such local law, be owned by foreign interests is less than fifty percent (50%), "CONTROL" means to own the maximum ownership percentage that may, under such local law, be owned by foreign interests.

1.2 "APPLICABLE LAW" means the applicable laws, rules and regulations, including any rules, regulations, guidelines or other requirements of regulatory authorities that may be in effect from time to time.

1.3 "AZ BACKGROUND TECHNOLOGY" means any and all Technology Controlled by AZ as of the Effective Date or during the Research Term (regardless of when disclosed) and described on EXHIBIT 1.3, or included as AZ Background Technology pursuant to Section 3.5. The AZ Background Technology excludes (i) any and all Collaboration Technology and Collaboration Knowledge, and (ii) any and all Technology provided to CK hereunder by or on behalf of AZ consisting of General Methods.

1.4 "AZ COMPOUND" means each Compound intended or provided for use in the Research Program hereunder by or for AZ, in each case identified by an AZ Compound identifier listed on EXHIBIT 1.4 and identified therein as Public or Proprietary, including additional AZ Compounds added pursuant to Section 3.2 and excluding Compounds removed as Proscribed Compounds pursuant to Section 3.2.

1.5 "AZ COMPOUND DATA" means data proprietary to AZ and conclusions derived by or for AZ from such data (other than Collaboration Technology), existing as of the Effective Date or during the Research Term, comprised of data and information that describes or otherwise relates to an AZ Compound and (i) described in, included or required to be provided to CK under Section 3.2 or the Research Plan, or (ii) otherwise disclosed by AZ to CK in accordance with this Agreement.

1.6 "AZ FACILITY(IES)," when used in the singular, means the primary location at which AZ performs the Research Program, as designated and updated in accordance with Section 2.3 from time to time; and when used in the plural, means any and all of AZ's facilities, also as designated and updated in accordance with Section 2.3 from time to time.

1.7 "AZ IMPROVEMENTS" means Improvements that are made during the Pilot License Term that are adaptations or modifications to the Cytometrix(TM) Hepatotoxicity Module required solely for purposes of achieving compatibility of the Cytometrix(TM) Hepatotoxicity Module with AZ's information technology or bioinformatics infrastructure.

1.8 "AZ KNOWLEDGE" means Technology provided to CK by or on behalf of AZ during the Research Term for use in the Research Program, which in each case is not AZ Background Technology, Collaboration Technology, AZ Compounds or AZ Compound Data.

1.9 "CHANGE OF CONTROL" means an event in which (i) any Person, other than the shareholders of a Party as of the Effective Date of the Agreement, acquires or becomes the beneficial owner of more than fifty percent (50%) of the voting securities of that Party, (ii) a

Party enters into a merger, consolidation or other similar transaction with another Person or Persons and is not the surviving entity in such transaction, or (iii) a Party sells to any Person(s) in one or more related transactions all or substantially all of its consolidated total assets. The public or private sale of equity securities by the current shareholders of a Party in a single or related series of transactions shall not constitute a Change in Control unless as a result of such sale or sales one Person or group of Persons acting in concert attains control of that Party or acquires or becomes the beneficial owner of more than fifty percent (50%) of the voting securities of that Party or such entity into which that Party has merged or consolidated.

1.10 "CK BACKGROUND TECHNOLOGY" means any and all Technology Controlled by CK as of the Effective Date or during the Research Term (regardless of when disclosed) and consisting of the CM System, embodied in CK's proprietary standard operating procedures described on EXHIBIT 1.10, or included as CK Background Technology pursuant to Section 3.5. The CK Background Technology excludes (i) any and all Collaboration Technology and Collaboration

Knowledge, (ii) any and all Technology primarily related to the Prohibited Field, and (iii) Technology provided to AZ hereunder by or on behalf of CK consisting of General Methods.

1.11 "CK COMPOUND" means each Compound intended or provided for use in the Research Program hereunder by or for CK, in each case identified by a CK Compound identifier listed on EXHIBIT 1.11 and identified therein as Public or Proprietary, including additional CK Compounds added pursuant to Section 3.2, and excluding CK Compounds removed as Proscribed Compounds pursuant to Section 3.2.

1.12 "CK COMPOUND DATA" means data proprietary to CK and conclusions derived by or for CK from such data (other than Collaboration Technology), existing as of the Effective Date or during the Research Term, comprised of data and information that describes or otherwise relates to a CK Compound, and (i) described in, included, or required to be provided to AZ under the Research Plan, or (ii) otherwise disclosed by CK to AZ in accordance with this Agreement.

1.13 "CK FACILITY" means the primary location at which CK performs the Research Program, as designated and updated in accordance with Section 2.2 from time to time.

1.14 "CK KNOWLEDGE" means Technology provided to AZ by or on behalf of CK during the Research Term for use in the Research Program, which in each case is not CK Background Technology, Collaboration Technology, Collaboration Knowledge, CK Compounds or CK Compound Data.

1.15 "CM SYSTEM" means that certain Technology Controlled by CK as of the Effective Date or during the Research Term consisting of the Cytometrix(TM) cellular phenotyping technologies system employing high-throughput fluidics, automation, microscopy, imaging analysis and advanced bioinformatics to automate cellular phenotyping, as described in more detail on EXHIBIT 1.15.

1.16 "COLLABORATION KNOWLEDGE" means all Technology conceived and/or reduced to practice or otherwise generated through activities performed under or in the scope of the

Research Program to the extent consisting of General Methods. For clarity, Collaboration Knowledge excludes all Technology developed in the course of the Exempt Activities.

1.17 "COLLABORATION TECHNOLOGY" means all Technology conceived and/or reduced to practice or otherwise generated through activities performed under or in the scope of the Research Program, solely by either AZ or CK or jointly by the Parties, excluding Collaboration Knowledge and excluding any Technology developed in the course of the Exempt Activities.

1.18 "COMPOUND" means a unique chemical entity.

1.19 "COMPOUND DATA" means the AZ Compound Data or the CK Compound Data, as applicable, and similar data generated pursuant to the Research Program.

1.20 "CONTRACT YEAR" means a year of 365 days (or 366 days in a leap year) beginning on the Effective Date and ending one (1) year thereafter and so on year-by-year. "CONTRACT YEAR ONE" means the first such year; "CONTRACT YEAR TWO" means the second such year, and so on, year-by-year.

1.21 "CONTROL" means, with respect to any item of Technology, or a particular Compound, or the related Intellectual Property Rights thereto, the

possession of the right, whether directly or indirectly, and whether by ownership, license or otherwise, to disclose, deliver, assign, or grant a license, sublicense or other right to or under such applicable Technology, Compound or related Intellectual Property Rights, of the scope and as provided for herein, without any of the following: (i) violating the terms of any agreement or other arrangement with any Third Party existing as of the Effective Date; (ii) the granting Party being required to pay any royalty or other consideration to any Third Party that would not have been required had the applicable right or license not been provided under this Agreement; or (iii) violating any law, regulation, rule, code, order or other requirement of any federal, state, foreign, local, or other government body or the need for any additional permits, payments, authorizations, or approvals under any such law, regulation, rule, code, order or requirement.

1.22 "CYTOMETRIX(TM) HEPATOTOXICITY MODULE" or "CHM" means that certain module of the CM System developed in the course of performance and scope of the Research Program, and directed to in vitro predictions of hepatotoxicity (i.e., in vitro image-based assays that can be used to support selection of chemical entities for drug discovery and development that may have a lower intrinsic potential to cause liver toxicity).

1.23 "DELIVERABLES" means certain identified items required to be delivered or provided by one Party to the other pursuant to the Research Program, as set forth in EXHIBIT 1.23.

1.24 "EFFECTIVE DATE" means the date as set forth in the preamble to this Agreement.

1.25 "EXEMPT ACTIVITIES" means, with respect to the specific Party identified on EXHIBIT 1.25, the corresponding activities set forth on EXHIBIT 1.25.

1.26 "FIELD" means the use of imaging-based cellular phenotyping, together with the use of analysis for the in vitro prediction of hepatotoxicity to support drug discovery and development. For the avoidance of doubt, "FIELD" excludes, without limitation, (i) any and all [*] applications (i.e., the direct or indirect [*]), (ii) [*] applications (i.e., the direct or indirect [*] whether by [*], [*], [*] or otherwise), (iii) any and all [*], [*] or similar applications, or uses as a commercial service (e.g., as a service bureau or on behalf of any Third Party) or product, and (iv) the use of the CM System or any other Cytometrix(TM) cellular phenotyping and/or analysis technologies or similar technologies (other than the Cytometrix(TM) Hepatotoxicity Module) to investigate and engage in activities related to discovery and validation of any [*] and/or [*].

1.27 "FTE" means the equivalent of one researcher employed by CK or AZ having the requisite skills to fulfill CK's or AZ's obligations under this Agreement and devoting the equivalent hours of a full time employee. For purposes of this Agreement, "full time" shall mean 1880 hours per year as determined in accordance with the applicable Party's regular project hour reporting system.

1.28 "FULL LICENSE" has the meaning set forth in Section 5.7.

1.29 "FULL LICENSE TERM" means the period of time during which the Full License is in effect, beginning as of the date the Full License is first effective.

1.30 "GENERAL METHODS" means (a) methods or techniques for (i) cell culture, (ii) cell plating and conditions therefor, (iii) automation, (iv) automated image acquisition, (v) variable exposure of cells to treatment, and (vi) automated addition of treatment and stains; and (b) general knowledge of

use to practitioners of toxicological studies or cellular phenotyping and analysis.

1.31 "IMPROVEMENT" means any improvement, adaptation, modification or upgrade arising during the Pilot License Term and/or the Full License Term.

1.32 "INTELLECTUAL PROPERTY RIGHTS" means any and all intellectual property rights in, to, or arising out of any (i) Patents; (ii) trade secrets; (iii) know-how (iv) copyrights, copyright registrations, or any national or regional application therefor, in any territory, or any other right corresponding thereto throughout the world, including moral rights; or (v) any other intellectual property or proprietary right anywhere in the world, including rights in or to any data bases, data collections (including knowledge databases) or software (including any source code or object code form).

1.33 "JOINT RESEARCH COMMITTEE" or "JRC" means the committee established pursuant to Section 2.4 herein.

1.34 "JOINT STEERING COMMITTEE" or "JSC" means the committee established pursuant to Section 2.5 herein.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

1.35 "PATENT" means any and all rights under any of the following, whether existing now or in the future: (i) all national, regional and international patents and patent applications, including provisional patent applications, utility model, design registration, certificate of invention, patent of addition or substitution, or other governmental grant for the protection of inventions or industrial designs anywhere in the world, including any reissue, renewal, re-examination or extension thereof; and (ii) any application for any of the foregoing, including any international, provisional, divisional, continuation, continuation-in-part, or continued prosecution application.

1.36 "PERFORMANCE CRITERIA" means the functional criteria for performance of the Cytometrix(TM) Hepatotoxicity Module, as set forth in EXHIBIT 1.36, as may be revised by the JRC or by mutual written agreement of the Parties.

1.37 "PERSON" means an individual, sole proprietorship, partnership, limited partnership, limited liability partnership, corporation, limited liability company, business trust, joint stock company, trust, incorporated association, joint venture or similar entity or organization, including a government or political subdivision, department or agency of a government.

1.38 "PILOT LICENSE" has the meaning set forth in Section 5.6.1.

1.39 "PILOT LICENSE TERM" is the period during which the Pilot License is effective, (A) commencing on the earlier of (i) the date after the last day of the Research Term or (ii) the date that the prototype Cytometrix(TM) Hepatotoxicity Module, installed at the CK Facility and used in connection with CK's infrastructure and instrumentation, first meets the Performance Criteria therefor, as determined pursuant to Section 3.4, and then (B) continuing until the earlier of (x) the date that the Cytometrix(TM) Hepatotoxicity Module, installed at the AZ Facility and used in connection with AZ's infrastructure and instrumentation, first meets the Performance Criteria therefor, as determined pursuant to Section 3.4, or (y) the first anniversary of the date of

commencement (as described in clause (A) above) of the Pilot License Term, subject to extension by mutual written agreement of the Parties.

1.40 "PRINCIPAL SCIENTIST" means the AZ Principal Scientist or the CK Principal Scientist, as applicable, as each is defined in Sections 2.3.2 and 2.2.2, respectively.

1.41 "PROHIBITED FIELD" means any and all research, development or commercialization activities directed toward any [*] or products for any such applications.

1.42 "PROPRIETARY" means (i) with respect to a Compound, that the Party providing such Compound hereunder Controls Patents which specifically recite and specifically, but not solely generically, claim the making, possession, use, sale, import or export of such Compound or has maintained, as a trade secret, the composition of matter of such Compound, and (ii) with respect to Compound Data, such data has been maintained as a trade secret by the providing Party.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

1.43 "PROSCRIBED COMPOUND" means:

1.43.1 with respect to an AZ Compound, a Compound that is marked with the development flag in the [*] system. The development flag shall be applied only to a Compound meeting any of the following criteria: (i) the Compound is being actively developed; (ii) the Compound is commercially sensitive to AZ; or (iii) the Compound is an isomer of a Compound described in clause (i) or (ii). In marking with a development flag any Compound that is an AZ Compound hereunder, AZ shall apply the same criteria in a manner consistent with current internal policy and past practice as it does with other Compounds under similar circumstances.

1.43.2 with respect to a CK Compound, a Compound that has been designated as having restricted use within CK. Such restricted use applies only to a Compound meeting any of the following criteria: (i) the Compound is being actively developed; (ii) the Compound is commercially sensitive to CK; or (iii) the Compound is an isomer of a Compound described in clause (i) or (ii). In designating a Compound as having restricted use, CK shall apply the same criteria in a manner consistent with current internal policy and past practice as it does with other Compounds under similar circumstances.

1.44 "PUBLIC" means (i) with respect to a Compound, such Compound is not Proprietary, and (ii) with respect to AZ Compound Data or CK Compound Data, such data is not Proprietary.

1.45 "RESEARCH PLAN" means the document attached hereto as EXHIBIT 1.45 outlining the Research Program, the budget for the Research Program, and each Parties' undertakings and obligations, including allocation of FTEs by CK and AZ, in relation thereto.

1.46 "RESEARCH PROGRAM" has the meaning described in Section 2.1 hereof.

1.47 "RESEARCH TERM" means the period beginning on the Effective Date and continuing for two (2) years thereafter, as may be extended in accordance with Section 2.7 or by mutual written agreement of the Parties.

1.48 "TERM" means the period beginning on the Effective Date and continuing until the earlier of the date upon which this Agreement expires by its terms, is terminated in accordance with Article VIII, or extended by mutual written agreement of the Parties.

1.49 "TECHNOLOGY" means any and all of the following, including tangible copies and embodiments thereof:

1.49.1 information and materials (including Compounds) relating to the subject matter of this Agreement and including data such as test data (including pharmacological, toxicological and clinical test data) and image data and in vitro and in vivo data;

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

1.49.2 experimental methods and techniques, including those that are part of or related to assays and cell cultures, screens, models, practices, and know-how, techniques, trade secrets, and inventions (whether or not patented or patentable);

1.49.3 instrumentation, including selection and arrangement of instrumentation and setup or calibration settings;

1.49.4 computer software and code, and related technology, including flow diagrams, designs, assemblers, applets, compilers, algorithms, routines, design tools and user interfaces, in source code or object code form; and

1.49.5 antibodies, markers, cells and cell lines;

in each case (i) to the extent and for so long as such subject matter or materials are not generally available in the public domain or otherwise from a Third Party without restriction, except as a result of a Party's activities in violation of the terms or conditions of this Agreement, or (ii) to the extent and for so long as there are protectable Intellectual Property Rights subsisting in or encompassing those materials.

1.50 "THIRD PARTY" means any Person other than CK or AZ and the Affiliates of either.

ARTICLE II - RESEARCH PROGRAM

2.1 RESEARCH PROGRAM.

2.1.1 GENERALLY. CK and AZ agree to conduct a collaborative research program with the specific goal of creating the Cytometrix(TM) Hepatotoxicity Module for use in the Field as an in vitro predictor of hepatotoxicity (the "RESEARCH PROGRAM"). The Research Program shall be conducted solely in accordance with the Research Plan then in effect unless otherwise mutually agreed in writing by the Parties or through the JRC in accordance with Section 2.4.4.

2.1.2 DILIGENT EFFORTS. Each Party shall apply the same diligent efforts with respect to the Research Program as each, respectively, expends for its own high priority discovery technology programs. Without limiting the foregoing, each Party shall apply diligent efforts toward the performance of activities under the Research Program and allocate personnel and other resources as reasonably necessary to successfully complete those activities within the timeframes set forth in the Research Plan then in effect.

2.1.3 CONTRIBUTIONS. Each Party shall contribute to the

Research Program the items identified in Article III.

2.2 CK FACILITIES AND CK PRINCIPAL SCIENTIST.

2.2.1 CK shall provide the facilities, equipment, and manpower that are reasonably necessary or useful to carry out the work undertaken by CK under the Research Program at 280 East Grand Avenue, South San Francisco, CA 94080 (the "CK FACILITY"). CK shall have the right to change the location of the CK Facility upon reasonable advance written notice to AZ.

2.2.2 The principal scientist designated by CK (the "CK PRINCIPAL SCIENTIST") shall be responsible for all Research Program activities undertaken by CK and shall supervise the work of all personnel engaged by CK in the Research Program. The CK Principal Scientist shall serve as the primary contact for AZ on all matters related to the Research Program. The CK Principal Scientist is [*]. CK may change the CK Principal Scientist, but only to a similarly qualified individual and only on providing AZ with prior written notice. Notwithstanding any change in the identity of the CK Principal Scientist, CK shall continue to be responsible for performing the activities undertaken by it under the Research Program and any consent or agreement by AZ pursuant to this Section 2.2.2 shall not be deemed to be a waiver of any right or remedy AZ may have in relation to any failure of CK to conduct such activities.

2.3 AZ FACILITIES AND AZ PRINCIPAL SCIENTIST.

2.3.1 AZ shall provide the facilities and equipment that are reasonably necessary or useful to carry out the work undertaken by AZ under the Research Program at [*] (the "AZ FACILITIES"). To the extent AZ is authorized to use the Collaboration Technology or CK Background Technology at more than one facility controlled by AZ, AZ shall designate in writing to CK each such facility at which it is using the Collaboration Technology or CK Background Technology. AZ shall provide prompt written updates of changes in the location of any AZ Facility and AZ shall have the right to change the locations of the AZ Facilities upon reasonable advance written notice to CK; provided that after CK's delivery of the Cytometrix(TM) Hepatotoxicity Module such changes shall only be effective upon CK's written approval.

2.3.2 The principal scientist designated by AZ (the "AZ PRINCIPAL SCIENTIST") shall be responsible for all Research Program activities undertaken by AZ and shall supervise the work of all personnel engaged by AZ in the Research Program. The AZ Principal Scientist shall serve as the primary contact for CK on all matters related to the Research Program. The AZ Principal Scientist is [*]. AZ may change the AZ Principal Scientist, but only to a similarly qualified individual and only on providing CK with prior written notice. Notwithstanding any change in the identity of the AZ Principal Scientist, AZ shall continue to be responsible for performing the activities undertaken by it under the Research Program, and any consent or agreement by CK pursuant to this Section 2.3.2 shall not be deemed to be a waiver of any right or remedy CK may have in relation to any failure of AZ to conduct such activities.

2.4 THE JOINT RESEARCH COMMITTEE. Promptly after the Effective Date, the Parties shall establish a Joint Research Committee (the "JRC") as set forth in this Section 2.4. The JRC will

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exist until the end of the Pilot License Term. Each Party shall keep the JRC informed of its progress and activities within the Research Program.

2.4.1 MEMBERSHIP. The JRC shall be comprised of an equal number of representatives from each of AZ and CK, initially three (3) from each of AZ and CK, including one lead representative from each Party (who may be but is not required to be the CK Principal Scientist for CK and the AZ Principal Scientist for AZ) and any ad hoc members as requested by either Party and approved by the other Party in writing. For CK, the lead representative is [*]; for AZ, the lead representative is [*]. A Party may replace its lead representative or other representatives to the JRC with other similarly qualified individuals by providing advance written notice to the other Party.

2.4.2 MEETINGS. The JRC shall meet regularly during the Research Term and the Pilot License Term, including face-to-face meetings to be held at least quarterly, telephone or videoconference calls to be held at least monthly, with additional regular e-mail and telephone exchanges among the members. The JRC shall create and agree on written minutes for each meeting of the JRC. The Parties shall alternate responsibility for chairing the meetings. Each Party shall bear the expenses of its JRC members related to such members' participation on the JRC and attendance at JRC meetings.

2.4.3 RESPONSIBILITIES.

(a) The JRC shall have responsibility for: (i) reviewing and coordinating the Research Program, and for expediting work progress under the Research Plan currently in effect; (ii) overseeing, reviewing, recommending the direction of, and allocating resources under the Research Program; (iii) preparing the Research Plan for each Contract Year (other than Contract Year One); (iv) adapting and revising the Research Plan, if appropriate; (v) approving any use of a Third Party's Technology or Intellectual Property Rights in connection with the Research Program; (vi) tracking and recording Compound Data provided under Section 3.2 or otherwise generated pursuant to the Research Program; (vii) monitoring performance of the Research Program, including comparing its progress to established goals and revising the Performance Criteria as may be required or appropriate from time to time, including to address removal of Proscribed Compounds or Proscribed Compounds pursuant to Section 3.2.4 or 3.2.5; and (viii) carrying out other responsibilities or making any other decisions as are expressly allocated to the JRC under this Agreement.

(b) The Parties, through the JRC, shall discuss and consider a proposal to expand the Research Program to include [*] activities with respect to AZ Compounds and CK Compounds. Such discussions shall commence no more than [*] months after the Effective Date. If such proposal is approved by the Parties following the recommendation of the JRC, then the Research Plan and this Agreement will be revised to reflect such expansion, which may include modification of the Field to include [*]. If such expansion is not approved, then the Parties, through the JRC, shall discuss and consider a proposal to extend the licenses to AZ Compound Data and AZ Compounds to permit CK to conduct [*] at its own expense outside the Research Program.

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2.4.4 DECISION MAKING. The JRC shall endeavor to reach consensus on all matters brought before it. Decisions of the JRC must be made with participation of at least two (2) representatives of each Party and by

unanimous vote of each participating representative. Decisions will be included in the written minutes of a meeting, with such written minutes approved by all Persons present at such a meeting of the JRC. In the event the JRC is unable to resolve an outstanding matter, such matter shall be referred for resolution in good faith by the Joint Steering Committee (JSC) as described in Section 2.5.

2.5 THE JOINT STEERING COMMITTEE. Promptly after the Effective Date, the Parties shall establish a Joint Steering Committee (the "JSC") as set forth in this Section 2.5. The JSC will exist throughout the term of this Agreement.

2.5.1 MEMBERSHIP. The JSC shall be comprised of two (2) representatives from each of AZ and CK. For AZ, the representatives are [*] and [*]. For CK, the representatives are [*] and another individual to be selected by CK by written notice to AZ. Each Party may replace its representatives on the JSC at any time by providing written notice to the other Party. Replacements must have comparable seniority, responsibility and knowledge or experience.

2.5.2 MEETINGS. The JSC shall meet at least once annually during the Research Term, and as necessary from time to time during the remainder of the Term, including face-to-face meetings, telephone or video conference calls. The location and other logistics of any meeting will be determined by the JSC. The JSC shall create and agree on written minutes for each meeting of the JSC. Each party shall bear the expenses of its JSC members related to such members' participation on the JSC and attendance at JSC meetings.

2.5.3 RESPONSIBILITIES. The JSC shall have responsibility to oversee and review the Research Program and to arbitrate decision making as described below.

2.5.4 DECISION MAKING. Decisions of the JSC shall be made by unanimous vote, with each Party having a single vote irrespective of the number of representatives actually in attendance at a meeting. Decisions will be included in the written minutes of a meeting, with such written minutes approved by all persons present at such a meeting of the JSC. If the Parties are unable to reach resolution within [*] days following the date the matter in dispute is first brought to the attention of the JSC, that matter shall be resolved in accordance with Section 10.2.

2.6 RESEARCH PLAN.

2.6.1 INITIAL RESEARCH PLAN. The initial Research Plan, which covers the Research Program during Contract Year One, is attached as EXHIBIT 1.45. The Parties acknowledge and agree that such initial Research Plan sets forth the goals and objectives of the Research Program and the broad terms of the Parties' respective undertakings to achieve those goals and objectives. The Parties further acknowledge and agree that the Research Plan will be supplemented and otherwise amended by the JRC from time to time during the Research Term

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for each stage of the Research Program to identify and define the specific undertakings of the Parties required to implement the Research Program.

2.6.2 NEW RESEARCH PLANS. At least three (3) months prior to the end of each Contract Year during the Research Term, the JRC shall meet to establish the Research Plan for the upcoming Contract Year. The JRC shall establish such Research Plan no later than thirty (30) days prior to the end of the then-current Contract Year.

2.6.3 REVISED RESEARCH PLANS. In addition to new Research Plans, the JRC shall review each Research Plan on an ongoing basis and may make changes thereto in accordance with the procedures in Section 2.4.4.

2.6.4 REQUIREMENTS OF THE RESEARCH PLAN. Unless otherwise agreed by each Party, the Research Plan must be consistent with the terms in Article III and this Agreement generally.

2.7 EXTENSION OF RESEARCH TERM. [*] days prior to the expiration of the initial Research Term, the JRC shall discuss the possibility of extending the Research Program and correspondingly the Research Term. In such event, if the Parties do not reach agreement on an extension of the Research Term prior to the expiration of the initial Research Term, then the expiration date for the initial Research Team will be extended for [*] days, in order to continue negotiation of the terms and conditions for an extension of the Research Term, if any.

2.8 INFORMATION AND REPORTS. During the Research Term, each Party shall provide to the other, through the JRC, a written report summarizing the progress of its activities and performance of the Research Program, and including data and information pertaining to assays, protocols and procedures developed for use with the Cytometrix(TM) Hepatotoxicity Module, and other information and Technology as otherwise provided in the applicable Research Plan. Unless otherwise agreed, such reports shall be due thirty (30) days after the end of each calendar quarter and after the end of the Research Term. Upon the written request of a Party, the other Party shall provide that requesting Party with raw data generated by or on behalf of such other Party within the Collaboration Technology and Collaboration Knowledge, to the extent not previously provided hereunder. Without limiting the foregoing, each Party shall disclose to the other Party, any and all Collaboration Technology and Collaboration Knowledge, including any discoveries or inventions made by such Party in the scope of the Research Program or pursuant to carrying out the Research Program, with significant discoveries or advances being communicated as soon as practical after such Collaboration Technology or Collaboration Knowledge is developed.

ARTICLE III - CONTRIBUTIONS TO THE RESEARCH PROGRAM

3.1 FTES. In its conduct of its activities under the Research Program and unless otherwise mutually agreed in writing or determined by the JRC, each Party shall assign the number of FTEs to the Research Program as follows: CK shall commit [*] FTEs during each Contract Year to perform activities under the Research Program in accordance with the

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Research Plan then in effect, and AZ shall commit [*] FTEs during the Research Term to perform activities under the Research Program in accordance with the Research Plan then in effect. For clarity, AZ has agreed to fund during each Contract Year of the Research Term [*] of the FTEs committed by CK, as described in Section 6.1.

3.2 COMPOUNDS AND COMPOUND DATA.

3.2.1 AZ shall identify the AZ Compounds to be used in the Research Program, and shall provide to CK the AZ Compounds in reasonable quantities, but at least [*] for each AZ Compound. For each AZ Compound, AZ shall provide the information, to the extent such information exists on the Effective Date, contemplated by the version of EXHIBIT 1.4 attached to this Agreement as of the Effective Date (which information, it is understood, may be

different for Proprietary and Public AZ Compounds). In addition to the information on EXHIBIT 1.4, for each AZ Compound, AZ shall provide compound purity and analytical and quality control data and procedures, to the extent such information exists on the Effective Date. AZ is not required to provide [*] for any Proprietary AZ Compounds. During the Research Term, AZ may include additional Compounds as AZ Compounds upon written notice to CK or by mutual written agreement of the Parties. For each such AZ Compound, AZ shall provide the AZ Compound Data on EXHIBIT 1.4 and the other AZ Compound Data required pursuant to this Section 3.2.1, to the extent such information exists at the time such AZ Compound is added.

3.2.2 CK shall identify the CK Compounds to be used in the Research Program, and make available for use in the Research Program, the CK Compounds in reasonable quantities, but at least [*] for each CK Compound. For each CK Compound, CK shall provide the information, to the extent such information exists on the Effective Date, contemplated by the version of EXHIBIT 1.11 attached to this Agreement as of the Effective Date (which information, it is understood, may be different for Proprietary and Public CK Compounds). In addition to the information on EXHIBIT 1.11, for each CK Compound, CK shall provide compound purity and analytical and quality control data and procedures, to the extent such information exists on the Effective Date. CK is not required to provide [*] for any Proprietary CK Compounds. During the Research Term, CK may include additional Compounds as CK Compounds upon written notice to AZ or by mutual written agreement of the Parties. For each such CK Compound, CK shall provide the CK Compound Data on EXHIBIT 1.11 and other CK Compound Data required pursuant to this Section 3.2.2, to the extent such information exists at the time such CK Compound is added.

3.2.3 Each Party's rights with respect to the Compounds and Compound Data delivered under this Agreement are as set forth in Section 5.3.

3.2.4 AZ may remove any Proprietary AZ Compound from use in the Research Program, upon written notice to CK, if that Proprietary AZ Compound becomes or is named a Proscribed Compound. EXHIBIT 1.4 shall be amended accordingly and such Compound no longer shall be an "AZ Compound" for purposes of this Agreement. Upon CK's receipt of notice that a Compound is a Proscribed Compound and is being removed as an AZ Compound,

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CK shall, in AZ's sole discretion and at AZ's direction and expense, return or destroy those removed Proscribed Compounds.

3.2.5 CK may remove a Proprietary CK Compound from use in the Research Program, upon written notice to AZ, if that Proprietary CK Compound becomes or is named a Proscribed Compound. EXHIBIT 1.11 shall be amended accordingly and such Compounds no longer shall be "CK Compounds" for purposes of this Agreement. Upon AZ's receipt of notice that a Compound is a Proscribed Compound and is being removed as a CK Compound, AZ shall, in CK's sole discretion and at CK's direction and expense, return or destroy those removed Proscribed Compounds.

3.2.6 For clarity, nothing herein shall be deemed to create an obligation on behalf of either Party to provide the other Party with Compounds after the expiration of the Research Term, except that on an ongoing basis after termination or expiration of the Research Term, AZ shall provide Proprietary AZ Compounds to CK in specific amounts under the conditions described in this Section 3.2.6 for the purpose of enabling CK to [*]. AZ shall provide Proprietary AZ Compounds on the limited basis described herein in

accordance with the restrictions set forth in Section 3.2.7, Section 5.3 and other reasonable and customary terms, provided the amount of payment for those Proprietary AZ Compounds shall not exceed AZ's documented direct and reasonably allocable indirect costs in obtaining such Compounds for any reason.

3.2.7 AZ's obligations under Section 3.2.6 shall extend for no longer than [*] years after the date of expiration or termination of the Research Term, but shall cease immediately upon termination of this Agreement under Section 8.2.1 for CK's material breach or upon termination of this Agreement under Section 8.2.3 for lack of feasibility.

3.2.8 AZ represents and warrants that no AZ Compound on EXHIBIT 1.4 is, as of the Effective Date, a Proscribed Compound. CK represents and warrants that no CK Compound on EXHIBIT 1.11 is, as of the Effective Date, a Proscribed Compound.

3.3 DELIVERABLES. CK shall deliver or otherwise make available to AZ the Deliverables, as defined in EXHIBIT 1.23. The timing, form and manner of delivery are set forth on the Research Plan, including which of the software components of the Cytometrix(TM) Hepatotoxicity Module or other Deliverables will be delivered in source code form and which in object code form. The Research Plan also sets forth the infrastructure and instrumentation required for use of the Cytometrix(TM) Hepatotoxicity Module, and objectives for development, delivery and functionality of the Cytometrix(TM) Hepatotoxicity Module, including parameters for expandability and flexibility.

3.4 EVALUATION OF CYTOMETRIX(TM) HEPATOTOXICITY MODULE. After the prototype Cytometrix(TM) Hepatotoxicity Module is installed at the CK Facility and used in connection with CK's infrastructure and instrumentation, and then again after the Cytometrix(TM) Hepatotoxicity Module is installed at the AZ Facility and used in connection with AZ's infrastructure and instrumentation, the Parties jointly shall perform mutually agreed testing and other evaluation

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procedures to determine whether the Cytometrix(TM) Hepatotoxicity Module meets the Performance Criteria. If the Parties disagree as to whether the Performance Criteria have been met, then the Parties shall cooperate to resolve any disagreement. Where resolution is within the scope of the then-existing Research Plan, the Parties shall cooperate to resolve the disagreement first under Section 2.4 through the JRC, then under Section 2.5 through the JSC, and then pursuant to Section 10.2. Where resolution is outside the scope of the then-existing Research Plan, the Parties shall cooperate to resolve the disagreement under Section 2.5 through the JSC, and then pursuant to Section 10.2.

3.5 TECHNOLOGY AND DELIVERY. AZ shall use diligent efforts to make available for disclosure and delivery to CK, and CK shall use diligent efforts to make available for disclosure and delivery to AZ, any and all Technology that is (a) Controlled by the disclosing Party, (b) known to the disclosing Party's personnel responsible for the Research Program or to individuals that report to such personnel, and (c) is either reasonably required or known to be useful to undertaking the activities under the Research Program or performing the obligations required and activities contemplated under this Agreement, whether such Technology arises out of Exempt Activities or otherwise (such Technology, "RELEVANT TECHNOLOGY"). Relevant Technology includes AZ Knowledge, CK Knowledge, AZ Background Technology and CK Background Technology. Notwithstanding the foregoing, Relevant Technology shall exclude a Party's Technology to the extent that disclosure of that Technology would materially compromise an ongoing drug discovery or development program conducted by or on

behalf of that Party. Relevant Technology shall be disclosed in accordance with this Section 3.5 below. Such disclosure shall occur within [*] months from the time the disclosing Party's personnel responsible for the Research Program or individuals that report to such personnel become aware of such Relevant Technology.

3.5.1 If a disclosing Party deems Relevant Technology to be AZ Background Technology or CK Background Technology, as applicable, then prior to disclosing that Relevant Technology to the other Party hereunder, the disclosing Party shall provide to the JRC a summary of that Relevant Technology, in sufficient detail to determine whether that Relevant Technology is AZ Background Technology or CK Background Technology, as applicable. The JRC will confirm that such Relevant Technology is AZ Background Technology or CK Background Technology; provided that it is not required to do so to the extent the Relevant Technology consists of General Methods; and provided further and notwithstanding the foregoing that the JRC is required to agree that Relevant Technology is AZ Background Technology or CK Background Technology to the extent it consists of a type of Technology already similar to that within CK Background Technology or AZ Background Technology.

3.5.2 If the JRC confirms that Relevant Technology is AZ Background Technology or CK Background Technology, as applicable, then the Party to receive such Technology hereunder shall promptly notify the disclosing Party, within [*] business days after confirmation by the JRC, if it does not wish to receive such Relevant Technology; and provided further that AZ may not decline to receive Relevant Technology to the extent that Relevant Technology is reasonably necessary for the CHM to meet the Performance Criteria. The Parties may agree that certain Technology should be disclosed in a different form or manner

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(e.g., in object code rather than in source code), as appropriate. Exhibit 1.3 or Exhibit 1.10, as applicable, shall be amended to include such additional AZ Background Technology or CK Background Technology.

3.5.3 If the JRC does not confirm such Relevant Technology as AZ Background Technology or CK Background Technology and the receiving Party has declined to receive such Relevant Technology, then the disclosing Party has no obligation to disclose such Relevant Technology, and if the disclosing Party, at its option, discloses such Technology, then it will be deemed AZ Knowledge or CK Knowledge, as appropriate.

ARTICLE IV - EXCLUSIVITY OF EFFORTS

4.1 EXCLUSIVITY OF EFFORTS. Except for the Exempt Activities, during [*], neither AZ nor CK shall collaborate or otherwise cooperate with any Third Party to, and neither AZ nor CK shall, perform research or development specifically directed to the Field, other than under the Research Program. For the avoidance of doubt, during [*], nothing herein shall restrict either Party in any way from [*]. It is understood that even if the foregoing exclusivity provision terminates or expires, each Party shall continue diligently to endeavor to fulfill all of its obligations hereunder during the remainder of the term of the Agreement, including those obligations directed at enabling the Cytometrix(TM) Hepatotoxicity Module to meet the Performance Criteria.

4.2 PERMITTED ACTIVITIES. Nothing herein shall be deemed to prevent or restrict AZ's or CK's rights to undertake and perform the Exempt Activities and CK's right to develop and commercialize the CM System for any and all

applications outside of the Field. Likewise, nothing herein shall be deemed to prevent or restrict either Party's right to develop or commercialize methods of or systems for in vitro prediction of hepatotoxicity when those methods or systems are outside of the Field; provided that the Party is complying with its obligations hereunder with respect to Confidential Information and Intellectual Property Rights of the other Party.

ARTICLE V - OWNERSHIP AND LICENSE GRANTS

5.1 OWNERSHIP.

5.1.1 AZ OWNERSHIP. AZ owns and shall own all right, title and interest in and to the AZ Background Technology, AZ Compounds, AZ Compound Data, AZ Knowledge and all Intellectual Property Rights therein. As between the Parties, AZ has the exclusive right, at its sole discretion and expense, to apply for, register, maintain and enforce Patents and other

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Intellectual Property Rights as it deems appropriate with respect to any of the AZ Background Technology, AZ Compounds, AZ Compound Data and AZ Knowledge.

5.1.2 CK OWNERSHIP. CK owns and shall own all right, title and interest in and to the CM System, CK Compounds, CK Compound Data, CK Background Technology, CK Knowledge and all Intellectual Property Rights therein. Further, CK owns and shall own all right, title and interest in and to the Collaboration Technology and Collaboration Knowledge, and in and to the Cytometrix(TM) Hepatotoxicity Module, and all Intellectual Property Rights therein. Accordingly, AZ hereby assigns to CK any and all right, title and interest in and to the Collaboration Technology, Collaboration Knowledge, and the Cytometrix(TM) Hepatotoxicity Module, together in each case with all Intellectual Property Rights therein that AZ may acquire as a result of its performance of the Research Program or activities under the Pilot License (1) except that AZ shall not assign those Improvements (and the Intellectual Property Rights therein) owned by AZ pursuant to Section 5.1.3, and (2) the foregoing assignment is subject to the licenses granted by CK to AZ under Sections 5.4.2, 5.4.3, 5.5, 5.6 and 5.7. As between the Parties, CK has the exclusive right, at its sole expense, to apply for, register, maintain and enforce Patents and other Intellectual Property Rights as it deems appropriate with respect to any of the CK Background Technology, CK Knowledge, CK Compounds, CK Compound Data, Cytometrix(TM) Hepatotoxicity Module, Collaboration Technology, Collaboration Knowledge and Improvements owned by CK under Section 5.1.3. AZ agrees to execute documents, render such reasonable assistance, and take such other reasonable action at CK's expense as CK may reasonably request to apply for, register, perfect, confirm, and protect the rights it assigns to CK under this Section 5.1.2.

5.1.3 IMPROVEMENTS. Without limiting Section 5.1.2, (i) all AZ Improvements are owned by AZ (subject to the licenses granted to CK under Section 5.1.4), and (ii) all other Improvements to the Cytometrix(TM) Hepatotoxicity Module arising during the Pilot License Term, whether created jointly or solely by one of the Parties, are owned by CK. Accordingly, AZ hereby assigns to CK any and all right, title and interest in and to any Improvements owned by CK pursuant to this Section 5.1.3. AZ agrees to execute documents, render such reasonable assistance, and take such other reasonable action at CK's expense as CK may reasonably request to apply for, registered, perfect, confirm and protect the rights it assigns to CK under this Section 5.1.3. After the end of the Pilot License Term, Improvements to the Cytometrix(TM) Hepatotoxicity Module made by CK shall be owned by CK and Improvements to the Cytometrix(TM) Hepatotoxicity Module made by AZ shall be owned by AZ. For avoidance of doubt,

neither Party has any right, license or access to Improvements made by the other Party after the end of the Pilot License Term.

5.1.4 LICENSE TO AZ IMPROVEMENTS. AZ agrees to grant and hereby grants CK a worldwide, perpetual, irrevocable, non-exclusive right and license, including the right to grant and authorize sublicenses, under AZ Intellectual Property Rights in AZ Improvements.

5.2 LICENSES TO BACKGROUND TECHNOLOGY.

5.2.1 AZ GRANT TO CK. AZ agrees to grant and hereby grants CK a non-exclusive, worldwide, royalty-free right and license, under AZ Intellectual Property Rights in AZ Background Technology, to use AZ Background Technology solely for the purposes of CK performing the Research Program during the Research Term. Upon completion of the Research Program and CK delivering to AZ the items required to be provided under the Research Plan, and upon the Cytometrix(TM) Hepatotoxicity Module, as installed at the CK Facility, meeting the Performance Criteria, AZ agrees to grant and hereby grants to CK a non-exclusive, worldwide, royalty-free, perpetual right and license, limited to the Field, under AZ Intellectual Property Rights in AZ Background Technology, for CK to practice AZ Background Technology in the production, use and modification of the Cytometrix(TM) Hepatotoxicity Module and Improvements thereof. For [*] years following the expiration of the Research Term, CK's license under this Section 5.2.1 shall be restricted solely for internal research purposes, which internal research purposes include CK's use of the Cytometrix(TM) Hepatotoxicity Module in its research collaborations with any collaborator when required to advance the research collaboration or CK's internal drug discovery and development programs; provided that the Cytometrix(TM) Hepatotoxicity Module is not the predominant component of the relationship between CK and such collaborator and provided further that in any research collaboration the Cytometrix(TM) Hepatotoxicity Module is used for activities such as to inform lead generation or to triage hits and leads rather than solely for activities such as screening entire libraries of compounds. For the avoidance of doubt however, such internal research use shall expressly exclude exploitation of the Cytometrix(TM) Hepatotoxicity Module as a commercial product or service (e.g., as a service bureau), except as expressly provided above. In connection with such internal research purposes, CK may authorize collaborators and others to access and use of the AZ Background Technology at CK's facility. After the first [*] years after the Research Term, CK is free to sublicense its rights under this Section 5.2.1 without restriction.

5.2.2 CK GRANT TO AZ. CK agrees to grant and hereby grants AZ a non-exclusive, worldwide, royalty-free right and license, outside the Prohibited Field and limited to the Field, under CK Intellectual Property Rights in CK Background Technology, to use CK Background Technology solely for the purposes of AZ performing the Research Program during the Research Term. To the extent that CK Background Technology is software and is delivered to AZ in object code form, AZ shall not reverse engineer or otherwise attempt to derive source code from that software.

5.3 LICENSES TO COMPOUNDS AND COMPOUND DATA.

5.3.1 AZ GRANT TO CK.

(a) AZ agrees to grant and hereby grants CK a non-exclusive, worldwide, royalty-free license under AZ Intellectual Property Rights in AZ Compounds and AZ Compound Data in the Field (a) during the Research Term, solely in connection with CK's performance of the Research Program and in accordance with the Research Plan, (b) during and after the Research Term, to perform purity analysis, and (c) after the Research Term (1) for CK to

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[*] thereof, and (2) as expressly provided in Section 7.3. CK agrees that although it may perform purity analysis as set forth above, neither it nor any of its employees, agents or assigns shall [*], the AZ Compounds proprietary to AZ without the prior written consent of AZ. For [*] years following the expiration of the Research Term, CK's license under this Section 5.3.1 shall be restricted solely for internal research purposes. For purposes of this Agreement, internal research purposes include CK's use of the Cytometrix(TM) Hepatotoxicity Module in its research collaborations with any collaborator when required to advance the research collaboration or CK's internal drug discovery and development programs; provided that the Cytometrix(TM) Hepatotoxicity Module is not the predominant component of the relationship between CK and such collaborator and provided further that in any research collaboration the Cytometrix(TM) Hepatotoxicity Module is used for activities such as to inform lead generation or to triage hits and leads rather than solely for activities such as screening entire libraries of compounds. For the avoidance of doubt however, such internal research use shall expressly exclude exploitation of the Cytometrix(TM) Hepatotoxicity Module as a commercial product or service (e.g., as a service bureau), except as expressly provided above. In connection with such internal research purposes, CK may authorize collaborators and others to access and use of the AZ Compounds and Compound Data at CK's facility. After the first [*] years after the Research Term, CK is free to sublicense its rights to the AZ Compound Data for the purpose of [*] thereof under this Section 5.3.1(a).

(b) CK shall maintain written records regarding the use of AZ Compounds and AZ Compound Data, and upon reasonable advance written notice and during regular business hours, CK shall permit AZ or its authorized designee to access CK Facilities, and to review required documentation to determine compliance with the terms of this license.

5.3.2 CK GRANT TO AZ. CK agrees to grant and hereby grants AZ a non-exclusive, worldwide, royalty-free license, but excluding all activities in the Prohibited Field, under CK Intellectual Property Rights in CK Compounds and CK Compound Data in the Field (a) during the Research Term, solely in connection with AZ's performance of the Research Program and in accordance with the Research Plan, (b) during and after the Research Term, to perform purity analysis, and (c) after the Research Term (1) for AZ to [*] thereof, and (2) as expressly provided in Section 7.3. AZ agrees that although it may perform purity analysis as set forth above, neither it nor any of its employees, agents or assigns shall [*], the CK Compounds proprietary to CK without the prior written consent of CK.

5.3.3 PUBLIC COMPOUNDS AND PUBLIC COMPOUND DATA. The Parties acknowledge that, with respect to any CK Compound or AZ Compound that is designated as Public on EXHIBIT 1.11 or EXHIBIT 1.4 (as applicable) (together with corresponding CK Compound Data or AZ Compound Data), nothing in this Agreement will be construed to restrict either Party in any manner from using, disclosing, reproducing, or obtaining from other sources such Compounds or such data and information.

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5.4 KNOWLEDGE LICENSES.

5.4.1 AZ KNOWLEDGE. AZ grants CK an automatic, worldwide, non-exclusive, royalty-free, perpetual and irrevocable license to use, reproduce and otherwise exploit AZ Knowledge. The license granted in this Section 5.4.1 includes the right to disclose such AZ Knowledge to, and authorize further disclosure and use by, Third Parties in connection with ongoing discovery, development, collaboration and marketing or other activities. Disclosure to Third Parties must be under appropriate terms and conditions including restrictions equivalent to any in this Section 5.4.1 and, to the extent any AZ Knowledge also is AZ's Confidential Information, confidentiality provisions substantially equivalent to those in this Agreement.

5.4.2 CK KNOWLEDGE. CK grants AZ an automatic, worldwide, non-exclusive, royalty-free, perpetual and irrevocable license, to use, reproduce and otherwise exploit CK Knowledge, solely for applications outside the Prohibited Field. The license granted in this Section 5.4.2 includes the right to disclose such CK Knowledge to, and authorize further disclosure use by, Third Parties in connection with ongoing discovery, development, collaboration and marketing or other activities. Disclosure to Third Parties must be under appropriate terms and conditions including restrictions equivalent to any in this Section 5.4.2 and, to the extent any CK Knowledge also is CK's Confidential Information, confidentiality provisions substantially equivalent to those in this Agreement.

5.4.3 COLLABORATION KNOWLEDGE. During and after the Research Term, CK grants AZ an automatic, worldwide, non-exclusive, royalty-free, perpetual and irrevocable license, to use, reproduce and otherwise exploit Collaboration Knowledge, solely for applications outside the Prohibited Field. The license granted in this Section 5.4.3 includes the right to disclose such Collaboration Knowledge to, and authorize further disclosure use by, Third Parties in connection with ongoing discovery, development, collaboration and marketing or other activities by or on behalf of AZ. Disclosure to Third Parties of Collaboration Knowledge licensed under this Section must be under appropriate terms and conditions including restrictions equivalent to any in this Section 5.4.3 and, to the extent any such Collaboration Knowledge also is CK's Confidential Information, confidentiality provisions substantially equivalent to those in this Agreement.

5.5 COLLABORATION TECHNOLOGY LICENSES.

5.5.1 CYTOMETRIX(TM) HEPATOTOXICITY MODULE MEETS PERFORMANCE CRITERIA. Upon the Cytometrix(TM) Hepatotoxicity Module meeting the Performance Criteria at the AZ Facility (as determined pursuant to Section 3.4), CK agrees to grant and hereby grants to AZ a worldwide, perpetual, non-transferable (except in accordance with Section 10.4), non-exclusive right and license, outside the Prohibited Field, under CK Intellectual Property Rights in Collaboration Technology. The rights granted in this Section 5.5.1 do not extend to the use, development or exploitation of Collaboration Technology in the Field, which restriction is for a period not to exceed [*] years following the Pilot License Term (subject to earlier termination of the foregoing restriction pursuant to Section 8.3.2(b) for termination of the Agreement under Section 8.2.1).

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5.5.2 OPTION FOR LICENSES WHEN CYTOMETRIX(TM) HEPATOTOXICITY MODULE FAILS TO MEET PERFORMANCE CRITERIA OR AGREEMENT IS TERMINATED PURSUANT TO SECTION 8.2.3. If either (1) the Parties determine that the Cytometrix(TM) Hepatotoxicity Module has not met the Performance Criteria (as determined pursuant to Section 3.4) or (2) this Agreement is terminated

prior to the end of the Pilot License Term pursuant to Section 8.2.3 (Lack of Feasibility), then AZ may, at its option, obtain a license to Collaboration Technology as set forth in this Section 5.5.2. Upon the occurrence of either of the conditions outlined above, AZ may provide notice to CK of its desire to obtain such a license, and the Parties will negotiate in good faith an amount to be paid for the license, but not to exceed US$[*]. Upon payment of such amount, CK agrees to grant and hereby grants to AZ a worldwide, perpetual, non-exclusive, non-transferable (except in accordance with Section 10.4), irrevocable right and license under CK Intellectual Property Rights in Collaboration Technology, solely for applications outside the Prohibited Field.

5.6 PILOT LICENSE AND SUPPORT.

5.6.1 PILOT LICENSE. Upon the Cytometrix(TM) Hepatotoxicity Module meeting the Performance Criteria at the CK Facility, CK agrees TO grant and hereby grants AZ, during the Pilot License Term, a worldwide, non-exclusive, non-transferable (except in accordance with Section 10.4), royalty-free right and license in the Field (but excluding all activities or applications in the Prohibited Field), under CK Intellectual Property Rights in CK Knowledge, CK Background Technology and Collaboration Technology, to use the Cytometrix(TM) Hepatotoxicity Module, together with any Improvements owned by CK, solely for its own internal research at the AZ Facility (the "PILOT LICENSE"). To the extent that a software component of the Cytometrix(TM) Hepatotoxicity Module is delivered in object code form, the license granted extends only to the object code form and not the source code form of that software, and AZ shall not, and shall not permit any Third Party to, reverse engineer or decompile, or otherwise attempt to derive source code from that software component. To the extent that a software component of the prototype version of the Cytometrix(TM) Hepatotoxicity Module is delivered in source code form, AZ shall not modify that software component and the use and disclosure thereof is subject to the requirements of Section 7.1; however, it is understood that AZ may compile such source code to create the object code derivative thereof.

5.6.2 SUPPORT. CK shall provide technical support as set forth on EXHIBIT 5.6.2 with respect to the Cytometrix(TM) Hepatotoxicity Module. For clarity, CK has no support obligations other than as expressly set forth on that EXHIBIT 5.6.2.

5.7 AZ FULL LICENSE TO CYTOMETRIX(TM) HEPATOTOXICITY MODULE.

5.7.1 LICENSES. Upon the Cytometrix(TM) Hepatotoxicity Module meeting the Performance Criteria at the AZ Facility, and upon payment by AZ of the Milestone Payment under Section 6.2 and the Annual License Renewal Fees thereafter, CK agrees to grant and hereby grants AZ, during the Full License Term, a worldwide, non-exclusive, non-transferable (except in accordance with Section 10.4), royalty-free right and license in the Field (but excluding all activities or applications in the Prohibited Field), under CK Intellectual Property

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Rights in CK Knowledge, CK Background Technology and Collaboration Technology, (i) to use the Cytometrix(TM) Hepatotoxicity Module, and any Improvements (to the extent such Improvements are in the Field, owned by CK, and in existence as of the first day of the Full License Term), for its own internal research and development program at any and all AZ Facilities, (ii) to make and distribute a reasonable number of copies of the Cytometrix(TM) Hepatotoxicity Module, including a reasonable number of backup copies thereof in connection with the

exercise of the rights set forth in clause (i) above, and (iii) to create derivative works of the Cytometrix(TM) Hepatotoxicity Module only for the purpose of maintaining and supporting AZ's authorized use thereof and to the extent those derivative works are within the scope of the Deliverables described in EXHIBIT 1.23 and of the following activities: refining the model by including extra compounds, modifying existing assays, and incorporating additional assays (the foregoing licenses in clauses (i) through (iii) above together are the "FULL LICENSE"). To the extent that a software component of the Cytometrix(TM) Hepatotoxicity Module is delivered in object code form, the license granted extends only to the object code form and not the source code form of that software, and AZ shall not, or permit any Third Party to, reverse engineer or decompile, or otherwise attempt to derive source code from that software component.

5.7.2 RECORDS. AZ shall maintain records regarding the use of the Cytometrix(TM) Hepatotoxicity Module, and upon reasonable advance written notice and during regular business hours, AZ shall permit CK or its authorized designee to access AZ Facilities, and to review required documentation to determine compliance with the terms of this license.

5.8 NO IMPLIED LICENSES. Each Party acknowledges that the rights and licenses granted under this Article V are limited to the scope expressly granted herein, and all rights not so granted are hereby expressly reserved. Nothing in this Agreement shall limit in any respect the right of either Party to use its own Technology to conduct research and development with respect to and commercialize products or technologies outside the Field. Consistent with the foregoing, it is understood that licenses to Collaboration Technology and licenses to Collaboration Knowledge do not include or incorporate any right or license to CK Background Technology; exploitation of Collaboration Technology or Collaboration Knowledge may require a license to the underlying subject matter. It is further understood that licenses to Collaboration Technology and licenses to Collaboration Knowledge do not extend to the Cytometrix(TM) Hepatotoxicity Module; exploitation of Collaboration Technology or Collaboration Knowledge that is not independent of the Cytometrix(TM) Hepatotoxicity Module may require a separate license to such Cytometrix(TM) Hepatotoxicity Module for use thereof.

ARTICLE VI - PAYMENTS

6.1 RESEARCH PROGRAM FUNDING.

6.1.1 FTE FUNDING. Each Party shall assume responsibility for its own costs and expenses for its conduct of activities under the Research Program with the sole exception that AZ shall fund, quarterly in advance, during the Research Term (whether or not the Pilot License Term has begun), [*] of the [*] FTEs to be committed by CK for the performance of the Research Program, at the FTE rate set forth below. In total, subject to any

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Additional Items, the annual FTE funding to be provided by AZ to CK under this Section 6.1.1 shall not exceed US$[*], unless otherwise separately agreed by the Parties in writing.

6.1.2 The FTE rate is [*] dollars (US$[*]) per year, which includes all employee-related compensation, including salaries, wages, bonuses, benefits, profit sharing, stock option grants, and FICA costs, travel, meals and entertainment (except in connection with reimbursed travel described below), training, recruiting, relocation, operating supplies, postage, communications expense, professional dues, depreciation, repairs and maintenance, rent and lease, utilities, taxes, facilities and space costs, and computer service

charges. The FTE rate excludes the cost of items identified as Additional Items as described in Section 6.1.2. AZ shall have no obligation to fund FTEs after the Research Term. During the Pilot License Term, the direct out-of-pocket expenses of travel and lodging incurred by CK personnel while required to be on site pursuant to the Research Program will be reimbursed by AZ to CK; provided that the CK employees are away from the facility at which those personnel typically work and the duration of the trip is for an extended period of time (i.e., more than three (3) working days). AZ shall reimburse CK for such direct out-of-pocket expenses incurred by CK that are within the AZ travel guidelines within sixty (60) days after receipt by AZ of a correct invoice with supporting documentation from CK that identifies the name of the employee, the date of the trip(s) taken and the total dollar amount incurred with sufficient detail to determine amounts incurred for transportation, meals, lodging, and related incidentals.

6.1.3 ADDITIONAL EXPENSES. From time to time, the JRC may identify additional items or subject matter required to carry out the Research Program, including additional licenses under Intellectual Property Rights of Third Parties, extraordinary equipment or specialized reagents or any other external costs (each such item an "ADDITIONAL ITEM"). In each instance, the JRC will apportion the cost of Additional Items according to the following principles: (i) if the Additional Item will be consumed fully during the Research Term and will be used only for work in the Field, the expense will be borne equally by CK and AZ; (ii) if the Additional Item will not be fully consumed during the Research Term, or will be used during the Research Term outside the Field by either CK or AZ, the expense will be apportioned between CK and AZ in a manner that equitably reflects the relative value to the Research Program of such Additional Item and for applications outside of the Research Program for the Party(ies) that will have rights thereto. For clarity, neither Party shall have any obligation to reimburse the other Party with respect to amounts incurred by the other Party with respect to any Additional Item, except as agreed by the JRC. Unless otherwise mutually agreed, during the Research Program, CK shall be the contracting Party with respect to any such Additional Items and shall directly pay for any such Additional Items. If there are cost apportionment concerns regarding Additional Items during the Pilot Program, responsibility for such costs shall be resolved by the JRC. All equipment acquired during the Pilot Phase at the AZ facility shall become the property of AZ.

6.2 MILESTONE PAYMENT. Upon completion of the Research Program, after CK has delivered to AZ the items required to be provided under the Research Plan, and upon the Cytometrix(TM) Hepatotoxicity Module, as installed at the AZ Facility, meeting the Performance Criteria (as determined pursuant to Section 3.4), a milestone payment of [*] USD dollars

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(US$[*]) ("MILESTONE PAYMENT") will become due and payable. AZ shall pay the Milestone Payment within thirty (30) days following receipt of an invoice from CK, generated in accordance with the foregoing.

6.3 LICENSE RENEWAL FEES.

6.3.1 On each of the first [*] annual year anniversaries of the date on which the Full License is first effective, AZ shall pay to CK an annual license renewal fee of [*] dollars (US$[*]) ("ANNUAL LICENSE RENEWAL FEE") for continuance of the Full License, within thirty (30) days after CK's invoice. On each of the [*] through [*] annual year anniversaries of the date on which the Full License is first effective, AZ has the option to (i) pay to CK

the annual license renewal fee of [*] dollars (US$[*]) for continuance of the Full License, within thirty (30) days after CK's invoice or the end of a Contract Year, or (ii) cease payments and terminate the Full License. Upon either (i) a CK Change of Control event that arises due to CK's merger with, acquisition by, or other similar transaction with a pharmaceutical company with annual sales in excess of US$1 billion that occurs at any time during the Full License, or (ii) payment of the [*] such annual license renewal fee in accordance with this Agreement, the Full License granted to AZ pursuant to Section 5.7 shall become fully paid up and perpetual.

6.3.2 To the extent CK licenses the use of the Cytometrix(TM) Hepatotoxicity Module to any Third Party for an amount that is leSS than the amount owed by AZ under Section 6.3.1, AZ's obligation to pay to CK an Annual License Renewal Fee of US$[*] shall be reduced to the equivalent or less than the lowest amount that such Third Party is obligated to pay.

6.4 TAXES. CK will be responsible for paying any and all taxes and assessments relating to any income or other consideration that CK derives from this Agreement. All payments made by AZ to CK under this Agreement shall be made without any deduction or withholding for or on account of any taxes. Withholding taxes, if any, must be paid by AZ to the relevant taxing authority on behalf of CK.

6.5 TOTAL OBLIGATION. The Annual License Renewal Fees and the Milestone Payment payable by AZ to CK pursuant to this Agreement, taken together with the funding to be provided by AZ to CK and other amounts payable pursuant to this Article 6, represent all of AZ's financial obligations to CK hereunder. CK shall not be entitled to any additional compensation or remuneration from AZ under this Agreement. The foregoing will not be construed as a limit on fees due for termination, damages for breach, or obligations of indemnity.

ARTICLE VII - CONFIDENTIALITY

7.1 CONFIDENTIAL INFORMATION. Except to the extent expressly authorized by this Agreement or otherwise agreed in writing, the Parties agree that, for ten (10) years after the expiration of the Research Term, the receiving Party shall keep confidential and shall not publish or otherwise disclose or use for any purpose other than as provided for in this Agreement any Confidential Information of the other Party. "CONFIDENTIAL INFORMATION" means (i) any

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prototypes provided by CK under this Agreement or in connection with the Research Program; (ii) information disclosed in tangible form that is marked "confidential" or with other similar designation to indicate its confidential or proprietary nature; and (iii) information disclosed orally, where such information is either (A) of the type usually considered confidential or proprietary in the biopharmaceutical industry or (B) otherwise indicated to be confidential or proprietary by the disclosing Party at the time of the initial disclosure thereof and confirmed in writing as confidential or proprietary by the disclosing Party within thirty (30) days after such disclosure. Notwithstanding the foregoing, Confidential Information shall not include information that, in each case as demonstrated by written documentation:

(a) was already or becomes lawfully known to the receiving Party, other than under an obligation of confidentiality, at the time of disclosure;

(b) can be demonstrated by documentation or other

competent proof to have been in the receiving Party's or its Affiliates' possession prior to disclosure by the disclosing Party;

(c) is subsequently received by the receiving Party or its Affiliates from a Third Party who is not bound by any obligation of confidentiality with respect to that information;

(d) is generally made available to Third Parties by the disclosing Party without restriction on disclosure;

(e) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving Party or became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving Party in breach of this Agreement; or

(f) was developed by the receiving Party without reference to any information or materials disclosed or provided by the disclosing Party.

7.2 PERMITTED DISCLOSURES. Notwithstanding Section 7.1 above, each Party may disclose Confidential Information of the other Party as follows:

(a) to Third Parties (and to Affiliates) under appropriate terms and conditions including confidentiality provisions substantially equivalent to those in this Agreement in connection with obtaining financing and other business activities, such Confidential Information permitted under this subsection to be disclosed shall be limited to general descriptions of the activities, technology and findings under this Agreement (including associations), and shall exclude hepatotoxicity profiles, other than toxicophoric centers, associated with chemotypes;

(b) as is reasonably necessary to exercise the rights and licenses granted or reserved herein (including the right to grant sublicenses);

(c) to the extent such disclosure is reasonably necessary in filing for, registering or maintaining Intellectual Property Rights in accordance with Section 5.1;

(d) as required by law or regulation (including applicable securities regulations); provided, however, that if a Party is required by law or regulation to make any such disclosure of the other Party's Confidential Information it will, except where impracticable for necessary disclosures, give reasonable advance notice to the other Party of such disclosure requirement will use its reasonable efforts to secure confidential treatment of such Confidential Information required to be disclosed; or

(e) to the extent mutually agreed to by the Parties.

7.3 RESTRICTIONS ON DISCLOSURE OF DATA SETS. Notwithstanding anything to the contrary in this Agreement, AZ agrees that it shall treat as CK's Confidential Information data sets generated by AZ using the CK Compounds. Likewise, CK agrees that it shall treat as AZ's Confidential Information data sets generated by CK using the AZ Compounds. However, CK may disclose those data sets to CK collaborator(s) under appropriate obligations of confidentiality no less protective than those for CK's own information. In addition, either Party may use and disclose such data sets without restriction (a) as aggregated information and data sets, whether about the proprietary or public AZ Compounds or CK Compounds, as applicable for purposes of describing the utility of the Cytometrix(TM) Hepatotoxicity Module and the general nature of the activities under this Agreement; and (b) individual data sets about public AZ Compounds or

CK Compounds, as applicable, in each case so long as that Party does not disclose specific [*], other than [*], that could be associated with specific [*].

7.4 PRESS RELEASE; CONFIDENTIALITY OF TERMS OF AGREEMENT. Neither Party shall disclose to any Third Party the terms of this Agreement without the prior written consent of the other Party, except (a) to advisors and existing and potential investors on a need to know basis under circumstances that reasonably ensure the confidentiality thereof, (b) to Third Parties to the extent necessary to comply with the terms of licenses from Third Parties with respect to a Party's Confidential Information, (c) to the extent required by law or a court or other governmental body; provided that in such situation the Party wishing to disclose the terms gives reasonable advance written notice to the non-disclosing Party of the proposed disclosure and the reason for such disclosure and uses reasonable efforts to secure confidential treatment of such disclosed information. Notwithstanding the foregoing, following the Effective Date, the Parties shall issue a press release, substantially in the form of EXHIBIT 7.4, to announce the execution of this Agreement, together with a corresponding Question & Answer outline for use that has been approved in advance by both Parties for the purpose of responding to inquiries about the Agreement; thereafter, each of AZ and CK may each disclose to Third Parties the information contained in such press release and Question & Answer outline without the need for further approval by the other. In addition, with the advance review and prior written approval of the other Party in each instance, each Party is authorized to issue additional press releases when amounts such as milestone payments or licensing fees become due under this Agreement.

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7.5 PUBLICATION. Each Party acknowledges the other Party's interest in publishing the results of the Research Program, obtaining valid patent protection, and protecting business interests and trade secrets. Consequently, if (i) CK, its employees, agents or consultants wish to make a publication related to the CK Compounds or the AZ Compounds (it is understood that CK will not disclose the identity of the AZ Compounds or other Confidential Information of AZ without AZ's prior written consent), or (ii) AZ, its employees, agents or consultants wish to make a publication regarding the use of the Cytometrix(TM) Hepatotoxicity Module or CM System in any manner, with or without the CK Compounds (it is understood that AZ will not disclose Confidential Information of CK without CK's prior written consent), in each case, such Party shall deliver to the other Party a copy of the proposed written publication or an outline of an oral disclosure at least thirty (30) days prior to submission for publication or presentation. The reviewing Party may (a) propose modifications to the publication for patent reasons or business reasons, (b) delete any trade secrets or Confidential Information of such Party included in that publication, or (c) request a reasonable delay in publication or presentation to protect know-how and patentable subject matter. Once a particular public disclosure has been approved, either Party may disclose the information contained therein in subsequent disclosures.

7.6 OUTSOURCING OF IT TECHNOLOGY SERVICES.

7.6.1 RIGHT TO OUTSOURCE. Without limiting the foregoing confidentiality provisions, during the Pilot License Term and the Full License Term, AZ shall have the right to appoint a Third Party ("OUTSOURCER") to provide information technology "outsourcing" services to AZ and its Affiliates that relates to the subject matter of this Agreement ("OUTSOURCE SERVICES") for the purposes of enabling AZ to perform under the Agreement or enabling AZ to use Technology and or information licensed under this Agreement, only on behalf of AZ and for the purposes permitted under this Agreement. Outsource Services

include loading any software licensed under the Agreement onto equipment owned or controlled by the Outsourcer, located either at the AZ Facility, an Outsourcer's premises or at the CK Facility. In connection with an Outsourcer providing Outsource Services, CK shall permit the Outsourcer to access, operate and use such software on its equipment in its performance of the Outsource Services, and shall otherwise permit the Outsourcer, in its performance of the Outsource Services, to do anything that AZ or its Affiliates are not precluded from doing under the Agreement that are reasonably connected to the Outsource Services, such as accessing, operating and using items supplied or licensed under the Agreement, and receiving and using services provided under the Agreement.

7.6.2 COOPERATION WITH OUTSOURCER. AZ shall provide to CK a copy of its agreement with any Outsourcer, to the extent relevant to either Party's activities, rights or obligations under this Agreement. CK shall reasonably cooperate with any authorized Outsourcer in the Outsourcer's performance of the Outsource Services. In order to provide Outsource Services to AZ under this Agreement, it may be necessary for Outsourcer to have access to CK Confidential Information. Outsourcer shall be bound by terms of confidentiality no less restrictive than those contained in this Agreement as applied to AZ.

ARTICLE VIII- TERM AND TERMINATION

8.1 TERM; EXPIRATION. This Agreement will commence upon the Effective Date and unless terminated as provided in this Article VIII shall continue in full force and effect until [*] months following payment by AZ of the [*] Annual License Renewal Fee pursuant to Section 6.3.

8.2 EARLY TERMINATION.

8.2.1 MATERIAL BREACH. At any time during the Term, if a Party materially breaches this Agreement and does not cure that material breach within thirty (30) days after written notice from the non-breaching Party, then upon further written notice the non-breaching Party may terminate this Agreement. If within thirty (30) days following notice of breach from the non-breaching Party, the Party allegedly in breach initiates a dispute resolution procedure in good faith and as permitted under this Agreement for resolution of the dispute for which termination is being sought and is diligently pursuing such procedure (including any litigation or arbitration following therefrom), then termination is effective only if at the conclusion of the dispute resolution procedure, the initiating Party notifies the other Party in writing that the termination shall take effect. The non-breaching Party may, however, withhold or suspend performance of its obligations during the pendency of such dispute resolution procedure, without being considered to be in breach of its obligations hereunder, and without liability for having so withheld or suspended performance. Notwithstanding anything to the contrary in this Section 8.2.1, however, if the breach is a failure to pay amounts due under Sections 6.2 or 6.3, then the licenses granted to AZ by CK shall not continue during pendency of the dispute.

8.2.2 [INTENTIONALLY LEFT BLANK.]

8.2.3 MUTUALLY FOR LACK OF FEASIBILITY. If the Parties mutually determine that installing and implementing the Cytometrix(TM) Hepatotoxicity Module in a manner that meets the Performance Criteria is not scientifically or commercially feasible, or if the Parties mutually determine, after installing the Cytometrix(TM) Hepatotoxicity Module at the AZ Facility, that it has material deficiencies that cannot reasonably be remedied, then by mutual written agreement the Parties may terminate this Agreement.

8.2.4 BY AZ FOR ITS CONVENIENCE DURING LATER FULL LICENSE TERM. During the [*] through [*] years of the Full License Term and not before,

and provided that AZ is in compliance with its obligations under this Agreement and has paid all amounts previously due, for any reason or no reason, AZ may terminate this Agreement by providing written notice of non-renewal at least thirty (30) days prior to the date on which the annual renewal license fee would be due.

8.2.5 BY AZ FOR ITS CONVENIENCE PRIOR TO [*] YEAR OF THE FULL LICENSE TERM. At any time after the Research Term and prior to the [*] year of the Full License Term, for any reason or for no reason, AZ may terminate this Agreement by providing written notice at least ninety (90) days prior to such termination.

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8.2.6 BY EITHER PARTY FOR INSOLVENCY. At any time during the Term, if either Party is subject to an Insolvency Event (defined below), then the other Party may terminate this Agreement upon thirty (30) days prior written notice to the other Party. For purposes of the foregoing, an "Insolvency Event" is any of the following: (i) making a general assignment for the benefit of creditors; (ii) filing an insolvency petition in bankruptcy (other than a petition for reorganization); (iii) petitioning for or acquiesces in the appointment of any receiver, trustee or similar officer to liquidate or conserve its business or any substantial part of its assets; (iv) commencing under the laws of any jurisdiction any proceeding involving its dissolution or liquidation or any other similar proceeding; (v) ceasing to carry on the whole or substantially the whole of its business or that part of its business to which this Agreement relates; or (vi) becoming a party to any proceeding or action of the type described above in (iii) or (iv) and such proceeding or action remains undismissed or unstayed for a period of sixty (60) days.

8.3 CONSEQUENCES OF EXPIRATION OR TERMINATION.

8.3.1 SURVIVAL. In all events of expiration or termination the provisions of Articles I (Definitions), VII (Confidentiality), and X (Miscellaneous), and Sections 2.8(Information and Reports), 4.2 (Permitted Activities), 5.1 (Ownership) (including 5.1.4 (License to AZ Improvements), 5.4 (Knowledge Licenses), 5.7.2 (Record Keeping), 5.8 (No Implied Licenses), 6.4 (Taxes), 8.3 (Consequences of Expiration or Termination), 9.2 (Warranty Disclaimer) and 9.3 (No Liability) shall survive. In addition, the Full License under Section 5.7 survives in any event if it has become fully paid-up pursuant to the last sentence of Section 6.3 (License Renewal Fee).

8.3.2 OTHER CONSEQUENCES. The following are in addition to any Sections that survive under Section 8.3.1. Sections or rights not noted as surviving terminate on termination of the Agreement. In each case, on termination each Party promptly shall return to the other Party any Technology or Confidential Information of the other Party, except to the extent the licenses granted pursuant to this Agreement to such Technology or Confidential Information survive.

(a) In the event of expiration pursuant to Section 8.1 (Term; Expiration), Section 3.2.6 and Section 3.2.7 (Compounds) survive for the period indicated therein, licenses to Background Technology (Section 5.2) and Compounds and Compound Data (Section 5.3) survive, all licenses to Collaboration Technology under Section 5.5.1 survive, CK may retain the physical AZ Compounds and AZ Compound Data in its possession, and each Party shall retain identical copies of the images and derived data generated during the Research Term.

(b) In the event of termination by AZ under Section

8.2.1 (Material Breach by CK): (i) AZ has no further requirement to pay FTE costs, the Milestone Payment, the Annual License Renewal Fees or any other amounts not already due and owing; (ii) the licenses from CK to AZ for CK Background Technology (Section 5.2) and CK Compounds and CK Compound Data (Section 5.3) survive and AZ may retain the physical CK Compounds and CK Compound Data in its possession; (iii) CK shall return to AZ all AZ Compounds in its possession, and, for avoidance of doubt, AZ has no obligation to provide AZ Compounds under

Section 3.2.6; (iv) the license from CK to AZ for Collaboration Technology (under either Section 5.5.1 or Section 5.5.2, as appropriate) survive; (v) where such termination occurs prior to the end of the Pilot License Term, CK will be deemed to have granted a license to the components or portions of the Cytometrix(TM) Hepatotoxicity Module installed at AZ Facilities, on the same terms as Section 5.7, but without payment of further fees; (vi) where such termination occurs during the Full License Term, the license granted to the Cytometrix(TM) Hepatotoxicity Module to AZ continues in accordance with its terms without additional payment of fees; (vii) CK shall deliver to AZ all images and derived data generated during the Research Term in its possession; and (viii) the restriction under the last sentence of Section 5.5.1 no longer applies.

(c) In the event of termination by CK under Section 8.2.1 (Material Breach by AZ): (i) AZ shall pay, in each case to the extent not yet paid, any remaining FTE costs, the Milestone Payment, and the unpaid balance of the first [*] Annual License Renewal Fees; (ii) the licenses from AZ to CK for AZ Background Technology (Section 5.2) and AZ Compounds and AZ Compound Data (Section 5.3) survive and CK may retain the physical AZ Compounds and AZ Compound Data in its possession; (iii) AZ's obligation to provide Proprietary AZ Compounds under Section 3.2.6 and Section 3.2.7 continues for the time indicated, regardless of whether or not the Research Term has been completed; (iv) in the event that such termination occurs prior to the end of the Research Term, AZ's obligations with respect to exclusivity of efforts (Section 4.1) continue for an additional [*] month period; and (v) AZ shall deliver to CK all images and derived data generated during the Research Term in its possession.

(d) [INTENTIONALLY LEFT BLANK.]

(e) In the event of termination under Section 8.2.3 (Mutually for Lack of Feasibility): (i) AZ shall pay remaining unpaid FTE costs (if any); (ii) the licenses from AZ to CK for AZ Background Technology (Section 5.2), and AZ Compounds and AZ Compound Data (Section 5.3) survive and CK may retain the physical AZ Compounds and AZ Compound Data in its possession; (iii) the license from CK to AZ for Collaboration Technology (under either Section 5.5.1 or Section 5.5.2, as appropriate) survive; (iv) the Cytometrix(TM) Hepatotoxicity Module (including backups thereof) shall be removed from any AZ Facilities in which it has been installed, and all licenses granted to AZ thereunder shall terminate; and (v) each Party shall retain identical copies of the images and derived data generated during the Research Term.

(f) In the event of termination or non-renewal by AZ under Section 8.2.4 (AZ Convenience During Later Full License Term): (i) the license from CK to AZ for Collaboration Technology under Section 5.5.1 survives; (ii) the licenses from AZ to CK for AZ Background Technology (Section 5.2) and AZ Compounds and AZ Compound Data (Section 5.3) survive, and CK may retain the physical AZ Compounds and AZ Compound Data in its possession; and (iii) the Cytometrix(TM) Hepatotoxicity Module (including backups thereof) shall be removed from any AZ Facilities in which it has been installed, and all licenses granted to AZ thereunder shall terminate; and (v) each Party shall retain identical copies of the images and derived data generated during the Research Term.

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(g) In the event of termination or non-renewal by AZ under Section 8.2.5 (AZ Convenience Prior to [*] Year of the Full License Term): (i) AZ shall pay, in each case to the extent not yet paid, any remaining FTE costs, the Milestone Payment, and the unpaid balance of the first [*] Annual License Renewal Fees; (ii) the license from CK to AZ for Collaboration Technology under Section 5.5.1 survives; (iii) the licenses from AZ to CK for AZ Background Technology (Section 5.2) and AZ Compounds and AZ Compound Data (Section 5.3) survive, and CK may retain the physical AZ Compounds and AZ Compound Data in its possession; (iv) AZ's obligation to provide AZ Compounds under Section 3.2.6 continues and Section 3.2.7 survives; (iv) the Cytometrix(TM) Hepatotoxicity Module (including backups thereof) shall be removed from any AZ Facilities in which it has been installed, and all licenses granted to AZ thereunder shall terminate; and (v) each Party shall retain identical copies of the images and derived data generated during the Research Term.

(h) In the event of termination by either Party under Section 8.2.6 (Insolvency): (i) licenses already granted (to and from the insolvent Party) continue in accordance with their terms and subject to payment of related fees; (ii) each Party shall pay for services already provided; and (iii) each Party shall retain identical copies of the images and derived data generated during the Research Term.

8.4 ACCRUED LIABILITY. Termination or expiration of this Agreement for any reason shall not release either Party hereto from any liability that at the time of such termination or expiration has already accrued to the other Party prior to such time including any and all damages arising from any breach hereunder. Such termination or expiration will not relieve a Party from accrued payment obligations or from obligations that are expressly indicated in this Agreement to survive termination or expiration of this Agreement.

8.5 TERMINATION NOT SOLE REMEDY. Termination is not the sole remedy under this Agreement and, whether or not termination is effected, all other remedies will remain available except as agreed to otherwise herein.

ARTICLE IX - WARRANTY AND INDEMNIFICATION

9.1 REPRESENTATIONS AND WARRANTIES. Each Party hereby represents and warrants and covenants as follows:

(a) it is duly organized and validly existing under the laws of the jurisdiction of its incorporation and has full corporate power and authority to enter into this Agreement and is in good standing with all relevant governmental authorities;

(b) this Agreement is a legal and valid obligation binding upon such Party and enforceable in accordance with its terms; and accordingly, it has taken all corporate actions necessary to authorize the execution and delivery of this Agreement and the performance of its obligations under this Agreement;

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(c) the execution, delivery and performance of the Agreement by such Party does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it is bound, nor violate any law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it;

(d) it has not, and during the term of the Agreement will not, grant any right to any Third Party relating to its respective Technology in the Field which would conflict with the rights granted to the other Party hereunder;

(e) it has the requisite rights to grants the licenses set forth under this Agreement; and further, to the best of its knowledge, as of the Effective Date there is no pending litigation or claim, and no basis for such claim, challenging its right to grant the rights herein; and

(f) the execution, delivery and performance of this Agreement will not result in a violation of, or be in material conflict with, or constitute a material default, under any agreement in existence as of the Effective Date between CK and Third Parties and that CK is not party to any agreements that limit or in any other way affect or impair AZ's rights or obligations under this Agreement, including but not limited to CK's rights and obligations under that certain agreement between CK and GlaxoSmithKline dated June 20, 2001.

9.2 WARRANTY DISCLAIMER. EXCEPT FOR ANY EXPRESS WARRANTY SET FORTH WITHIN THIS AGREEMENT, ALL COMPOUNDS, THE CM SYSTEM, THE CYTOMETRIX HEPATOTOXICITY MODULE, TECHNOLOGY AND OTHER MATERIALS PROVIDED BY THE PARTIES HEREUNDER ARE PROVIDED "AS IS" AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW THE PARTIES HEREBY DISCLAIM AND EXCLUDE ANY AND ALL REPRESENTATIONS, WARRANTIES, CONDITIONS OR OTHER TERMS, WHETHER WRITTEN OR ORAL, EXPRESSED OR IMPLIED, INCLUDING ANY REPRESENTATION OR WARRANTY OF QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE.

9.3 NO LIABILITY WITH RESPECT TO COMPOUNDS AND COMPOUND DATA. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY, OR ANY OF ITS EMPLOYEES OR AGENTS, WHETHER FOR BREACH OF CONTRACT, NEGLIGENCE OR OTHERWISE, WITH REGARD TO THE PROVISION OF COMPOUNDS OR COMPOUND DATA, EXCEPT FOR A BREACH OF ITS OBLIGATIONS TO DELIVER AND LICENSE SUCH COMPOUNDS OR COMPOUND DATA UNDER THIS AGREEMENT IN ACCORDANCE WITH THE TERMS HEREOF.

9.4 INDEMNITY.

9.4.1 INDEMNIFICATION BY CK. In addition to any other remedy available to AZ, CK shall indemnify, defend and hold harmless AZ, its Affiliates and its and their respective agents, employees, officers and directors (the "AZ INDEMNITEES") from and against any and all

liability, claims, demands, causes of action, damage, loss, cost or expense (including reasonable attorneys' fees) arising out of Third Party claims or suits to the extent resulting from: (i) CK's performance of, or failure to perform, its obligations under this Agreement; or (ii) breach by CK of any of its representations and warranties under Section 9.1 above, provided, however, that CK's obligations pursuant to this Section 9.4 shall not apply to the extent such claims or suits result from the negligence or willful misconduct of any of the AZ Indemnitees.

9.4.2 INDEMNIFICATION BY AZ. In addition to any other remedy available to CK, AZ shall indemnify, defend and hold harmless CK, its Affiliates and its and their respective agents, employees, officers and directors (the "CK INDEMNITEES") from and against any and all liability, claims, demands, causes of action, damage, loss, cost or expense (including reasonable attorneys' fees) arising out of Third Party claims or suits to the extent resulting from: (i) AZ's performance of, or failure to perform, its obligations under this Agreement; or (ii) breach by AZ of any of its representations and warranties under Section 9.1 above; provided, however, that AZ's obligations pursuant to this Section 9.4 shall not apply to the extent such claims or suits result from the negligence or willful misconduct of any of the CK Indemnitees.

9.4.3 NOTIFICATION OF CLAIM; CONDITIONS TO INDEMNIFICATION OBLIGATIONS.

(a) As a condition to a Party's right to receive indemnification under this Section 9.4, it shall: (i) promptly notify ("CLAIM NOTICE") the other Party as soon as it becomes aware of a claim or suit for which indemnification may be sought pursuant hereto (provided that the failure to give a Claim Notice promptly shall not prejudice the rights of an indemnified Party except to the extent that the failure to give such prompt notice materially prejudices the indemnifying Party; however, in no event shall the indemnifying Party be liable for any loss that results from any delay in providing the Claim Notice); (ii) cooperate with the indemnifying Party in the defense of such claim or suit, at the expense of the indemnifying Party, including providing reasonable information, including, but not limited to, copies of all papers and official documents received in respect of any such loss; and (iii) if the indemnifying Party confirms in writing to the indemnified Party its intention to defend such claim or suit within ten (10) days of receipt of the Claim Notice, permit the indemnifying Party to control the defense of such claim or suit, including without limitation the right to select defense counsel; provided that if the indemnifying Party fails to (x) provide such confirmation in writing within the ten (10) day period or (y) diligently and reasonably defend such suit or claim at any time, its right to defend the claim or suit shall terminate immediately in the case of (x) and otherwise upon twenty (20) days' written notice to the indemnifying Party without cure and the indemnified Party may assume the defense of such claim or suit at the sole expense of the indemnifying Party and may settle or compromise such claim or suit without the consent of the indemnifying Party. In no event, however, may the indemnifying Party compromise or settle any claim or suit in a manner which admits fault or negligence on the part of any indemnified Party or that otherwise materially affects such indemnified Party's rights or requires any payment by an indemnified Party without the prior written consent of such indemnified Party. Subject as expressly provided above, the indemnifying Party will have no liability under this Section 9.4 with respect to claims or suits settled or compromised (including by admission) without its prior written consent.

(b) Each Claim Notice shall contain a description of the claim and the nature and amount of the loss claimed (to the extent that the nature and amount of such loss is known at such time).

ARTICLE X - MISCELLANEOUS

10.1 GOVERNING LAW. The interpretation and construction of this Agreement and any dispute arising from the performance or breach hereof shall be governed by and construed and enforced in accordance with, the laws of the State of New York, United States of America, excluding any conflicts or choice of law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction.

10.2 DISPUTE RESOLUTION. Prior to initiating any proceeding before a court or arbitrator, or in another tribunal, all outstanding matters arising under this Agreement must be submitted to the JSC for good faith negotiation as described in Section 2.4, and then for resolution pursuant to Section 2.5. Matters not resolved under Section 2.5 will be referred to the Chief Executive Officer for CK, and Executive Vice President, Head of Global Discovery Research for AZ (collectively the "SENIOR MANAGEMENT") for resolution. Any final decision mutually agreed to by Senior Managements of the Parties shall be in writing and shall be conclusive and binding on the Parties. If resolution cannot be reached by the Senior Management within thirty (30) days from the date the matter in dispute is first brought to the attention of the Senior Management, the dispute is subject to arbitration under Section 10.3.

103 ARBITRATION. Except as set forth in Sections 2.4 and 2.5, any dispute arising out of or relating to the negotiation, interpretation, breach or performance of this Agreement shall be settled by binding arbitration in accordance with the rules of arbitration indicated below. The number of arbitrators shall be three (3), of whom each Party shall appoint one (1). The two arbitrators so appointed will select the third and final arbitrator. The place of arbitration shall be San Francisco, California. The language used in the arbitration proceedings shall be English. The proceedings, including any outcome, shall be confidential. The arbitration shall be governed by the United States Arbitration Act 9 U.S.C. Sections 1-16 to the exclusion of any inconsistent state laws and judgment on the award rendered by the arbitration may be entered by any court having jurisdiction. Nothing in this Article X will preclude either Party from seeking interim or provisional relief from a court of competent jurisdiction, including a temporary restraining order, preliminary injunction or other interim equitable relief, concerning a dispute either prior to or during any arbitration if necessary to protect the interests of such Party or to preserve the status quo pending the arbitration proceeding.

10.4 ASSIGNMENT. This Agreement shall not be assignable by either Party to any Third Party hereto without the written consent of the other Party hereto; except that either Party shall always have the right, without such consent, (a) to perform any or all of its obligations and exercise any or all of its rights under this Agreement through any of its Affiliates, and (b) on written notice to the other Party, assign any or all of its rights and delegate any or all of its obligations hereunder to any of its Affiliates or to any successor in interest (whether by merger, acquisition, asset purchase or otherwise) to all or substantially all of the business to which this

Agreement relates. Any permitted successor of a Party or any permitted assignee of all of a Party's rights under this Agreement that has also assumed all of such Party's obligations hereunder in writing shall, upon any such succession or assignment and assumption, be deemed to be a party to this Agreement as though named herein. All validly assigned rights of a Party shall inure to the benefit of and be enforceable by, and all validly delegated obligations of such Party shall be binding on and be enforceable against, the permitted successors and assigns of such Party, provided that such Party, if it survives, shall remain jointly and severally liable for the performance of such delegated obligations under this Agreement. Any attempted assignment or delegation in violation of this Section 10.4 shall be void.

10.5 PERFORMANCE WARRANTY. AZ hereby warrants and guarantees the performance of any and all rights and obligations by its Affiliate(s).

10.6 DEBARMENT. To the extent required by applicable law, neither Party shall use, in any capacity, in connection with the performance of its obligations under this Agreement, any person debarred or subject to debarment or otherwise disqualified or suspended from performing the Research Program or otherwise subject to any restrictions or sanctions by any other governmental or regulatory authority or professional body with respect to the performance of the

Research Program. Accordingly, to the extent applicable, a Party shall immediately notify the other Party in writing if any person who is performing under this Agreement is or becomes debarred or if any action, suit, claim, investigation, or other legal or administrative proceeding is pending or, to the best of the Party's knowledge, threatened, that would make any person performing hereunder a person that is debarred or would preclude the Party from performing its obligations under this Agreement.

10.7 FORCE MAJEURE. Except with respect to payment of money, no Party shall be liable to the other for failure or delay in the performance of any of its obligations under this Agreement for the time and to the extent such failure or delay is caused by earthquake, riot, civil commotion, war, terrorist acts, strike, flood, or governmental acts or restriction, or other cause that is beyond the reasonable control of the respective Party. The Party affected by such force majeure will provide the other Party with full particulars thereof as soon as it becomes aware of the same (including its best estimate of the likely extent and duration of the interference with its activities), and will use commercially reasonable efforts to overcome the difficulties created thereby and to resume performance of its obligations as soon as practicable. If the performance of any such obligation under this Agreement is delayed owing to such a force majeure for any continuous period of more than one hundred eighty (180) days, the Parties hereto will consult with respect to an equitable solution, including the possibility of the mutual termination of this Agreement.

10.8 NOTICES. All notices, requests and communications hereunder shall be in writing and shall be personally delivered or sent by facsimile or e-mail transmission (receipt confirmed), mailed by registered or certified mail (return receipt requested), postage prepaid, or sent by international express courier service, and shall be deemed to have been properly served to the addressee upon receipt of such written communication, to following addresses of the Parties, or such other address as may be specified in writing to the other Party hereto:

IF TO CK,

ADDRESSED TO: CYTOKINETICS, INC.
280 East Grand Avenue
South San Francisco, CA 94080-4808
Attention: Robert Blum, Senior Vice President, Finance and Corporate Development, and Chief Financial Officer
Telephone: (650) 624-3000
Telecopy: (650) 624-3010
E-mail: rblum@cytokinetics.com

WITH A COPY TO: WILSON SONSINI GOODRICH & ROSATI, PC
650 Page Mill Road
Palo Alto, CA 94304-1050
Attention: Kenneth A. Clark, Esq.
Telephone: 415-493-9300
Telecopy: 415-493-6811
E-mail: kclark@wsgr.com

IF TO AZ,

ADDRESSED TO: ASTRAZENECA AB
R&D Headquarters
S-151 85 Sodertalje, Sweden
Attention: Jan Lundberg
Executive Vice President, Discovery Research
Telephone: [*]
E-mail: [*]

WITH A COPY TO: ASTRAZENECA AB
LEGAL DEPARTMENT
S-151 85 Sodertalje, Sweden
Attention: Johannes Linde
Associate General Counsel
Telephone: [*]
Telecopy: [*]

10.9 WAIVER. Neither Party may waive or release any of its rights or interests in this Agreement except in writing. The failure or either Party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition. No waiver by either Party of any condition or term in any one or more instances shall be construed as a continuing waiver of such condition or term or of another condition or term.

10.10 SEVERABILITY. If any provision hereof should be held invalid, illegal or unenforceable in any jurisdiction, the Parties shall negotiate in good faith a valid, legal and

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enforceable substitute provision that most nearly reflects the original intent of the Parties and all other provisions hereof shall remain in full force and effect in such jurisdiction and shall be liberally construed in order to carry out the intentions of the Parties hereto as nearly as may be possible. Such invalidity, illegality or unenforceability shall not affect the validity, legality or enforceability of such provision in any other jurisdiction. In the event a Party seeks to avoid a provision of this Agreement by asserting that such provision is invalid, illegal or otherwise unenforceable, the other Party shall have the right to terminate this Agreement upon thirty (30) days' prior written notice to the asserting Party, unless such assertion is eliminated and the effect of such assertion cured within such thirty (30)-day period. Any termination in accordance with the foregoing sentence shall be deemed a termination pursuant to Section 8.2 and the Party who made such assertion shall be deemed the breaching Party.

10.11 DAMAGES EXCLUSION AND LIMITATION. EXCEPT WITH RESPECT TO DAMAGES OR OBLIGATIONS ARISING OUT OF UNAUTHORIZED EXPLOITATION OF THE OTHER PARTY'S INTELLECTUAL PROPERTY RIGHTS OR BREACH OF ARTICLE VII, IN NO EVENT WILL EITHER PARTY OR ANY OF ITS RESPECTIVE AFFILIATES BE LIABLE TO THE OTHER PARTY OR ANY OF ITS AFFILIATES FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL, EXEMPLARY, OR PUNITIVE DAMAGES, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUE OR CLAIMS OF CUSTOMERS OF ANY OF THEM OR OTHER THIRD PARTIES FOR SUCH DAMAGES. The forgoing applies to obligations and damages under Article IX.

10.12 ENTIRE AGREEMENT. This Agreement sets forth all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties hereto and supersedes and terminates all prior agreements and understanding between the Parties with respect to the subject matter hereof, including that certain Mutual Non-Disclosure Agreement between the Parties dated January 29, 2003 (the "NDA"), as amended on July 9, 2003, and on August 11, 2003. Notwithstanding the foregoing, all information exchanged between the Parties pursuant to the NDA shall be deemed Confidential Information of the Party that disclosed it thereunder and shall be subject to the terms of this Article VII. There are no covenants, promises, agreements, warranties, representations conditions or understandings, either oral or written, between the Parties with respect to the subject matter hereof other than as set forth

herein. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties hereto unless reduced to writing and signed by the respective authorized officers of the Parties.

10.13 INDEPENDENT CONTRACTORS. Nothing herein shall be construed to create any relationship of employer and employee, agent and principal, partnership or joint venture between the Parties. Each Party is an independent contractor. Neither Party shall assume, either directly or indirectly, any liability of or for the other Party. Neither Party shall have the authority to bind or obligate the other Party and neither Party shall represent that it has such authority.

10.14 HEADINGS. Headings used herein are for convenience only and shall not in any way affect the construction of or be taken into consideration in interpreting this Agreement.

10.15 COUNTERPARTS AND FACSIMILE SIGNATURES. This Agreement may be executed in two counterparts, each of which shall be deemed an original, and all of which together, shall constitute one and the same instrument. This Agreement may be executed as counterparts and the signature page delivered by facsimile. The Parties agree that such execution and facsimile delivery shall have the same force and effect as delivery of an original document with original signatures, and that each Party may use such facsimile signatures as evidence of the execution and delivery of this Agreement by both Parties.

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IN WITNESS WHEREOF, this Agreement is executed by the authorized representatives of the Parties as of the Effective Date.

ASTRAZENECA AB	CYTOKINETICS, INC.
By: /s/ Per From	By: /s/ James Sabry
Name: Per From	Name: James Sabry
Title: President & CEO	Title: President and CEO

EXHIBIT 1.3

AZ BACKGROUND TECHNOLOGY

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* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the

omitted portions.

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EXHIBIT 1.4: AZ COMPOUNDS

The heading in each column indicates whether the information in that column should be provided for Public Compounds, Proprietary Compounds, or both. Information identified with *** is to be provided as of the Effective Date.

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(1) Such an identifier must be unique, but need not be the identifier used internally at the providing Party.

(2) If Compound is Proprietary, then in addition to the target class, identify whether the molecular target is the same.

(3) Reported as an EC50.

(4) Reported as a curve, not as an EC50.

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AZ AND CK CONFIDENTIAL

EXHIBIT 1.10

CK BACKGROUND TECHNOLOGY

CK Background Technology comprises the Technology disclosed in the following patents and patent applications.

CASE NO.	APPLN. NO. / (PUB. NO.)	FILING DATE	TITLE / SUBJECT MATTER	STATUS / NOTES
1008	[*]	[*]	[*]	Pending
1008A	[*]	[*]	[*]	Pending

1009	[*]	[*]	[*]	Pending
1009A	[*]	[*]	[*]	[*]
1009B	[*]	[*]	[*]	[*]
1009C	[*]	[*]	[*]	Pending
1009D	[*]	[*]	[*]	[*]
1011	[*]	[*]	[*]	Pending
1011A	[*]	[*]	[*]	[*]
1011B	[*]	[*]	[*]	Pending
1011PCT	[*]	[*]	[*]	[*]
1011EP	[*]	[*]	[*]	Pending
1011.1	[*]	[*]	[*]	Pending
1011.1PCT	[*]	[*]	[*]	[*]
1011.1US	[*]	[*]	[*]	Pending

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CASE NO.	APPLN. NO. / (PUB. NO.)	FILING DATE	TITLE / SUBJECT MATTER	STATUS / NOTES
1011.1EP	[*]	[*]	[*]	Pending
1011.1GB	[*]	[*]	[*]	Pending
1026	[*]	[*]	[*]	Pending
1026PCT	[*]	[*]	[*]	[*]
1027.1	[*]	[*]	[*]	Pending
1027.1PCT	[*]	[*]	[*]	[*]
1027.1EP	[*]	[*]	[*]	Pending
1035.1PCT	[*]	[*]	[*]	[*]
1035.1EP	[*]	[*]	[*]	Pending
1035.1GB	[*]	[*]	[*]	Pending

1036	[*]	[*]	[*]	[*]
1036.1PCT	[*]	[*]	[*]	[*]
1036A	[*]	[*]	[*]	Pending
1036.1EP	[*]	[*]	[*]	Pending
1036.1GB	[*]	[*]	[*]	Pending
1037	[*]	[*]	[*]	Pending
1037PCT	[*]	[*]	[*]	[*]
1037GB	[*]	[*]	[*]	Pending
1037EP	[*]	[*]	[*]	Pending

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CASE NO.	APPLN. NO. / (PUB. NO.)	FILING DATE	TITLE / SUBJECT MATTER	STATUS / NOTES
1062	[*]	[*]	[*]	Pending
1062PCT	[*]	[*]	[*]	[*]
1064	[*]	[*]	[*]	Pending
1064PCT	[*]	[*]	[*]	[*]
1064EP	[*]	[*]	[*]	Pending
1074	[*]	[*]	[*]	Pending
1131	[*]	[*]	[*]	Pending
1132	[*]	[*]	[*]	Pending
1146	[*]	[*]	[*]	Pending
1146.1	[*]	[*]	[*]	Pending
1170	[*]	[*]	[*]	Pending

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EXHIBIT 1.11

CK COMPOUNDS

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(1) Such an identifier must be unique, but need not be the identifier used internally at the providing Party.

(2) If Compound is Proprietary, then in addition to the target class, identify whether the molecular target is the same.

(3) Reported as an EC50.

(4) Reported as a curve, not as an EC50.

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EXHIBIT 1.15

CM SYSTEM

The CM System is an automated cell biology platform designed to quantify cellular phenotypes. Cytokinetics has developed the CM System for use across the drug discovery process, including target identification and validation, primary and secondary compound screening, mechanism-of-action studies and compound attrition management.

The components of the current CM System can be broken down as follows:

- Culture and plating of cells
- Automated addition of treatments and stains
- Variable exposure of cells to treatment
- Automated image acquisition
- Cell-by-cell image analysis
- Quantitative cell-by-cell biological analysis
- Statistical analysis to generate compound "fingerprints" and compound classifications

All the experimental data, including images, compound fingerprints and classifications are available for interpretation and decision support.

[CM SYSTEM FLOW DIAGRAM]

CELL CULTURE

A variety of cell lines and primary cell types are used in the CM System. The phenotype of interest is generally dependent on the cell type. By quantitatively comparing the response to a treatment across a variety of cell types, a fuller understanding of the effect of the treatment can be obtained. The cell types employed in the CM System have been selected for relevance to particular therapeutic problems, for biological diversity, for responsiveness in CM profiling experiments, and for reproducibility.

TREATMENT

The CM System can be used to quantify the effects of chemical compounds, or a variety other treatments, such as antibodies, toxins and transfected siRNAs, on the chosen cell types. The process of defining the CM experiment and the resulting required treatment plate format is handled in the in the CM System LIMS.

AUTOMATED PLATE PREPARATION

The CM System automation includes the plating of cells, incubation with treatment and staining of the cells. Quantitative reproducibility of assay results requires consistent fluidics. The CM System LIMS include data system interfaces for all fluidics operations.

IMAGING

High-quality imaging provides the primary data for the CM System. Imaging data are automatically stored to computer disk for analysis.

IMAGE ANALYSIS

Proprietary image analysis algorithms are used to segment images into individual cells and organelles. A large number of morphological and intensity-related features are extracted from each image. The CM System uses a scalable distributed computing architecture designed to take advantage of additional networked computers as computation demands increase. All results are stored in the CM System experiment database.

DATA ANALYSIS

CM System data analysis quantifies compound "fingerprints" in three phases:

- sub-cellular measurements
- biological features
- compound fingerprints

The process of generating compound fingerprints uses the image features, such as object area, intensity, shape, texture, etc., and experimental process parameters, e.g. drug, concentration, cell line, time point, etc., to generate so-called biological features. Examples of biological features from Cytokinetics' cell-cycle work include Mitotic Index, G1 phase, S phase, and Golgi apparatus classification. Treatment fingerprints are the CM System representation of the cellular phenotype and are generated from multidimensional analysis of the biological features. Compound groups are assembled when a group of compound phenotypes is compared and compounds with similar fingerprints are

assembled.

VISUALIZATION

CM System data can be reviewed at many levels, including visualizing compound fingerprints, reviewing biological analysis and viewing the original experimental images. Various biological reports and analyses are generated allowing access to information and analyses at any of the three levels:

- Compound Fingerprint Analyses

- Standardized and Ad Hoc Biological Reports

- Biological Experimental Data

The highest level is the compound fingerprint analyses, examples of which are Principal Component Analysis (PCA) Plots and Trellis Plots. The former are three-dimensional representations of the higher-dimensional dose-response data, the latter are representations of the fingerprint data at a given dose. Standardized and ad hoc biological reports, include cell-cycle analysis and dose- and time-response curves. Biological experimental data constitute the primary level and include all the data collected during the CM System experiment, such as the treatment name and concentration, cell type, marker, imaging parameters, extracted features, and exposure time.

An exemplary use of the CM System in compound profiling has the following hierarchy of data:

[TYPES OF DATA GENERATED BY THE CM SYSTEM]

FIGURE 1: Types of data generated by the CM System.

EXHIBIT 1.23

DELIVERABLES

This Exhibit 1.23 defines the Deliverables for the Research Program.

CELL CULTURE

The [*] for preparing and handling the [*] used in the CHM will be [*]. Initial implementation will be at [*] on [*]. In accordance with the Research Plan, the [*] will be subsequently [*] at [*] using [*]. The [*] will be [*].

TREATMENT PREPARATION

The CHM [*] and the associated [*] will be [*] for initial implementation at [*] within [*]. Acknowledging that [*] has its own [*] and [*], [*] will provide to [*] of the [*], including the definition of the [*] and the [*] enabling [*] to [*] for use on [*].

AUTOMATED PLATE PREPARATION

The [*] will include [*], [*], and [*]. The [*] for [*] will be [*] and [*]. The [*] will include both [*] and [*] for all necessary [*]. Again, acknowledging that [*] has its own [*] and [*], [*] will provide to [*] on the [*], enabling [*] to [*] for use on [*].

IMAGING

The [*] will be generated at [*] using an [*] or comparable [*] and [*]. The data will be [*] for subsequent [*] and [*]. The [*], [*] and [*] for [*] and [*] to specific locations to support the [*] will be [*], documented [*] for usage on [*] and [*].

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

IMAGE ANALYSIS

The parties will develop CHM [*] characterizing [*], [*], [*]. Those [*] will be [*], [*] and [*] at [*] during the [*]. [*] and [*] will be stored in the [*]. [*] will [*] the [*] and [*] and [*] of the [*] as part of the CHM.

DATA ANALYSIS

The parties will [*], [*] and [*] CHM [*] analogous to [*], as appropriate to [*]. [*] will document and provide to [*] for [*] for use at [*] as part of the CHM. [*] will [*] of this [*] on [*] and [*] at [*] on the [*].

VISUALIZATION

The parties will [*] via [*], [*], [*] and [*]. The [*] CHM [*] and [*] will be [*] and [*] to [*] for usage at [*] as part of the CHM. [*] will [*] the [*] of this [*] on [*] and [*] at [*] on [*] as part of the CHM.

OVERALL CHM PROCESS - [*]

In addition, an [*] which [*] the [*], [*] and [*] for [*] and [*] the [*] and to [*] of the [*]) will be [*] and [*] to [*] so that [*] can implement necessary [*] within [*] on [*] a part of the CHM.

INFORMATION EXCHANGE DURING THE RESEARCH TERM

In the course of the [*], a [*] of [*] will need to be [*]. The [*] of the [*], [*], the [*] and of the [*], the [*] and the [*], will be [*] at [*]. [*] will require [*] to the [*].

[*] will be [*] as [*], [*] and [*] for [*] in [*]. The [*] will be

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provided for use with [*]. [*] is responsible for acquiring its own [*].

[*]

[*]

ACCESS TO [*] EMPLOYED DURING THE RESEARCH TERM OF THE COLLABORATION

[*]

[*]

THE CYTOMETRIX(TM) HEPATOTOXICITY MODULE: [*] DELIVERED TO AZ FOR IDENTIFICATION OF HEPATOTOXICITY IN [*] DURING THE [*]

[*] of the [*], [*], [*], [*] and [*] for the overall [*] and the [*] will be delivered to [*] during the [*]. [*] will be [*] on the [*] and [*] of the CHM per the [*].

[*] and [*] with [*] for [*], [*] and [*] will be delivered. The [*] will constitute the [*] of the Cytometrix(TM) Hepatotoxicity Module, from [*] to [*] of a [*]. [*] on the [*] and [*] will be provided.

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[*]

THIRD PARTY PRODUCTS INCLUDED IN THE DELIVERABLES

[*]

INFORMATION EXCHANGE

[*]
[*]
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ALGORITHMS USED AS PART OF THE RESEARCH PLAN

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CYTOMETRIX(TM) HEPATOTOXICITY MODULE

Hardware systems:

All computers are to be Intel(R) Pentium(R) series, operating systems are to be Microsoft(R) Windows(R) 2000 or above.
(Memory, processor requirements TBD)

Applications Software:

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EXHIBIT 1.25

EXEMPT ACTIVITIES

AZ: With respect to AZ, Exempt Activities means the:

[*]

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CK: With respect to CK, Exempt Activities means the:

[*]

[*]

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EXHIBIT 1.36

PERFORMANCE CRITERIA

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EXHIBIT 1.45

RESEARCH PLAN

REVISION HISTORY

[*] Cytokinetics	[*]	First Draft	2 pages
[*] AstraZeneca	[*]	Version 1.0	
[*] AstraZeneca	[*]	Version 1.7	
[*] Cytokinetics	[*]	Version 1.8	
[*] Cytokinetics	[*]	Version 1.9	
[*] Cytokinetics	[*]	Version 2.0	
WSGSR	[*]	Version 2.1	Editing and consistency with main body of Agreement

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TABLE OF CONTENTS

ARTICLE I INTRODUCTION

1.1 DISCOVERY PROBLEMS

Section 1.01 Candidate Drugs (CDs) that fail to make it to market are both common and expensive. It has been estimated that that less than 10% of CDs result in a marketable product with each late stage failure incurring significant costs. Approximately 50% of these failures can be attributed to toxicological problems. There will be a greater need for early stage profiling in the future as high throughput screening increases the number of active compounds per target. Clearly, improved early stage toxicity profiling will aid the selection of CDs less likely to fail in the development phase and allow a more informed decision about which active compounds should be progressed.

1.2 APPROACH

Section 1.02 [*]

Section 1.03 [*]

Section 1.04 [*]

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1.3 PROJECT AIMS

The project aim is to utilise the expertise and knowledge within both companies to develop a high content biology platform for hepatotoxicity profiling of compounds. At the end of the collaboration the platform would be available for use in both companies in their own R&D programmes.

To share between AZ and CK [*] and AZ proprietary toxicological data.

[*]

ARTICLE II PROJECT ORGANISATION

2.1 ROLES AND RESPONSIBILITIES - TO BE APPOINTED

2.2 MEETINGS PLAN

Weekly telephone conference calls/NetMeeting will be held between AZ & CK scientists to discuss detailed scientific progress and issues.

Monthly video conference calls of project management team

Quarterly visits, alternating between AZ and CK will be held.

All meetings are to be scheduled at the outset of each project phase, agendas to be circulated at least 2 days before weekly meetings, and 1 week before monthly and quarterly.

2.3 COMMUNICATION FORMATS

All documents will follow the defined project format (attach templates) in MS Word for Windows v2000 or MS PowerPoint for Windows v2000. Up to date project plan will be available to all parties in MS Project for Windows v2000. MS Project will be used for GANT charts.

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ARTICLE III RESPECTIVE CONTRIBUTIONS

FTE commitments are man-years for the complete lifetime of the project - nominally [*] months.

AZ		CK	
[*]	[*] FTE		[*] FTE
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ARTICLE IV PROJECT PLAN

4.1 PROJECT PHASES

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4.2 DELIVERABLES FOR RESEARCH PROGRAM:

The Deliverables for the Research Program are defined in Exhibit 1.23 of the Agreement.

EXHIBIT 5.6.2

SUPPORT

DURING THE [*] WILL:

- Perform installation of the [*] at [*]. Given prior preparation, by [*], of the required [*] on the [*] at a [*] this effort is estimated to take [*] to complete.

- Supply [*] with a [*] and [*] for its own use in the event of [*] during the [*].

- Train [*] on [*].

- Supply [*] with [*] for the [*] as defined in Deliverables Exhibit 1.23.

- Prepare [*] as necessary and [*] to [*] with [*].

IN THE EVENT OF [*], WHETHER DURING THE [*] OR [*], [*] WILL:

- Expect that [*] will [*] from the [*] and [*] supplied by [*] during the [*] at [*].

- Answer [*] via phone, video conference or email regarding [*] or [*] to [*] of the CHM.

- In the event, that the [*] do not result in a [*] at [*], [*] will on a [*], [*] to the [*] and [*] a [*] of the CHM.

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EXHIBIT 7.4

Contacts:

CYTOKINETICS, INC.
Robert I. Blum
SVP, Finance and Corporate Development, and CFO
(650) 624-3000

BURNS MCCLELLAN, INC.
E. Blair Clark (investors) or Justin Jackson (media)
(212) 213-0006

ASTRAZENECA (MEDIA ENQUIRES)
Steve Brown, +44 (0) 207 304 5033
Scott Young, +1.781.839.4589
Kellie Rivest, +1.781.839.4151

FOR IMMEDIATE RELEASE

CYTOKINETICS AND ASTRAZENECA ANNOUNCE TECHNOLOGY DEVELOPMENT COLLABORATION FOCUSED ON PREDICTIVE TOXICITY

ALLIANCE LEVERAGES CYTOMETRIX(TM) CELLULAR PHENOTYPING TECHNOLOGIES

SOUTH SAN FRANCISCO, CA AND LONDON, UK, DEC. 18, 2003 - Cytokinetics, Inc., and AstraZeneca Pharmaceuticals announced today that the two companies have entered into an exclusive collaboration to develop automated imaging-based cellular phenotyping and analysis technologies for the in vitro prediction of hepatotoxicity. The companies have agreed to commit internal resources and combine efforts aimed at addressing an important inflection point in the pharmaceutical discovery and development process. Under the terms of the agreement, AstraZeneca will fund technology development activities at Cytokinetics over a two-year research term. The agreement further provides for a milestone payment and annual licensing fees to be paid to Cytokinetics upon the Cytometrix(TM) Hepatotoxicity Module successfully achieving certain agreed upon performance criteria.

"Under this collaboration, we have the potential to develop new technologies that may systematically and reliably predict toxic and non-toxic

pharmacophores," stated Jay Trautman, Ph.D., Cytokinetics' Vice President of Technology. "AstraZeneca has decades of molecular toxicology and pathology experience. By combining this expertise with Cytokinetics' validated cellular phenotyping technologies, we have an opportunity to together bring forward an application module of the Cytometrix(TM) technologies that may deliver productivity gains for each of our later stage discovery and pre-clinical development processes."

AstraZeneca's Vice President and Global Head of Safety Assessment, Peter Moldeus, Ph.D., stated, "Complications associated with toxicity are a major challenge for the pharmaceutical industry, as these toxicities often result in a project's failure after substantial investments have already been made. Diminishing the risks associated with toxicity by identifying a compound's off-target liabilities earlier could significantly increase our development success. We believe that Cytokinetics' Cytometrix(TM) cellular phenotyping technologies have potential to help AstraZeneca remain at the forefront of research in this area."

CYTOMETRIX(TM) TECHNOLOGIES

The collaboration will leverage Cytokinetics' proprietary platform, Cytometrix(TM) cellular phenotyping technologies, which are routinely utilized in Cytokinetics' screening processes to analyze both on-target and off-target effects of candidate compounds. Cytometrix(TM) cellular phenotyping technologies utilize cell-based assays to create digital phenotypic profiles ("fingerprints") representative of diverse molecular mechanisms of drug action. Cytometrix(TM) fingerprints detail information on the potency and specificity of a compound or drug-related toxicities. Cytokinetics presently employs Cytometrix(TM) cellular phenotyping technologies to eliminate compounds of mixed mechanism, allowing the company to focus its medicinal chemistry and pharmacology resources more selectively on higher quality chemical series. This collaboration with AstraZeneca is designed to develop a new Cytometrix(TM) technologies application called the Cytometrix(TM) Hepatotoxicity Module for the in vitro prediction of hepatotoxicities downstream of screening.

- more -

ABOUT CYTOKINETICS

Founded in 1998 and privately held, Cytokinetics is dedicated to the discovery, development and commercialization of a novel class of therapeutics resulting from its leadership position in the emerging field of cytoskeletal pharmacology. The cytoskeleton is a complex, dynamic framework that impacts all aspects of cell function including cell division, cell motility, intracellular transport, muscle contractility and regulation of cellular organization. Cytokinetics' R&D efforts aim to address pharmaceutical needs in cancer, cardiovascular and infectious diseases and feature proprietary Cytometrix(TM) cellular phenotyping technologies designed to industrialize cell biology for increased speed and productivity in drug discovery and development. Cytokinetics and GlaxoSmithKline have entered into a broad strategic collaboration to discover, develop and commercialize novel small molecule therapeutics targeting mitotic kinesins for applications in the treatment of cancer and other diseases. Cytokinetics and GlaxoSmithKline are conducting Phase I studies with the first novel anti-cancer drug candidate emerging from the collaboration and intend to expand clinical development upon completion of these studies. Additional information about Cytokinetics can be obtained at www.cytokinetics.com.

ABOUT ASTRAZENECA

AstraZeneca is a major international healthcare business engaged in the research, development, manufacture and marketing of prescription pharmaceuticals and the supply of healthcare services. It is one of the top five pharmaceutical

companies in the world with healthcare sales of over $17.8 billion and leading positions in sales of gastrointestinal, oncology, cardiovascular, neuroscience and respiratory products. AstraZeneca is listed in the Dow Jones Sustainability Index (Global and European) as well as the FTSE4Good Index. Worldwide, AstraZeneca has six major research and development sites and four discovery sites employing more then 11,000 people in six countries including Canada, France, India, Sweden, United Kingdom and the United States. For more information, please visit www.astrazeneca.com/research.

# # #

Exhibit 10.31

[*] CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 406 OF THE SECURITIES EXCHANGE ACT OF 1933, AS AMENDED.

COLLABORATION AGREEMENT

THIS COLLABORATION AGREEMENT (the "Agreement") is made and entered into as of the last execution date by a Party to this Agreement ("Effective Date") by and between EXELIXIS, INC., a Delaware corporation having a principal place of business at 170 Harbor Way, P.O. Box 511, South San Francisco, California 94083-0511 ("Exelixis"), and CYTOKINETICS, INC., a Delaware corporation having a place of business at 280 East Grand Avenue, South San Francisco, California 94080 ("Cytokinetics"). As used herein, references to Cytokinetics and Exelixis shall also include their respective Affiliates.

BACKGROUND

A. Cytokinetics is engaged in the research, development and commercialization of biotechnology and pharmaceutical products;

B. Exelixis is engaged in the research, development and commercialization of biotechnology, pharmaceutical, agrochemical and agricultural products and has developed novel proprietary methods for the generation of compound libraries;

C. Cytokinetics desires to obtain, and Exelixis desires to supply, certain of such compounds for screening and further evaluation and development by each Party, all on the terms and conditions set forth below.

NOW, THEREFORE, for and in consideration of the covenants, conditions, and undertakings hereinafter set forth, it is agreed by and between the Parties as follows:

1. DEFINITIONS.

1.1 "AFFILIATE" shall mean an entity which controls, is controlled by or is under the common control with a Party. An entity shall be regarded as in control of another entity for purposes of this definition if it owns or controls more than fifty percent (50%) of the shares of the subject entity entitled to vote in the election of directors (or, in the case of an entity that is not a corporation, for the election of the corresponding managing authority).

1.2 "COLLABORATION" shall mean a collaborative relationship between a Party and a third party(ies), the subject of which is the research, discovery, development, manufacturing and/or commercialization of Pharmaceuticals.

1.3 "COMPOUND" shall mean each chemically distinct compound that is synthesized by Exelixis that fulfills fee Quality Control Criteria on a per Plate basis and is delivered to Cytokinetics in accordance with Section 3.4.

1.4 "COMPOUND PATENT" shall mean patents and patent applications covering the composition, use, or method of preparation, of any Compound, filed after the date of synthesis of such Compound hereunder, whether foreign or domestic, all patents arising from such applications, and all patents and patent applications based on, or claiming or corresponding to the priority dates, of

any of the foregoing and any renewals, reissues, extensions, (or other governmental actions that provide exclusive right to the owner thereof in the patented subject matter beyond the original expiration date), substitutions, confirmations, registrations, revalidations, reexaminations, additions, continuations, continued prosecutions, continuations-in-part or divisions of or to any of the foregoing, including, without limitation, supplementary protection certificates or the equivalent thereof.

1.5 "CONFIDENTIAL INFORMATION" shall have the meaning as set forth in Article 5.

1.6 "DESIGN CRITERIA" shall mean the criteria for the design and/or synthesis of the Compounds as established by the JRC pursuant to Section 3.2.

1.7 "DRUG PRODUCT" shall mean a composition of matter used in the treatment, prevention or diagnosis of disease, state or condition, which composition of matter is (i) a Compound, or (ii) derived from the use of a Compound as [*] of such composition of matter.

1.8 "DRUG PRODUCT USE" shall mean use solely to research, develop and/or commercialize a Drug Product, internally or as part of a Collaboration, including the right to have any of the foregoing conducted on a Party's (including Collaboration partners') behalf by a third party.

1.9 "EXELIXIS BACKGROUND TECHNOLOGY" shall mean Exelixis Patent Rights and Exelixis Know-How.

1.9.1 "EXELIXIS PATENT RIGHTS" shall mean (i) patents and patent applications, whether foreign, or domestic, that claim, or are necessary or useful to exploit (A) a Compound or composition-of-matter containing such Compound or a method of use thereof or (B) a process developed prior to the Effective Date and/or under the Research Program, in each case, for the synthesis of Compounds (or analogs or derivatives thereof as provided in Section 4.2.2), and (ii) any divisions, continuations, continuations-in-part, reissues, reexaminations, or extensions to the extent the same have an earliest effective filing date prior to the date described in (i) above, and any (iii) substitutions, confirmations, registrations, or revalidations of any of the foregoing, in each Case, which are owned or controlled by Exelixis (solely or jointly), to the extent Exelixis has the right to license or sublicense the same.

1.9.2 "EXELIXIS KNOW-HOW" shall mean synthetic protocols developed prior to the Effective Date and/or under the Research Program, in each case, which are necessary or useful for the synthesis of the Compounds (or analogs or derivatives thereof as provided in Section 4.2.2), and any technical information, know-how, process, procedure, composition, method, formula, technique, software, design, drawing or data directly relating to the Compounds or necessary or useful for the manufacture, use or exploitation thereof.

1.10 "INTERNAL RESEARCH USE" shall mean use solely for research and/or pharmaceutical lead discovery purposes, internally or as part of a Collaboration, including the right to have any of the foregoing conducted on a Party's (including Collaboration partners') behalf by a

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third party; provided, it is understood and agreed that such use shall exclude the right to develop and/or commercialize the Compounds.

1.11 "PARTY" OR "PARTIES" shall mean individually

Exelixis, Cytokinetics or an Affiliate of the same, and collectively, Exelixis, Cytokinetics and their Affiliates.

1.12 "PLATE" shall have the meaning as set forth in Appendix B.

1.13 "PROGRAM COMPOUND INFORMATION" shall mean data, methods, results, conclusions, information and/or deliverables generated in connection with the design and/or production of the Compounds under the Research Program that are necessary for a person trained in the art of compound synthesis to make the Compounds, including without limitation, Design Criteria, structure, composition, results from Quality Control Criteria analysis of each Compound by [*], methods of synthesis, synthons, and non-commercially available building blocks relating to the Compounds.

1.14 "QUALITY CONTROL CRITERIA" OR "QCC" shall mean the quality control criteria established by the Parties as described in Appendix B, as may be amended by the JRC from time to time.

2. RESEARCH PROGRAM.

2.1 GENERAL. Cytokinetics and Exelixis will conduct a research program on a collaborative basis with the principal goal of producing a high throughput screen library consisting of up to a total of [*] ([*]) Compounds (the "Research Program"). The Research Program shall be conducted in accordance with the Design Criteria as established by the JRC, unless otherwise agreed by the Parties in writing. Each Party agrees to keep the other Party informed of its progress and activities within the Research Program. The scientific scope of the Research Program is further described in Appendix A, attached hereto, as may be amended in writing by the JRC from time to time under Section 3.2.

2.2 LIBRARY. Exelixis shall diligently utilize its combinatorial Chemistry expertise and apply its related technologies, as directed by the JRC, to generate the Compounds on behalf of the Parties. Exelixis shall be responsible for all components of library production, analytics, informatics and formatting.

2.3 NOVEL COMPOUNDS. Exelixis and Cytokinetics shall each use their respective diligent efforts to design Compounds that are not covered by any Exelixis or Cytokinetics intellectual property either (i) existing as of the Effective Date and excluded from the Research Program or (ii) arising outside of the Research Program during the Term (as defined in Section 8.1) that is owned, assigned and/or licensed by Exelixis or Cytokinetics. Without limiting the foregoing, each Party shall use its diligent efforts to not (i) design and/or synthesize any Compounds under this Agreement that have been, or are in the process of being, designed and/or synthesized under any other collaboration(s) it has with a third party, and/or (ii) design and/or synthesize any other compounds under any other collaboration(s) it has with a third party that have been, or are in the process of being, designed and/or synthesized as a Compound under this Agreement.

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2.4 PERSONNEL. In accordance with Section 5.1, Exelixis may disclose to employees and personnel of Exelixis (each, a "Research Program Personnel"), on a need to know basis under circumstances that ensure the confidentiality thereof, information within the Program Compound Information, including any Cytokinetics Confidential Information, Design Criteria, and/or Quality Control Criteria included therein, solely to conduct their designated activities under the Research Program. Exelixis may disclose to third parties who are under contractual relationship with Exelixis to synthesize scaffolds and/or generic structures (each a "Exelixis Third Party Supplier") information

within the Program Compound Information (but excluding Design Criteria, Quality Control Criteria, specific structures or compositions of the Compounds to be produced hereunder, or results from Quality Control Criteria analysis of the Compounds by [*]) to the extent necessary for such Exelixis Third Party Supplier to perform its activities as described hereunder. Any Exelixis Third Party Supplier performing such activities shall be under a confidentiality agreement with Exelixis on terms no less restrictive than the confidentiality provisions of this Agreement.

2.5 NO CONFLICTING ACTIVITIES. During the Term of this Agreement, Exelixis shall not, and shall ensure that the Research Program Personnel shall not, conduct the Research Program in conjunction with any other projects being conducted at, or on behalf of, Exelixis that would (a) conflict with any of the provisions of this Agreement, or (b) preclude Exelixis from complying with the provisions hereof. In addition, Exelixis shall not enter into agreements with Exelixis Third Party Suppliers that conflict with any of the provisions of this Agreement and shall use diligent efforts to ensure compliance with the confidentiality provisions, documentation requirements and intellectual property rights provisions of this Agreement.

2.6 RECORDS. In connection with the performance of the Research Program, Exelixis shall ensure that the Research Program Personnel who perform such services shall maintain laboratory notebooks, records and data ("Records") in accordance with good laboratory and research practices.

2.7 REPORTS. Exelixis shall promptly provide to the JRC documentation as to the Compounds, Program Compound Information, Records, methods, results, conclusions, information and/or other deliverables made, conceived, reduced to practice or otherwise generated in connection with this Agreement ("Reports"). All Reports, Records, including any required laboratory notebooks, records and data pursuant to any research services conducted under the Research Program, shall be [*] by [*] and [*], shall be treated in all respects as [*] Confidential Information of [*] and [*], and [*] shall have the right to disclose, use and exploit such information in conjunction with its disclosure, use and exploitation of the Compounds and Program Compound Information in accordance with Article 4. The JRC shall deliver to Cytokinetics such documentation from time to time and Without request by Cytokinetics.

2.8 FURTHER ASSURANCES. Exelixis shall provide to Cytokinetics documentation reasonably requested by Cytokinetics in order to assist Cytokinetics in determining whether any Compounds, Program Compound Information, Plates, Records, Reports, and/or other deliverables comply fully with this Article 2, Article 3 and Appendices A and B.

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3. RESEARCH PROGRAM OVERVIEW.

3.1 JOINT RESEARCH COMMITTEE. Promptly after the Effective Date, the Paries shall establish a six (6) member committee (the "Joint Research Committee" or "JRC") composed of three (3) representatives from each Party to manage the Research Program. Each representative of the JRC shall have one (1) vote. All decisions of the JRC shall be made by unanimous vote. In the event a unanimous decision can not be reached, then either Party may, by written notice to the other Party, have such issue referred to the [*] of Cytokinetics and Exelixis, [*] and [*], respectively, for resolution by good faith negotiations within thirty (30) days after such notice is received. Minutes of the JRC shall be taken, and shall, at a minimum, record all decisions made. Such minutes shall be approved by both Parties. Each Party may replace its appointed JRC representatives at any time upon written notice to the other Party.

3.2 JRC RESPONSIBILITIES. The JRC shall be responsible

for planning, overseeing, reviewing and coordinating the work being done under the Research Program, including; (i) making decisions regarding the specific details of templates and Compounds for synthesis, including without limitation the Design Criteria for the Compounds; (ii) evaluating progress against timelines established by the JRC for the Research Program, including without limitation the design, quality assurance testing and delivery of Compounds; (iii) establishing and monitoring the schedule for delivery of Compounds; (iv) establishing, maintaining and updating on an ongoing basis a database record of the design of each of the Compounds and each Party's contribution to such design, as further described in Section 4.3.2; (v) recording and approving meeting minutes; and (vi) having the authority to accept or reject any Plates and/or Compound(s) synthesized that failed the Quality Control Criteria established by the Parties as set forth in Appendix B attached hereto, as may be amended in writing by the JRC from time to time.

3.3 MEETINGS. The JRC shall meet quarterly, or as more or less often as otherwise mutually agreed by the Parties, at such locations as the Parties agree. It is understood that such meetings shall be held at least quarterly in person, otherwise by telephone, in writing or by electronic mail. The JRC shall provide monthly written updates to each Party as to the progress of the Research Program.

3.4 DELIVERABLES.

3.4.1 COMPOUNDS. Exelixis shall deliver to Cytokinetics, in accordance with the timelines as established by the JRC, the number of unique Compounds as set forth in Table 1 below, such Compounds to be delivered in Plates in accordance with the provisions of Appendices A and B:

Table 1:

Year	No. Of Compounds
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
Total:	[*]

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The JRC shall use diligent efforts to establish the Design Criteria for the Compounds, and schedule the synthesis thereof, such that the Plates will be delivered to Cytokinetics on a regular basis, with the goal of making such deliveries [*], but in no event [*] (with goal of each such delivery equaling approximately [*] if [*] (and [*] if [*]) of the total amount of Compounds scheduled to be delivered in such year), or, as may be mutually agreed by the Parties, on an alternative schedule.

Exelixis shall deliver Plates to Cytokinetics promptly following the synthesis and quality assurance testing of the Compounds formatted thereon; provided, Exelixis shall use diligent efforts to complete such synthesis, quality assurance testing, and delivery of Plates within [*] ([*]) months after the JRC has established the Design Criteria of the Compounds formatted thereon. In the event Exelixis is unable to maintain such scheduled synthesis, quality assurance testing, and/or deliveries it shall provide Cytokinetics with prompt written notice thereof.

3.4.2 PLATE FORMAT. All Compounds shall be formatted according to Appendix A; provided, that if requested by Cytokinetics, Exelixis may deliver a format that consists of [*] ([*]) compounds per Plate. Other formats proposed by Cytokinetics shall be reviewed and agreed in writing by the JRC. Any additional final custom formatting for Cytokinetics' purpose shall be performed at Cytokinetics.

3.4.3 ACCEPTANCE/REJECTION/RESYNTHESIS/REPLACEMENT OF PLATE(S). All Plates that fulfill the Quality Control Criteria set forth in Appendix B and are delivered to Cytokinetics shall be deemed accepted ("Accepted Plates"). Plates that do not fulfill Quality Control Criteria will be reviewed by the JRC and accepted, rejected or designated for re-synthesis by the JRC. If a Plate is accepted by the JRC, the compounds on such Plate shall be considered to have met the Quality Control Criteria and shall be deemed Compounds. If a Plate is rejected, upon agreement with the JRC, the entire Plate may be resynthesised. The re-synthesis of Plates shall not involve either reformatting of compounds, removal or replacement of compounds. Exelixis shall promptly notify the JRC of the existence of any excess template material. Any excess template material shall [*] the Parties and made available to each of the Parties within a reasonable time after the JRC's receipt of such notification from Exelixis. With respect to Plates, and/or compounds synthesized by Exelixis under the Research Program which are rejected by the JRC, the JRC shall determine whether such Plates and/or compounds, including any related Program Compound Information, shall be destroyed and/or [*] between the Parties. It is understood and agreed, that neither Party shall have the right to disclose, use and/or exploit such rejected Plates and/or compounds, including any related Program Compound Information, except as expressly authorized by the JRC in writing. In the event that the Plate(s) delivered to Cytokinetics contain Compound(s) that do not substantially match with the Program Compound Information supplied by Exelixis, Cytokinetics shall notify Exelixis within [*] thereof, and Exelixis shall promptly replace such Plate(s) with Plate(s) of Compounds substantially matching such Program Compound Information, [*] to Cytokinetics. Notwithstanding the above, Exelixis shall not be responsible for losses resulting from, relating to or arising from (i) acts or omissions or the gross negligence or willful misconduct of Cytokinetics or (ii) damage to Plates or Compounds that occur after delivery to Cytokinetics.

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3.4.4 PROGRAM COMPOUND INFORMATION. At the time of delivery of each Plate, Exelixis shall deliver to Cytokinetics Program Compound Information substantially relating to each Compound contained on such Plate. Exelixis and Cytokinetics will diligently work to define a suitable electronic format, and subject to electronic file format compatibility, Exelixis shall make the Program Compound Information available in electronic files for batch registration as set forth in Appendix B.

3.4.5 OTHER DELIVERABLES. Without limiting the foregoing, Exelixis shall deliver to Cytokinetics the deliverables set forth on Appendix A in accordance with the time schedules set forth therein.

4. OWNERSHIP AND USE OF MATERIALS AND INFORMATION AND LICENSES.

4.1 COMPOUNDS AND [*]. All right, title and interest in and to the Compounds and [*] shall be jointly owned by Cytokinetics and Exelixis, shall be treated in [*] Confidential Information of [*], and each Party shall have the right to disclose, use and exploit such Compounds and [*] in accordance with the rights and licenses granted in this Article 4. Each Party shall have a worldwide, [*], assignable, fully paid-up, royalty free, [*] right, with the right to grant and authorize sublicenses subject to Section 4.1 (i) and (ii) below, under such right, title and interest to disclose, use and exploit the Compounds and [*], including the right to resynthesize such Compounds, for (i) Internal Research Use, and (ii) Drug Product Use, [*]; provided, in each

case, [*] shall have the right to sell, license, sublicense, lend, lease, assign or otherwise transfer the Compounds and/or [*] to any third party, except (a) for contract research, contract development, contract manufacturing or Collaboration purposes or (b) as a Drug Product. The Parties expressly understand and agree that no rights or licenses are granted by [*] to [*] under this Section 4.1, whether by implication, estoppel or otherwise, except as expressly set forth in this Section 4.1. [*] shall have the right to research, develop, make, have made, import, have imported, use, sell and offer for sale analogs and derivatives of the Compounds without limitation, but no rights or licenses are granted, or obligations imposed, [*] pertaining to such analogs and derivatives. Subject to the confidentiality provisions contained herein, [*] shall also have the right to practice and use [*] with such analogs and derivatives.

4.2 LICENSE TO EXELIXIS BACKGROUND TECHNOLOGY.

4.2.1 COMPOUNDS. For each Compound on an Accepted Plate and its corresponding Program Compound Information, Exelixis hereby grants to Cytokinetics a worldwide, nonexclusive, royalty-free, fully-paid-up, [*], sublicenseable subject to Section 4.2.1(i) and (ii) below, right and license, under the Exelixis Background Technology to practice and use all intellectual property rights therein with respect to such Compound and Program Compound Information, including the right to resynthesize such Compounds, for (i) Internal Research Use, and (ii) Drug Product Use; provided, Cytokinetics shall not have the right to license or sublicense the Exelixis Background Technology to any third party, except as it relates to its practice and use of the

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Compounds and/or Program Compound Information (a) for contract research, contract development, contract manufacturing or Collaboration purposes, or (b) as a Drug Product.

4.2.2 ANALOGS AND DERIVATIVES OF COMPOUNDS. In addition, Exelixis hereby grants to Cytokinetics a worldwide, nonexclusive, royalty-free, fully-paid-up, [*], sublicenseable (as provided below), right and license, under the Exelixis Background Technology to practice and use all methods of synthesis developed prior to the Effective Date and/or under the Research Program, in each case, to research, develop, make, have made, import, have imported, use, sell and offer for sale analogs and derivatives of such Compounds and Program Compound Information for the same uses described in Section 4.2.1 (i) and (ii) above, except such uses, including sublicensing rights, shall apply to such analogs and derivatives rather than such Compounds.

4.3 PATENTS AND PATENT APPLICATIONS.

4.3.1 COMPOUND PATENTS. It is anticipated that each Party may independently file Compound Patents claiming Compounds when utility has been established for such Compounds by or on behalf of a Party. Each Party hereby grants to the other Party a worldwide, perpetual, irrevocable, assignable, fully paid-up, royalty-free, non-exclusive license, (with the right to sublicense to third parties pursuant to a Collaboration), under its Compound Patents to practice and use any and all methods of use and compositions of matter claims contained therein obtained on the Compound(s), including the right to resynthesize such Compound(s), in each case, solely for Internal Research Use. Notwithstanding the foregoing, it is understood that a patent claim of a Compound Patent may encompass many compounds in addition to the Compound(s), and that no license or other intellectual property right is granted to the other Party in respect of such additional compounds encompassed by the claims, including any methods of use or compositions of matter thereof, that are not Compound(s).

4.3.2 NOVEL COMPOUNDS: INVENTORSHIP AND COMPETING

FILINGS.

(a) DESIGN CRITERIA. The JRC shall, with respect to each Compound designed and/or synthesized under the Research Program, mutually determine in good faith whether the chemical identity of such Compound was designed solely by Cytokinetics, solely by Exelixis, or jointly. After this mutual determination is made, the JRC shall document the full names of each Party's personnel responsible for the design of such Compound in question in a suitable database or other permanent record to which both Parties and their counsel shall have access. The Parties acknowledge that their determination of design under this Section 4.3.2 will be made in the absence of any knowledge concerning the specific utility of such Compounds. Accordingly, any determination made under this Section 4.3.2 shall be limited to design, alone, and shall not, per se, be construed as a determination of inventorship of such Compounds in question.

(b) INVENTORSHIP AND COMPETING FILINGS.

(i) The timing and strategy of filing Compound Patents shall be at the sole discretion of the Party wishing to file ("the Applicant Party"); provided both Parties agree not to file any Compound Patent claiming one (1) or more Compounds until utility has been in

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good faith reasonably established for such Compounds by or on behalf of such Party. The Applicant Party shall be under no obligation to discuss or disclose any portion of any Compound Patents to the other Party (the "Non-Applicant Party"), except, and only to the extent, as may be required by law to enable the Non-Applicant Party to perform its obligations under this Section 4.3.2. Subject to the foregoing, in no event shall the Applicant Party be required to disclose additional subject matter of the patent claims in such Compound Patents, such as specific uses recited or generic structures that encompass the Compound(s) and/or other compounds claimed. If an employee of the Non-Applicant Party is determined to be an inventor on a claim covering a Compound within a Compound Patent of the Applicant Party, then the Non-Applicant Party hereby assigns and agrees to assign its rights (subject to Section 4.3.2(b)(ii) below), and shall use its best efforts to ensure that such employee inventors assign their rights, of inventorship and ownership in such claim to the extent such claim is specifically directed to such Compound (but not to any other compounds covered in such claim), obtained by virtue of holding said rights under a duty to assign, to the Applicant Party, and to take all reasonable steps necessary, at the Applicant Party's expense, to perfect such assignment. It is understood and agreed that such claims on novel Compounds assigned under this Section 4.3.2 shall be subject to the licenses set forth in Section 4.3.1, including any rights and restrictions contained therein.

(ii) For the avoidance of doubt, it is understood by the Parties that both may file Compound Patents on the same Compound(s) with the same or substantially the same utility, and that under this set of circumstances, the national patent laws in each country where competing filings are made shall be applied in and by the respective patenting authorities to determine questions of priority and patentability and shall determine the ownership of the competing claims. Each Party further agrees to cooperate, and shall use [*] efforts to ensure that its employee inventors cooperate, with the other in making any declarations, oath, assignments and the like necessary to perfect such filings. With respect to any information disclosed by a Party to the other Party pursuant to this Section 4.3.2, notwithstanding anything to the contrary in this Agreement, the receiving Party acknowledges that it shall have no right to use or disclose such information of the disclosing Party without the disclosing Party's prior written consent.

(c) SUBSEQUENT DISCLOSURES. With

respect to any further disclosures that may be required in order to prosecute and maintain claims already assigned under this Section 4.3.2, the assigning Party (the "Assignor") agrees to cooperate with the Party to whom such claims have been assigned (the "Assignee"), and to take all [*] steps necessary to perfect such assignment, including without limitation to use [*] efforts to ensure that each of its employee inventors on such claims cooperates with the Assignee on such further disclosures. On a case-by case basis, the Parties shall discuss and agree upon a mechanism by which such employee inventors of the Assignor on such claims may communicate and cooperate directly with the Assignee, including without limitation, having such employee inventors enter into a separate confidentiality agreement (which covers only such further disclosures) directly with the Assignee.

4.3.3 PROSECUTION OF PATENTS. Each Party shall be solely responsible, at Its own expense and discretion, for prosecuting, maintaining, enforcing and defending patents solely owned by such Party, including without limitation those patent claims assigned to it by the other Party pursuant to Section 4.3.2.

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5. CONFIDENTIAL INFORMATION.

5.1 CONFIDENTIALITY. Each Party agrees to maintain, for a period of ten (10) years from the date of disclosure, as confidential and not use for any purpose or disclose to any third party (except to (i) Exelixis Third Party Suppliers under Section 2.4, (ii) third party contractors from academic and contract research and/or development organizations authorized to conduct activities for a Party (including its Collaboration partners) under Article 4, and (iii) Collaboration partners, in each case, on a need to know basis under circumstances that ensure the confidentiality thereof), all information disclosed by one Party to the other Party under this Agreement, whether in writing or presented, stored or maintained in or by electronic, magnetic or other means, and marked "Confidential" at the time of such disclosure, or if disclosed orally, confirmed in writing and marked as "Confidential" within thirty (30) days following such oral disclosure, including without limitation all such information relating to the business, plans and/or technology of the Parties hereto, including, but not limited to technical information, including inventions, discoveries, methods, plans, processes, specifications, characteristics, raw data, equipment design, know-how, show-how, experience and trade secrets; developmental, marketing, sales, operating and performance information; computer programming techniques; computational chemistry data or processes; information relating to the design of chemical structures and compounds, synthetic protocols, analytical data and procedures, including but not limited to, the Research Program, the Compounds and/or Program Compound Information for drug discovery and/or parallel synthesis directed to therapeutic, diagnostic, prophylactic, prognostic, agrochemical or agricultural applications; and all record-bearing media containing or disclosing the foregoing information and techniques, including written business plans, patents and patent applications, grant applications, notes and memoranda (collectively "Confidential Information").

5.2 EXCLUSIONS. Notwithstanding the foregoing, the Parties' obligations of confidentiality shall not apply to any information contained within the Confidential Information, to the extent such information:

(a) was known to the receiving Party at the time of receiving such information, as evidenced by its contemporaneous written records;

(b) is now, or hereafter becomes, through no act or failure to act on the part of the receiving Party, generally known or available in the public domain;

(c) is the subject of a written permission to disclose provided by the disclosing Party;

(d) is independently developed by or for the receiving Party without access to, or knowledge of, the disclosing Party's Confidential Information as evidenced by its contemporaneous written record; or

(e) is hereafter furnished to the receiving Party by a third party, as a matter of right and without restriction on disclosure.

5.3 RESTRICTIONS ON USE OF CONFIDENTIAL INFORMATION. Notwithstanding the provisions of Section 5.1 above, each Party may disclose the other Party's Confidential Information (i) solely to the extent necessary to exercise the rights granted, and obligations assigned, to it hereunder (provided it uses reasonable efforts to protect such information commensurate with the efforts used to protect its own most sensitive information of a similar nature), (ii) as reasonably necessary to prosecute or defend litigation; in connection with financings, securities offerings, or merger or acquisitions; to provide information to tax or other governmental authorities, (iii) or to the extent such disclosure is reasonably necessary to comply with applicable governmental laws, regulations, or orders (provided that, if a Party is required to make any such disclosure of the other Party's Confidential Information, it will, to the extent it may legally do so, give reasonable advance notice to the latter Party of such disclosure and will use its reasonable efforts to secure confidential treatment of such information prior to its disclosure (whether through protective orders or otherwise)).

5.4 NONDISCLOSURE OF TERMS. Each of the Parties agrees not to disclose to any third party the terms of this Agreement without the prior written consent of the other Party hereto, except to such Party's attorneys, advisors, investors, potential investors or acquirers or partners and others on a need to know basis under circumstances that reasonably ensure the confidentiality thereof, or to the extent required by law.

6. PAYMENTS.

6.1 INITIAL PAYMENT. Cytokinetics shall pay Exelixis an upfront fee of (i) [*] ($[*]) upon signing of the Agreement, and (ii) [*] ($[*]) upon delivery of the first [*] ([*]) Compounds hereunder (collectively, the "Upfront Fee"), which Upfront Fee is intended to [*] the Compounds to be delivered to Cytokinetics during the [*] of the Research Program. Exelixis shall invoice Cytokinetics for the first payment on the Effective Date, and the second payment upon the delivery of the first [*] ([*]) Compounds. Cytokinetics shall pay such invoices [*] of receipt. The [*] shall be [*] of Compounds by Cytokinetics. It is understood and agreed that Exelixis' right to receive and retain such payment is contingent upon Exelixis' obligation to deliver to Cytokinetics that number of Compounds (including their substantially related Program Compound Information) that correspond to such payments.

6.2 PAYMENT SCHEDULE. In consideration of Exelixis providing Compounds to Cytokinetics, Cytokinetics shall pay Exelixis at the rate of [*] U.S. Dollars ($[*]) per Accepted Plate, based upon a rate of [*] U.S Dollars ($[*]) per Compound and [*] ([*]) Compounds per Plate up to a [*] of [*] ([*]) Compounds. All Accepted Plates shall be delivered promptly to Cytokinetics. Exelixis shall invoice Cytokinetics for each Accepted Plate at the rate provided herein within [*] days after the first business day of each calendar quarter.

6.3 DELIVERY TERMS. All deliveries shall be F.O.B. Exelixis shipping dock at the address located at the front of this Agreement, and Cytokinetics shall assume all shipping and

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insurance charges for delivery of such Compounds, which shall be billed directly to Cytokinetics from the carrier, unless otherwise agreed by the Parties.

6.4 PAYMENT TERMS. Subject to the acceptance of Compounds by Cytokinetics as set forth in Section 3.4.3, payments by Cytokinetics to Exelixis shall be due within [*] upon receipt of invoice from Exelixis; provided, it is understood and agreed that Cytokinetics shall have no obligation to make any payments to Exelixis, until such time as the [*] is [*] of the first [*] ([*]) of such Compounds by Cytokinetics.

7. REPRESENTATIONS AND WARRANTIES.

7.1 Each of the Parties hereby represents and warrants, as of the Effective Date, as follows;

(a) It is a corporation or entity duly organized and validly existing under the laws of the state or other jurisdiction of its incorporation or formation.

(b) It has the full corporate power and authority to execute and deliver this Agreement and to consummate the transactions contemplated hereby.

(c) All corporate acts and other proceedings required to be taken to authorize such execution, delivery and consummation have been duly and properly taken and obtained.

(d) This Agreement has been duly executed and is a legal and valid obligation binding upon such Party and enforceable in accordance with its terms.

(e) It has not previously granted, and during the Term (as defined in Section 8.1) will not make any commitment or grant any rights which are in conflict with the rights and licenses granted to other Party herein.

7.2 Each of the Parties hereby agrees to promptly notify the JRC of any change in its business which would be reasonably expected to materially delay or impair its ability to perform its obligations hereunder, so that the JRC may discuss and agree upon a reasonable resolution that addresses any POTENTIAL harm caused to the other Party by such anticipated delay or impairment.

8. TERM; TERMINATION.

8.1 TERM. The term of this Agreement shall commence on the Effective Date and, unless earlier terminated as provided in this Article 8, continue in full force and effect until [*] ([*]) years from the Effective Date, as may be extended by Cytokinetics pursuant to Section 8.3 (the "Term").

8.2 [*] TERMINATION. Commencing upon the [*] of the Effective Date, this Agreement may be terminated [*], with [*], at any time for any reason upon ninety (90) days prior written notice [*]. Without limiting the foregoing [*], upon any such notice of termination under this

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Section 8.2, the Parties shall agree upon and issue a joint press statement [*].

8.3 EXTENSION OF DELIVERY SCHEDULE OF COMPOUNDS. Cytokinetics [*] may extend the overall timeline for design, development and delivery of the Compounds (as summarized in Section 3.4.1-Table 1, for Years [*]), and, concurrent with such extension, extend the Term of this Agreement up to an additional [*], upon ninety (90) days prior written notice to Exelixis. Notwithstanding the above, the number of Compounds to be delivered by Exelixis to Cytokinetics in Year [*] shall be [*] ([*]) Compounds, and upon mutual agreement of the Parties, Cytokinetics may [*] the number of Compounds to be delivered by Exelixis in any given year, but such [*] shall not be [*] ([*]) Compounds per year.

8.4 TERMINATION FOR MATERIAL BREACH. Ether Party may terminate this Agreement for any material breach of this Agreement by the other Party, if such breach is not cured within sixty (60) days after the breaching Party receives written notice of such breach by the nonbreaching Party. Such termination shall be effective upon expiration of such sixty (60) day period.

8.5 EFFECTS OF TERMINATION.

8.5.1 ACCRUED RIGHTS. Termination of this Agreement shall not affect the rights and obligations of the Parties that accrued prior to the effective date of such termination.

8.5.2 CONFIDENTIAL INFORMATION. Upon request, each Party agrees to destroy any copies of Confidential Information of the other Party whenever the work hereunder for which they have been supplied is completed, discontinued or otherwise terminated, other than any Confidential Information contained within the Compounds and/or Program Compound Information, Reports and/or Records. Notwithstanding the above, the Parties expressly agree that one (1) complete set of Confidential Information may be retained solely for evidentiary purposes.

8.5.3 MATERIALS. Upon any termination of this Agreement, other than for uncured failure to make payments due by Cytokinetics in accordance with Sections 6.1, 6.2, and/or 8.5.4, Exelixis shall cooperate fully and timely with Cytokinetics regarding the transfer to Cytokinetics of Cytokinetics' [*] Plates, Compounds (including any partial or completed compounds paid for by Cytokinetics), templates, starting materials, intermediates, synthons and building blocks relating to such Compounds (including any partial or completed compounds paid for by Cytokinetics) and necessary or useful for the synthesis thereof, Program Compound Information, Reports and Records.

8.5.4 COSTS AND PAYMENTS.

(a) Upon notice of any termination of this Agreement prior to expiration of its Term, Exelixis shall stop all further work under the Research Program, and use its best efforts to cancel any cancelable costs. Notwithstanding anything to the contrary in this Agreement, Cytokinetics shall have no obligation to make any payments to Exelixis for any Compounds delivered after notice of such termination that fail to meet the QCC.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

(b) If [*] under Section 8.2, Cytokinetics shall pay Exelixis (i) in [*] for any compounds [*] for synthesis by the JRC [*]; provided, such compounds meet the QCC or are accepted by the JRC as Compounds (or if the IRC is no longer in existence, by mutual agreement of the Parties), and are delivered to Cytokinetics, with their substantially relating Program Compound Information, within [*] ([*]) months after such submission for

synthesis by the JRC, and (ii) [*] of all actual, reasonable, documented, non-cancelable costs incurred by Exelixis prior to the effective date of such termination, to the extent such costs were approved by the JRC (or if incurred after the effective date of such termination, to the extent such costs are [*] and are necessary to synthesize and deliver such Compounds), and subject to Exelixis using [*] to cancel all cancelable costs. Within thirty (30) days of delivery of the last of the Compounds in accordance with this Section 8.5.4(b), Exelixis shall provide Cytokinetics with an invoice setting forth the amount owed for such Compounds ([*]), its actual, reasonable, documented, non-cancelable costs incurred by Exelixis for the conduct of the Research Program prior to the effective date of such termination, and such costs incurred by Exelixis and [*] after the effective date of such termination and prior to the effective date of delivery of the last of the Compounds (and to the extent any amounts remain from any moneys previously paid by Cytokinetics to Exelixis, the outstanding balance in such account).

(c) If Exelixis terminates this Agreement pursuant to Section 8.4 due to Cytokinetics' material breach, Cytokinetics agrees to pay Exelixis (i) in [*] for any compounds that meet the QCC or are accepted by JRC as Compounds, and are delivered to Cytokinetics, with their substantially relating Program Compound Information, prior to the effective date of termination, and (ii) [*] of all actual, reasonable, documented, non-cancelable costs incurred by Exelixis prior to the effective date of termination, to the extent such costs were approved by the JRC and subject to Exelixis [*] to cancel all cancelable costs. Within thirty (30) days of any such termination, Exelixis shall provide Cytokinetics with an invoice setting forth the amount owed for such Compounds ([*]), and its actual, reasonable, documented, non-cancelable costs incurred by Exelixis for the conduct of the Research Program prior to the effective date of such termination (and to the extent any amounts remain from any moneys previously paid by Cytokinetics to Exelixis, the outstanding balance in such account).

(d) If Cytokinetics terminates this Agreement pursuant to Section 8.4 due to Exelixis' material breach, without limiting any remedies Cytokinetics may have at law, Cytokinetics agrees to pay Exelixis in [*] for any compounds that meet the QCC or are accepted by JRC as Compounds, and are delivered to Cytokinetics, with their substantially relating Program Compound Information, prior to the effective date of termination. Within thirty (30) days of any such termination, Exelixis shall provide Cytokinetics with an invoice setting forth the amount owed for such Compounds ([*]) (and to the extent any amounts remain from any moneys previously paid by Cytokinetics to Exelixis, the outstanding balance in such account).

(e) Subject to delivery to Cytokinetics of the materials and information listed in Section 8.5.3, and verification by Cytokinetics of Exelixis' invoice, within

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thirty (30) days after receipt of adequate documentation therefor, the Parties shall settle, in accordance with this Section 8.5.4, any such outstanding amounts. If there is a balance owed to Exelixis, Cytokinetics shall make a payment to Exelixis (and/or Exelixis may retain from moneys previously paid by Cytokinetics) for such Compounds and, except for termination of this Agreement due to Exelixis' material breach, such Exelixis' costs. Following settlement of such outstanding amounts, if there is a balance remaining in Exelixis' accounts from any moneys previously paid by Cytokinetics to Exelixis, Exelixis shall refund such amounts to Cytokinetics.

8.6. SURVIVAL. The provisions of Articles 4, 5, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21 and Sections 6.1, 8.5 and 8.6 shall survive termination or expiration of this Agreement for any reason. Upon

any termination of this Agreement, neither Party shall have any ongoing obligation to the other Party, except as expressly provided herein.

9. PUBLICITY. The Parties shall issue a mutually agreed-upon joint press release to announce the signing of this Agreement; thereafter, Exelixis and Cytokinetics may each disclose to third parties the information contained in such press release without the need for further approval by the other.

10. PUBLIC PRESENTATIONS. The Parties acknowledge that they, independently or jointly, may wish to make a Public Presentation of information and data generated in the course of the Research Program. The term "Public Presentation" shall mean the submission for publication of any manuscript, abstract or other form of public presentation, including, without limitation, posters, doctoral theses, slides and texts of oral presentations, and texts of any transmission through any electronic media, e.g. any computer access system such as the Internet, World wide Web, etc.

The Party wishing to make a Public Presentation (the "Publishing Party") shall provide to the other Party (the "Non-Publishing Party") a complete copy of its proposed publication at least thirty (30) days prior to the date of its intended submission for publication, and agrees, upon request, not to submit any such abstract or manuscript for publication until (i) the Non-Publishing Party is given a reasonable period of time to secure patent protection for any material in such proposed publication which it believes to be patentable, and (ii) to remove, at the Non-Publishing Party's reasonable request, any Confidential Information of the Non-Publishing Party and/or any [*] contained within such proposed publication. Both Parties understand that a reasonable commercial strategy may require delay of publication of information contained within a Public Presentation for filing of patent applications. Neither Party shall have the right to publish or present Confidential Information of the other Party or any [*] in any Public Presentation without the other Party's prior written consent. Subject to the foregoing, at the Non-Publishing Party's reasonable request, the Publishing Party shall remove the [*] and Non-Publishing Party's Confidential Information from such proposed publication. The Publishing Party agrees to provide the Non-Publishing Party with a final copy of the proposed publication prior to its disclosure.

Nothing contained in this Article 10 is intended to grant any right or license to either Party to commercialize or file patent applications on any information of the Publishing Party that is included in such Public Presentation. Any disputes between the Parties regarding delaying a Public Presentation to permit the filing of a patent application shall be referred to the JRC.

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11. INDEMNIFICATION.

11.1 INDEMNIFICATION. Each Party agrees to be responsible and assume liability for its own acts, gross negligence, and/or willful misconduct, including those of its employees, Affiliates, independent contractors and other agents, to the full extent permitted by law, and shall indemnify and hold the other Party, and its employees, Affiliates, directors and agents, harmless from and against any third party claims or liabilities (including, without limitation, reasonable attorney's fees) arising from any such acts or gross negligence, and/or willful misconduct; provided, however, that the Party entitled to indemnification pursuant to this Article 10 shall cooperate with the indemnifying Party in defending against any such claims or liabilities and shall not settle any such claim without the prior consent of the indemnifying Party, which consent shall not be unreasonably withheld.

11.2 PROCEDURES. A Party (the "Indemnitee") that intends

to claim indemnification under this Article 11 shall promptly notify the other Party (the "Indemnitor") in writing of any claim, complaint, suit, proceeding or cause of action in respect of which the Indemnitee intends to claim such indemnification (for purposes of this Section 11.2, each a "Claim"), and the Indemnitor shall have sole control of the defense and/or settlement thereof; provided that the Indemnitee shall have the right to participate, at its own expense, with counsel of its own choosing in the defense and/or settlement of such Claim. The indemnification under this Article 11 shall not apply to amounts paid with respect to settlement of any Claim if such settlement is effected without the consent of the Indemnitor, which consent will not be unreasonably withheld or delayed. The failure to deliver written notice to the Indemnitor within a reasonable period of time after the commencement of any such claim, suit or proceeding, if prejudicial to its ability to defend such action, shall relieve such Indemnitor of any liability to the Indemnitee under this Article 11, but the omission to so deliver written notice to the Indemnitor shall not relieve the Indemnitor of any liability to any Indemnitee otherwise than under this Article 11. Without limiting the foregoing, the Indemnitee shall keep the Indemnitor fully informed of the progress of any Claim for which it intends to claim, indemnification under this Article 11.

12. FORCE MAJEURE. Except with respect to the payment of monies due hereunder and the responsibility to maintain the confidentiality of Confidential Information and the obligations of non-disclosure and non-use thereof, neither Party shall be considered in default in the performance of any obligation hereunder to the extent that the performance of such obligation is prevented or delayed by fire, flood, explosion, strike, war, insurrection, embargo, government requirement, civil or military authority, natural disaster or any other event, occurrence or condition which is not caused, in whole or in part, by that Party and which is beyond the reasonable control of that Party.

13. DISCLAIMER.

13.1 EACH PARTY ACKNOWLEDGES THAT THE COMPOUNDS AND PROGRAM COMPOUND INFORMATION WHICH WILL BE PRODUCED PURSUANT TO THE RESEARCH PROGRAM ARE EXPERIMENTAL AND THEIR PROPERTIES ARE NOT COMPLETELY KNOWN. EACH PARTY SHALL BEAR FULL RESPONSIBILITY FOR SAFE HANDLING, STORAGE, TRANSFER AND USE OF ANY COMPOUNDS AND PROGRAM COMPOUND INFORMATION IN ITS POSSESSION.

13.2 EACH PARTY AGREES TO ACT IN ACCORDANCE WITH ALL IMPORT/EXPORT LAWS AND ENVIRONMENTAL AND DRUG LAWS AND REGULATIONS AND ALL OTHER LAWS AND REGULATIONS APPLICABLE TO THE USE AND POSSESSION OF THE COMPOUNDS AND PROGRAM COMPOUND INFORMATION.

13.3 EXCEPT AS EXPRESSLY SET FORTH HEREIN, COMPOUNDS AND PROGRAM COMPOUND INFORMATION PROVIDED HEREUNDER. ARE PROVIDED "AS IS" AND WITHOUT WARRANTY OR CONDITIONS OF ANY KIND, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE.

13.4 WITHOUT LIMITING THE PARTIES' RESPECTIVE INDEMNIFICATION OBLIGATIONS UNDER ARTICLE 11, IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES INCURRED BY THE OTHER PARTY, INCLUDING LOST PROFITS OR ANTICIPATED REVENUES OR PROFITS RELATING TO THE SAME), ARISING FROM OR RELATING TO THIS AGREEMENT OR THE SUBJECT MATTER HEREOF, WHETHER BASED IN CONTRACT, TORT (INCLUDING WITHOUT LIMITATION NEGLIGENCE) OR OTHERWISE, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THESE LIMITATIONS SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OR ANY LIMITED REMEDY PROVIDED HEREIN.

14. GOVERNING LAW. The validity and interpretation of this Agreement and the legal relations of the Parties under this Agreement shall be governed by the laws of the State of California, without reference to its conflict of laws principles.

15. ASSIGNMENT. This Agreement shall not be assignable by either Party without the prior written consent of the other Party; except that Exelixis or Cytokinetics may assign, at their discretion, the Agreement without such consent (i) to an Affiliate, or (ii) to a third party pursuant to merger, acquisition, consolidation, reorganization or sale of all or substantially all of its assets to which this Agreement relates; provided that, such assignee or transferee has agreed in writing to be bound by the terms and conditions of this Agreement. Any attempted assignment contrary to this Article 15 shall be void. Subject to the foregoing, this Agreement shall be binding upon and inure to the benefit of the Parties, their successors and assigns.

16. HEADINGS. The headings for each article and section in this Agreement have been inserted for convenience of reference only and are not intended to limit or expand on the meaning of the language contained in the particular article or section.

17. INDEPENDENT CONTRACTOR. For the purposes of this Agreement and all services to be provided hereunder, each Party shall be, and shall be deemed to be, an independent contractor and not an agent or employee of the other Party. Neither Party shall have authority to make any statements, representations or commitments of any kind, or take action, which shall be binding on the other Party, except as may be explicitly provided for herein or authorized by the other Party in writing.

18. SEVERABILITY. If any one or more provisions of this Agreement shall be found to be illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby, provided the surviving agreement materially comports with the parties' original intent.

19. WAIVER. Waiver or forbearance by either Party or the failure by either Party to claim a breach of any provision of this Agreement or exercise any right or remedy provided by this Agreement or applicable law, shall not be deemed to constitute a waiver with respect to any subsequent breach of any provision hereof.

20. NOTICES. Any notice, payment or report required or permitted to be given under this Agreement shall be deemed to have been sufficiently given if mailed by first class certified or registered airmail addressed to the Parties as follows:

Exelixis - U.S. Postal Service:
Exelixis, Inc.
170 Harbor Way
P.O. Box 511
South San Francisco, California 94083-0511 USA
Attention: Vice President, Corporate Technology Development

Exelixis - Other Mail Delivery Carrier:
Exelixis,Inc.
169 Harbor Way
South San Francisco, California 94080 USA
Attention: Vice President, Corporate Technology Development

Cytokinetics:
Cytokinetics, Inc.
280 East Grand Avenue
South San Francisco, California 94080
Attention: Senior Vice President, Finance and Corporate Development
Chief Financial Officer

21. ENTIRE AGREEMENT. This instrument contains the entire agreement between the Parties hereto as to the subject matter hereof. The

provisions of the Confidential Disclosure Agreement, entered into on February 12, 2001, is expressly superseded and terminated hereby, and any confidential or proprietary information disclosed thereunder shall be subject to the terms of this Agreement. No verbal agreement or representation between the Parties hereto either before, during or after execution of this Agreement shall affect or modify any of the terms or obligations herein. No amendment or modification of any term, provisions or conditions of this Agreement shall be binding or enforceable unless in writing and signed by each of the Parties. This Agreement may be executed in counterparts, each of which taken together shall be considered part of the entire document.

The undersigned represent that they are duly authorized to execute this Agreement.

CYTOKINETICS, INC.	EXELIXIS, INC.
BY: /s/ Robert I. Blum	By: /s/ Glen Y. Sato
Name: Robert I. Blum	Name: Glen Y. Sato
Title: _____	Title: CFO and VP, Legal Affairs
Date: 12/28/01	Date: 12/28/01

APPENDIX A

RESEARCH PROGRAM

1) LIBRARY SCOPE & SIZE;

A library of [*] compounds based on [*] will be designed jointly by Cytokinetics and Exelixis and subsequently synthesized by Exelixis.

2) LIBRARY CONSTRUCTION:

[*] compounds will be derived from [*] libraries of [*] compounds. Each of the [*] libraries will be derived from [*] of [*] and a [*] of [*] per [*] (each, a "Library"). The details and identity of [*] component for the [*] will be determined by the JRC. Approximately [*] of each compound will be prepared and quality controlled by [*]. [*]. For [*] compounds per plate, a [*] of [*] per Plate will be transferred to Cytokinetics (that is, [*]). Following delivery of the [*] Plate within a Library, Exelixis shall deliver to Cytokinetics a [*] of [*] of each [*] used in such Library. Cytokinetics shall own all right, title and interest in such delivered [*], and shall have the right to use and exploit such [*] without limitation or obligation to account to Exelixis to the extent allowed under Section 4 of the Agreement.

3) EXELIXIS COMPOUND PLATE FORMAT:

Exelixis formats screening plates in a [*] plate format with [*], i.e., a total of [*] compounds per plate.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

APPENDIX B

QUALITY CONTROL CRITERIA

[*]

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[*]

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Exhibit 10.32

[*] CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 406 OF THE SECURITIES EXCHANGE ACT OF 1933, AS AMENDED.

280 East Grand Avenue
South San Francisco, CA 94080
Tel (650) 624-3000 Fax (650) 624-3010

[CYTOKINETICS LOGO]

April 10, 2003

Exelixis, Inc.
169 Harbor Way
South San Francisco, CA 94080
Attention: Pamela A. Simonton, J.D., L.L.M., Vice President, Corporate Technology Development

RE: FIRST LETTER AMENDMENT UNDER THAT CERTAIN COLLABORATION AGREEMENT BY AND BETWEEN EXELIXIS, INC. ("EXELIXIS") AND CYTOKINETICS, INC. ("CYTOKINETICS") OF EVEN DATE DECEMBER 28, 2001 (THE "AGREEMENT")

Dear Ms. Simonton:

This letter serves to amend the Agreement between Exelixis, Inc. and Cytokinetics, Inc. dated December 28, 2001 (the "Agreement") (the "Letter Amendment"). Subject to execution of this Letter Amendment, CK shall [*] described in the notice from Robert Blum to Pamela Simonton of January 16, 2003.

Now therefore, Exelixis and Cytokinetics agree, effective as of March 31, 2003 (the "Letter Amendment Effective Date"), us follows:

1. All capitalized terms not defined herein shall have the meaning ascribed to them in the Agreement.

2. Appendix B is hereby amended in its entirety to read as attached hereto.

3. Notwithstanding Section 3.2 and Section 3.4.1, it is understood and agreed that [*] of Exelixis and [*] of Cytokinetics will establish mutually agreed upon delivery dates for Compounds for the remainder of the 2003 calendar year. Such delivery dates will be subject to periodic reviews and updates as required.

4. Section 3.4.3 is hereby amended to add the following at the end of the paragraph:

Notwithstanding the above, [*].

BIN 1	BIN 2	BIN 3

[*]

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5. It is understood and agreed that there will be continued [*] and [*]. Changes or additions to the [*] will be brought before the JRC for ratification.

6. In accordance with Section 3.4.3, Cytokinetics will notify Exelixis of any Plates that fail to meet the purity standards of the Quality Control Criteria described on Exhibit B within [*] following delivery thereof to Cytokinetics. In addition, it is agreed and understood that Cytokinetics will provide Exelixis with [*] for such Plates after providing such notification.

7. Section 3.4.4 is hereby amended in its entirety to read as follows:

> 3.4.4 PROGRAM COMPOUND INFORMATION. [*] the scheduled delivery date for each shipment of Plates of Compounds, Exelixis will deliver to Cytokinetics a [*] and [*] for the analytical data for such Compounds. A JRC subcommittee will meet [*] the delivery date for such Plates to discuss the library production and the analytical data. At the time of delivery of each Plate, Exelixis shall deliver to Cytokinetics all Program Compound Information substantially relating to each Compound contained on such Plate. Exelixis and Cytokinetics will diligently work to define a suitable electronic format, and subject to electronic file format compatibility, Exelixis shall make the Program Compound Information available in electronic files for batch registration as set forth in Appendix B.

All other terms of the Agreement remain the same.

Please sign below to indicate your acceptance of the revised terms set forth above and return this letter to me. A duplicate original is enclosed for your records.

If you have any questions, please do not hesitate to contact me at (650) 624-3002 or Elisabeth Schnleders at (650) 624-3083.

With regards,

Sincerely,

/s/ Robert I. Blum

Robert I. Blum
Senior Vice President, Finance and Corporate Development
Chief Financial Officer

Agreed and accepted;

EXELIXIS, INC.

/s/ [ILLEGIBLE]

Name: [ILLEGIBLE]

Title: [ILLEGIBLE]

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APPENDIX B

QUALITY CONTROL CRITERIA

[*]

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[*]

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Exhibit 10.33

PROMISSORY NOTE

South San Francisco, California $100,000

July 12, 2002

FOR VALUE RECEIVED, the undersigned Robert I. Blum ("BORROWER") hereby promises to pay to the order of Cytokinetics, Incorporated, a Delaware corporation ("LENDER" also known as "Cytokinetics") at 280 East Grand Avenue, South San Francisco, California (or at such other address as the holder of this NOTE may designate by notice to BORROWER), in lawful money of the United States of America, the sum of one hundred thousand Dollars ($100,000), as set forth below.

1. Definitions.

a. "INTEREST RATE" shall mean the PRIME RATE plus 1%, which sum is equal to 5.75% per annum.

b. "SHARES" shall mean 166,667 shares of Common Stock of the LENDER presently owned by BORROWER that will secure payment hereunder.

c. "DUE DATE" shall mean the earliest of any of the following:

(i) the sale, conveyance, alienation, assignment, pledge, grant of any lien or other transfer by BORROWER of any of the SHARES without the prior written consent of the LENDER;

(ii) ninety (90) days after TERMINATION OF EMPLOYMENT;

(iii) eighteen (18) months after a LIQUIDITY EVENT; or

(iv) such earlier date as may be required by LENDER upon acceleration of the DUE DATE in accordance with Section 5 of this NOTE.

d. "TERMINATION OF EMPLOYMENT" shall mean the voluntary or involuntary termination of BORROWER's employment relationship with LENDER for any reason or no reason, with or without cause.

e. "LIQUIDITY EVENT" shall mean (i) an acquisition of the LENDER in which the stockholders of the LENDER receive cash or publicly traded securities in exchange for their shares of stock of the LENDER, or (ii) the first public offering by the LENDER of shares of its capital stock pursuant to a registration statement on Form S-1 under the Securities Act of 1933.

f. "PRIME RATE" shall mean an interest rate equal to the interest rate announced by the Federal Reserve Bank of San Francisco as its prime rate as of the date of this NOTE.

2. Payments.

a. Commencing on the date hereof, interest on the unpaid principal balance of this NOTE shall accrue at the INTEREST RATE.

b. The NOTE shall be repayable according to the following schedule:

(i) On the first anniversary of this NOTE, all interest accrued under this NOTE to such date;

(ii) On the second anniversary of this NOTE, all interest accrued under this NOTE to such date;

(iii) 20% of the original principal balance of this NOTE on the third anniversary of this NOTE, plus all interest accrued under this NOTE to such date;

(iv) 20% of the original principal balance of this NOTE on the fourth anniversary of this NOTE, plus all interest accrued under this NOTE to such date;

(v) 20% of the original principal balance of this NOTE on the fifth anniversary of this NOTE, plus all interest accrued under this NOTE to such date; and

(vi) 40% of the original principal balance of this NOTE on the sixth anniversary of this NOTE, plus all interest accrued under this NOTE to such date.

Notwithstanding the foregoing, all principal and accrued interest on the principal balance of this NOTE shall be due and payable on the DUE DATE.

g. All payments shall be applied first against accrued interest, and secondly against principal.

3. Prepayment.

BORROWER may prepay all or any portion of the principal on this NOTE and the accrued interest without penalty or acceleration of the DUE DATE of this NOTE.

4. Security/Insurance.

This NOTE is secured by a pledge of the SHARES under the terms of a SECURITY AGREEMENT, substantially in the form attached hereto as Exhibit A (the "SECURITY AGREEMENT") and dated as of even date hereof, and is subject to all of the provisions thereof.

5. Acceleration of DUE DATE.

The entire unpaid principal of this NOTE and accrued interest thereon shall at the election of the LENDER, become immediately due and payable upon the occurrence of any of the following, irrespective of the DUE DATE as otherwise defined in this NOTE:

a. BORROWER fails to make any payment when the same is due;

b. BORROWER fails to perform or observe any of the

covenants or obligations of BORROWER set forth in this NOTE or contained in the SECURITY AGREEMENT for a period of ten (10) days after written notice thereof from LENDER;

c. A bankruptcy or insolvency proceeding is instituted by or against BORROWER, or if a receiver is appointed for the property of BORROWER; or

d. BORROWER makes an assignment for the benefit of creditors.

6. Collection Costs Borne by BORROWER.

In the event of any failure on the part of BORROWER to make any payment when the same is due, LENDER shall be entitled to recover from BORROWER all costs of effecting collection of the same, including reasonable attorneys' fees. Unpaid principal and interest subject to collection shall bear interest at the maximum rate allowed under California law for nonexempt lenders.

7. Certification of BORROWER.

So long as the NOTE shall remain outstanding, BORROWER shall not sell, assign, transfer, convey, pledge, or grant a lien against the SHARES. In the event of any involuntary (by act of law or otherwise) sale, conveyance, pledge, lien, alienation or other transfer by BORROWER of any of the SHARES, BORROWER shall immediately notify LENDER.

BORROWER also warrants that, upon the written request of LENDER, BORROWER shall deliver to LENDER a written confirmation that a sale, conveyance, pledge, lien, alienation or other transfer of the SHARES has not occurred.

8. Full Recourse.

The holder of this NOTE shall have full recourse against the BORROWER, and shall not be required to proceed against the collateral securing the NOTE pursuant to the SECURITY AGREEMENT in the event of the occurrence of an event set forth in Section 5 of this NOTE.

9. No Right to Continued Employment.

Nothing contained herein shall be construed to confer on BORROWER any right to continued employment with the LENDER.

10. Governing Law.

This NOTE shall be governed by and construed in accordance with the internal laws of the State of California. BORROWER consents to personal jurisdiction in any court in San Mateo County, California.

11. Successors.

This NOTE shall be binding upon and shall inure to the benefit of the parties hereto and their respective representatives, heirs, administrators, successors and assigns.

Effective as of the date set forth above.

BORROWER:

_____

Name:_____

ACCEPTED AND ACKNOWLEDGED:

LENDER:

CYTOKINETICS, INCORPORATED, a Delaware corporation

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

EXHIBIT A

SECURITY AGREEMENT

This Security Agreement is made as of July 12, 2002 between Cytokinetics, Incorporated, a Delaware corporation ("Pledgee"), Robert I. Blum ("Pledgor"), and Secretary of Pledgee, as the agent of Pledgee and holder of the Collateral, as defined below, pledged hereunder ("Pledgeholder").

Recitals

Pursuant to the Promissory Note dated July 12, 2002 (the "Note"), between Pledgor and Pledgee, the Pledgee has loaned to Pledgor the principal amount of $100,000 (the "Loan").

NOW, THEREFORE, it is agreed as follows:

1. Creation and Description of Security Interest. In consideration of the Loan, Pledgor, pursuant to the California Uniform Commercial Code, hereby pledges 166,667 shares of Common Stock of the Pledgee presently owned by Pledgor which shall to the maximum extent permitted consist at all times of vested shares (i.e. shares that are not subject to Pledgee's repurchase option) (herein sometimes referred to as the "Collateral") and herewith delivers any certificates currently held by Pledgor representing such Collateral to Pledgeholder, who shall hold said certificates on behalf of Pledgee subject to the terms and conditions of this Security Agreement.

The Collateral (together with an executed blank stock assignment or assignments in substantially the form attached hereto as Annex 1) shall be held by Pledgeholder on behalf of Pledgee as security for the repayment of the Note, and any extensions or renewals thereof, to be executed by Pledgor pursuant to the terms of the Note, and Pledgeholder shall not sell, assign, transfer, pledge, encumber or dispose of such Collateral except in accordance with the provisions of this Security Agreement.

2. Pledgor's Representations and Covenants. To induce Pledgee to enter into this Security Agreement, Pledgor represents and covenants to Pledgee, its successors and assigns, as follows:

(a) Payment of Indebtedness. Pledgor will pay the principal sum of the Note secured hereby, and interest thereon, at the time and in the manner provided in the Note.

(b) Encumbrances. The Collateral is free of all other adverse claims, encumbrances, defenses and liens (other than restrictions on transfer imposed by applicable securities laws), except for (i) Pledgee's rights to repurchase the Collateral in connection with the termination of Pledgor's service relationship with the Pledgee, (ii) the pledge of the Collateral

hereunder as security for payment of the Note, and (iii) the pledge of the Collateral as security for payment of other obligations between the Pledgor and Pledgee, and Pledgor will not further encumber the Collateral without the prior written consent of Pledgee.

3. Voting Rights. During the term of this pledge and so long as all payments of principal and interest are made as they become due under the terms of the Note, Pledgor shall have the right to vote all of the Collateral pledged hereunder.

4. Stock Adjustments. In the event that during the term of the pledge any stock dividend, reclassification, readjustment or other changes are declared or made in the capital structure of Pledgee, all new, substituted and additional shares or other securities issued by reason of any such change shall be delivered to and held by the Pledgee under the terms of this Security Agreement in the same manner as the Collateral originally pledged hereunder. In the event of substitution of such securities, Pledgor, Pledgee and Pledgeholder shall cooperate and execute such documents as are reasonable so as to provide for the substitution of such Collateral and, upon such substitution, references to "Collateral" in this Security Agreement shall include the substituted investment property of Pledgor as a result thereof.

5. Options and Rights. In the event that, during the term of this pledge, subscription options or other rights or options shall be issued in connection with the pledged Collateral, such rights and options shall be the property of Pledgor and, if exercised by Pledgor, all new stock or other securities so acquired by Pledgor as it relates to the pledged Collateral then held by Pledgeholder shall be immediately delivered to Pledgeholder, to be held under the terms of this Security Agreement in the same manner as the Collateral pledged.

6. Default. Pledgor shall be deemed to be in default of the Note and of this Security Agreement in the event:

(a) Payment of principal or interest on the Note becomes delinquent; or

(b) Pledgor fails to perform or observe any of the covenants or obligations of Pledgor set forth in the Note or contained in this Security Agreement for a period of 10 days after written notice thereof from Pledgee; or

(c) A bankruptcy or insolvency proceeding is instituted by or against Pledgor, or if a receiver is appointed for the property of Pledgor; or

(d) Pledgor makes an assignment for the benefit of creditors.

In the case of a default, as set forth above, Pledgee shall have the right to accelerate payment of the Note, and Pledgee shall thereafter be entitled to pursue its remedies under the California Uniform Commercial Code.

7. Withdrawal or Substitution of Collateral. Pledgor shall not sell, assign, transfer, withdraw, pledge, substitute or otherwise dispose of all or any part of the Collateral without the prior written consent of Pledgee.

8. Term. The within pledge of Collateral shall continue until the payment of all indebtedness secured hereby.

9. Insolvency. Pledgor agrees that if a bankruptcy or insolvency proceeding is instituted by or against Pledgor, or if a receiver is appointed for the property of Pledgor, or if Pledgor makes an assignment for the benefit of creditors, the entire amount unpaid on the Note shall become immediately due and payable, and Pledgee may proceed as provided in the case of default.

10. Pledgeholder Liability.

(a) Pledgeholder shall not be liable to any party for any of its acts, or omissions to act, as Pledgeholder unless Pledgeholder is proved to have acted in bad faith. Any act done or omitted pursuant to the advice of legal counsel, other than an act or omission involving gross or willful negligence, shall be deemed to be done or omitted in good faith.

(b) Pledgeholder shall be entitled to employ such legal counsel and other experts as Pledgeholder may deem necessary to properly advise Pledgeholder in connection with its obligations hereunder, and Pledgeholder may rely upon the advice of such counsel. Such counsel's reasonable fees and costs shall be borne 50% by Pledgor and 50% by Pledgee.

(c) It is understood and agreed that should any dispute arise with respect to the delivery and/or ownership or right of possession of the securities held by Pledgeholder hereunder, Pledgeholder is authorized and directed to retain in Pledgeholder's possession as agent of Pledgee without liability to anyone all or any part of said securities until such disputes shall have been settled either by mutual written agreement of the parties concerned or by a final order, decree or judgment of arbitration or of a court of competent jurisdiction after the time for appeal has expired and no appeal has been perfected, but Pledgeholder shall be under no duty whatsoever to institute or defend any such proceedings.

In addition, upon any dispute Pledgeholder should be entitled to engage legal counsel, one-half of whose fees and expenses shall be borne by Pledgor and one-half by Pledgee.

11. Invalidity of Particular Provisions. Pledgor and Pledgee agree that the enforceability or invalidity of any provision or provisions of this Security Agreement shall not render any other provision or provisions herein contained unenforceable or invalid.

12. Successors or Assigns. Pledgor and Pledgee agree that all of the terms of this Security Agreement shall be binding on their respective successors and assigns, and that the term "Pledgor" and the term "Pledgee" as used herein shall be deemed to include, for all purposes, the respective designees, successors, assigns, heirs, executors and administrators.

13. Governing Law. This Security Agreement shall be interpreted and governed under the laws of the State of California.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

"PLEDGOR" By: _____

Name: _____

_____
Address

_____

"PLEDGEE" Cytokinetics, Incorporated,
a Delaware corporation

By: _____

Title: _____

"PLEDGEHOLDER" _____

Secretary of Pledgee

ANNEX 1

STOCK POWER AND ASSIGNMENT

SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED and pursuant to that certain Security Agreement dated as of _____, 200__ the undersigned hereby sells, assigns and transfers unto _____, shares of the Common Stock of Cytokinetics, Incorporated, a Delaware corporation (the "Company"), standing in the undersigned's name on the books of the Company represented by Certificate No. _____ delivered herewith, and does hereby irrevocably constitute the Secretary of the Company as attorney-in-fact, with full power of substitution, to transfer said stock on the books of the Company.

Dated: _____, 20____

_____
(Signature)

_____
(Print Name)

THIS STOCK POWER MAY ONLY BE UTILIZED IN CONNECTION WITH THE PROVISIONS OF THE SECURITY AGREEMENT DATED AS OF _____, 200__, BY AND BETWEEN THE SIGNATORY HERETO AND THE COMPANY.

Exhibit 10.34

PROMISSORY NOTE

South San Francisco, California $37,400.00

May 20, 2002

FOR VALUE RECEIVED, the undersigned David Morgans, ("EMPLOYEE") and Sandra Morgans, (Collectively, "BORROWER") hereby promises to pay to the order of Cytokinetics, Inc., a Delaware corporation ("LENDER" also known as "Cytokinetics") at 280 East Grand Avenue, South San Francisco, California (or at such other address as the holder of this NOTE may designate by notice to BORROWER), in lawful money of the United States of America, the sum of Thirty-Seven Thousand Four Hundred Dollars ($37,400.00), as set forth below.

1. Definitions.

a. "CODE" shall mean the Internal Revenue Code of 1986, as amended.

b. "APPLICABLE FEDERAL RATE" shall mean the monthly long-term applicable Federal or other rate (as defined in the CODE) as of the date of the occurrence of this NOTE.

d. "DUE DATE" shall mean the earliest of any of the following:

(i) thirty (30) days after TERMINATION OF EMPLOYMENT of EMPLOYEE; or

(ii) May 20, 2011, provided that if BORROWER is unable to repay this NOTE at such time, LENDER in its discretion shall consider extending the DUE DATE.

e. "TERMINATION OF EMPLOYMENT" shall mean the voluntary or involuntary termination of EMPLOYEE'S employment relationship with LENDER for any reason or no reason, with or without cause.

2. Payments.

a. Interest on the unpaid principal balance of this NOTE shall accrue at the APPLICABLE FEDERAL RATE, compounded monthly, commencing on the date hereof.

b. No payment of principal or interest shall be due and payable until the DUE DATE, at which time all accrued interest on the principal balance of this NOTE shall be due and payable.

c. All payments shall be applied first against accrued interest, and secondly against principal.

3. Prepayment.

BORROWER may prepay all or any portion of this NOTE and the accrued interest without penalty or acceleration of the DUE DATE of this NOTE.

4. Unsecured Note.

This NOTE is unsecured.

5. Collection Costs Borne by BORROWER.

In the event of any failure on the part of BORROWER to make any payment when the same is due, LENDER shall be entitled to recover from BORROWER all costs of effecting collection of the same, including reasonable attorneys' fees. Unpaid principal and interest subject to collection shall bear interest at the maximum rate allowed under California law for nonexempt lenders.

7. Certification of BORROWER.

BORROWER warrants that BORROWER, shall immediately notify LENDER if any of the following occurs:

a. the sale, conveyance, alienation or other transfer by BORROWER of the PRINCIPAL RESIDENCE, whether voluntary or involuntary, by act of law or otherwise; or

b. any other change that removes BORROWER as a holder of record of title to the PRINCIPAL RESIDENCE; or

c. any default under any deed of trust that is senior to the Deed of Trust securing BORROWER'S obligation to LENDER hereunder.

BORROWER also warrants that, upon the written request, of LENDER, BORROWER shall deliver to LENDER a written confirmation that none of the events listed immediately above has occurred. BORROWER further certifies that BORROWER reasonably expects to itemize deductions for each year during which this loan is outstanding.

6. Termination.

The obligations of BORROWER hereunder shall terminate upon the indefeasible payment in full by BORROWER of all of its obligations evidenced by this NOTE.

7. Forgiveness of NOTE and/or Accrued Interest.

a. In the event EMPLOYEE remains an employee in good standing of LENDER, as determined in LENDER'S sole discretion, on the fifth (5th) anniversary date of this NOTE, one quarter (1/4) of the then outstanding principal balance of this NOTE shall be forgiven on such date. Thereafter, in the event BORROWER remains an employee in good standing of LENDER, as determined in LENDER'S sole discretion, on each succeeding anniversary date of this NOTE through and including the eighth (8th) anniversary date hereof, one quarter (1/4) of the then outstanding principal balance of this NOTE shall be forgiven on each such date.

b. In the event EMPLOYEE remains an employee in good standing of LENDER, as determined in LENDER'S sole discretion, on each anniversary date of this NOTE, all accrued interest shall be forgiven on such date.

c. In the event that EMPLOYEE dies or becomes permanently disabled any outstanding principal balance of this NOTE and all accrued interest shall be forgiven on such date.

d. In the event of any such forgiveness of principal and/or interest, BORROWER shall be responsible for all taxes related thereto.

8. Governing Law.

This NOTE shall be governed by and construed in accordance with the internal laws of the State of California. BORROWER consents to personal jurisdiction in any court in San Mateo County, California.

9. Successors.

This NOTE shall be binding upon and share inure to the benefit of the parties hereto and their respective representatives, heirs, administrators, successors and assigns.

Effective as of the date set forth above.

BORROWER:

/s/ David Morgans

David Morgans, Ph.D.

/s/ Sandra Morgans

Sandra Morgans

ACCEPTED AND ACKNOWLEDGED:

LENDER:

CYTOKINETICS, INC., a Delaware corporation

By: /s/ James Sabry

James Sabry, Ph.D., M.D. President & CEO

Name:

Title:

Exhibit 10.35

PROMISSORY NOTE

South San Francisco, California $150,000.00

October 18,2000

FOR VALUE RECEIVED, the undersigned David Morgans ("EMPLOYEE") and Sandra Morgans, (collectively, "BORROWER") hereby promises to pay to the order of Cytokinetics, Inc., a Delaware corporation ("LENDER" also known as "Cytokinetics") at 280 East Grand Avenue, South San Francisco, California (or at such other address as the holder of this NOTE may designate by notice to BORROWER), in lawful money of the United States of America, the sum of One Hundred Fifty Thousand Dollars ($150,000.00), as set forth below.

1. Definitions.

a. "CODE" shall mean the Internal Revenue Code of 1986, as amended.

b. "APPLICABLE FEDERAL RATE" shall mean the monthly long-term applicable Federal or other rate (as defined in the CODE) as of the date of the occurrence of this NOTE.

c. "DUE DATE" shall mean the earliest of any of the following:

(i) thirty (30) days after TERMINATION OF EMPLOYMENT of EMPLOYEE; or

(ii) October 18, 2009, provided that if BORROWER is unable to repay this NOTE at such time, LENDER in its discretion shall consider extending the DUE DATE.

d. "TERMINATION OF EMPLOYMENT" shall mean the voluntary or involuntary termination of EMPLOYEE'S employment relationship with LENDER for any reason or no reason, with or without cause.

2. Payments.

a. Interest on the unpaid principal balance of this NOTE shall accrue at the APPLICABLE FEDERAL RATE, compounded monthly, commencing on the date hereof.

b. No payment of principal or interest shall be due and payable until the DUE DATE, at which time all accrued interest on the principal balance of this NOTE shall be due and payable.

c. All payments shall be applied first against accrued interest, and secondly against principal.

3. Prepayment.

BORROWER may prepay all or any portion of this NOTE and the accrued interest without penalty or acceleration of the DUE DATE of this NOTE.

4. Unsecured Note.

This NOTE is unsecured.

5. Collection Costs Borne by BORROWER.

In the event of any failure on the part of BORROWER to make any payment when the same is due, LENDER shall be entitled to recover from BORROWER all costs of effecting collection of the same, including reasonable attorneys' fees. Unpaid principal and interest subject to collection shall bear interest at the maximum rate allowed under California law for nonexempt lenders.

6. Termination.

The obligations of BORROWER hereunder shall terminate upon the indefeasible payment in full by BORROWER of all of its obligations evidenced by this NOTE.

7. Forgiveness of NOTE and/or Accrued Interest.

a. In the event EMPLOYEE remains an employee in good standing of LENDER, as determined in LENDER'S sole discretion, on the fifth (5th) anniversary date of this NOTE, one quarter (1/4) of the then outstanding principal balance of this NOTE shall be forgiven on such date. Thereafter, in the event EMPLOYEE remains an employee in good standing of LENDER, as determined in LENDER'S sole discretion, on each succeeding anniversary date of this NOTE through and including the eighth (8th) anniversary date hereof, one quarter (1/4) of the then outstanding principal balance of this NOTE shall be forgiven on each such date.

b. In the event EMPLOYEE remains an employee in good standing of LENDER, as determined in LENDER'S sole discretion, on each anniversary date of this NOTE, all accrued interest shall be forgiven on such date.

c. In the event that EMPLOYEE dies or becomes permanently disabled, any outstanding principal balance of this NOTE and all accrued interest shall be forgiven on such date.

d. In the event of any such forgiveness of principal and/or interest, BORROWER shall be responsible for all taxes related thereto.

8. Governing Law.

This NOTE shall be governed by and construed in accordance with the internal laws of the State of California. BORROWER consents to personal jurisdiction in any court in San Mateo County, California.

9. Successors.

This NOTE shall be binding upon and share inure to the benefit of the parties hereto and their respective representatives, heirs, administrators, successors and assigns.

Effective as of the date set forth above.

BORROWER:

/s/ David Morgans

David Morgans, Ph.D.

/s/ Sandra Morgans

Sandra Morgans, Ph.D.

ACCEPTED AND ACKNOWLEDGED:

LENDER:

CYTOKINETICS, INC., a Delaware corporation

By: /s/ Lauren L. Stevens

Name: Lauren L. Stevens, Ph.D.
Title: Vice President, Intellectual Property & Legal Affairs [SEAL]

By: /s/ Don Oestreicher

Name: Don Oestreicher
Title: Vice President, Informatics Engineering

Exhibit 10.36

PROMISSORY NOTE

South San Francisco, California $82,600

July 12, 2002

FOR VALUE RECEIVED, the undersigned David Morgans ("BORROWER") hereby promises to pay to the order of Cytokinetics, Incorporated, a Delaware corporation ("LENDER" also known as "Cytokinetics") at 280 East Grand Avenue, South San Francisco, California (or at such other address as the holder of this NOTE may designate by notice to BORROWER), in lawful money of the United States of America, the sum of Eighty Two Thousand Six Hundred Dollars ($82,600), as set forth below.

1. Definitions.

a. "INTEREST RATE" shall mean the PRIME RATE plus 1%, which sum is equal to 5.75% per annum.

b. "SHARES" shall mean the options to purchase 137,666 shares of Common Stock of the LENDER presently held by BORROWER and the shares of Common Stock of the LENDER to be acquired by BORROWER upon exercise of such options that will secure payment hereunder.

c. "DUE DATE" shall mean the earliest of any of the following:

(i) the sale, conveyance, alienation, assignment, pledge, grant of any lien or other transfer by BORROWER of any of the SHARES without the prior written consent of the LENDER;

(ii) ninety (90) days after TERMINATION OF EMPLOYMENT;

(iii) eighteen (18) months after a LIQUIDITY EVENT; or

(iv) such earlier date as may be required by LENDER upon acceleration of the DUE DATE in accordance with Section 5 of this NOTE.

d. "TERMINATION OF EMPLOYMENT" shall mean the voluntary or involuntary termination of BORROWER's employment relationship with LENDER for any reason or no reason, with or without cause.

e. "LIQUIDITY EVENT" shall mean (i) an acquisition of the LENDER in which the stockholders of the LENDER receive cash or publicly traded securities in exchange for their shares of stock of the LENDER, or (ii) the

first public offering by the LENDER of shares of its capital stock pursuant to a registration statement on Form S-1 under the Securities Act of 1933.

f. "PRIME RATE" shall mean an interest rate equal to the interest rate announced by the Federal Reserve Bank of San Francisco as its prime rate as of the date of

this NOTE.

2. Payments.

a. Commencing on the date hereof, interest on the unpaid principal balance of this NOTE shall accrue at the INTEREST RATE.

b. The NOTE shall be repayable according to the following schedule:

(i) On the first anniversary of this NOTE, all interest accrued under this NOTE to such date;

(ii) On the second anniversary of this NOTE, all interest accrued under this NOTE to such date;

(iii) 20% of the original principal balance of this NOTE on the third anniversary of this NOTE, plus all interest accrued under this NOTE to such date;

(iv) 20% of the original principal balance of this NOTE on the fourth anniversary of this NOTE, plus all interest accrued under this NOTE to such date;

(v) 20% of the original principal balance of this NOTE on the fifth anniversary of this NOTE, plus all interest accrued under this NOTE to such date; and

(vi) 40% of the original principal balance of this NOTE on the sixth anniversary of this NOTE, plus all interest accrued under this NOTE to such date.

Notwithstanding the foregoing, all principal and accrued interest on the principal balance of this NOTE shall be due and payable on the DUE DATE.

g. All payments shall be applied first against accrued interest, and secondly against principal.

3. Prepayment.

BORROWER may prepay all or any portion of the principal on this NOTE and the accrued interest without penalty or acceleration of the DUE DATE of this NOTE.

4. Security/Insurance.

This NOTE is secured by a pledge of the SHARES under the terms of a SECURITY AGREEMENT, substantially in the form attached hereto as Exhibit A (the "SECURITY AGREEMENT") and dated as of even date hereof, and is subject to all of the provisions thereof.

5. Acceleration of DUE DATE.

The entire unpaid principal of this NOTE and accrued interest thereon shall at the election of the LENDER, become immediately due and payable upon the occurrence of any of the following, irrespective of the DUE DATE as otherwise defined in this NOTE:

a. BORROWER fails to make any payment when the same is

due;

b. BORROWER fails to perform or observe any of the covenants or obligations of BORROWER set forth in this NOTE or contained in the SECURITY AGREEMENT for a period of ten (10) days after written notice thereof from LENDER;

c. A bankruptcy or insolvency proceeding is instituted by or against BORROWER, or if a receiver is appointed for the property of BORROWER; or

d. BORROWER makes an assignment for the benefit of creditors.

6. Collection Costs Borne by BORROWER.

In the event of any failure on the part of BORROWER to make any payment when the same is due, LENDER shall be entitled to recover from BORROWER all costs of effecting collection of the same, including reasonable attorneys' fees. Unpaid principal and interest subject to collection shall bear interest at the maximum rate allowed under California law for nonexempt lenders.

7. Certification of BORROWER.

So long as the NOTE shall remain outstanding, BORROWER shall not sell, assign, transfer, convey, pledge, or grant a lien against the SHARES. In the event of any involuntary (by act of law or otherwise) sale, conveyance, pledge, lien, alienation or other transfer by BORROWER of any of the SHARES, BORROWER shall immediately notify LENDER.

BORROWER also warrants that, upon the written request of LENDER, BORROWER shall deliver to LENDER a written confirmation that a sale, conveyance, pledge, lien, alienation or other transfer of the SHARES has not occurred.

8. Full Recourse.

The holder of this NOTE shall have full recourse against the BORROWER, and shall not be required to proceed against the collateral securing the NOTE pursuant to the SECURITY AGREEMENT in the event of the occurrence of an event set forth in Section 5 of this NOTE.

9. No Right to Continued Employment.

Nothing contained herein shall be construed to confer on BORROWER any right to continued employment with the LENDER.

10. Governing Law.

This NOTE shall be governed by and construed in accordance with the internal laws of the State of California. BORROWER consents to personal jurisdiction in any court in San Mateo County, California.

11. Successors.

This NOTE shall be binding upon and shall inure to the benefit of the parties hereto and their respective representatives, heirs, administrators, successors and assigns.

Effective as of the date set forth above.

BORROWER:

/s/ David Morgans

Name: David Morgans Jr.

ACCEPTED AND ACKNOWLEDGED:

LENDER:

CYTOKINETICS, INCORPORATED, a Delaware corporation

By: /s/ James Sabry

Name:

Title:

By: /s/ Robert Blum

Name: Robert I. Blum

Title: SVP Corp Dev & Finance & CFO

Exhibit 10.37

PROMISSORY NOTE

South San Francisco, California $215,000

July 12, 2002

FOR VALUE RECEIVED, the undersigned Jay Trautman ("BORROWER") hereby promises to pay to the order of Cytokinetics, Incorporated, a Delaware corporation ("LENDER" also known as "Cytokinetics") at 280 East Grand Avenue, South San Francisco, California (or at such other address as the holder of this NOTE may designate by notice to BORROWER), in lawful money of the United States of America, the sum of Two Hundred Fifteen Thousand Dollars ($215,000), as set forth below.

1. Definitions.

a. "INTEREST RATE" shall mean the PRIME RATE plus 1%, which sum is equal to 5.75% per annum.

b. "SHARES" shall mean the options to purchase 125,000 shares of Common Stock of the LENDER presently held by BORROWER and the shares of Common Stock of the LENDER to be acquired by BORROWER upon exercise of such options that will secure payment hereunder.

c. "DUE DATE" shall mean the earliest of any of the following:

(i) the sale, conveyance, alienation, assignment, pledge, grant of any lien or other transfer by BORROWER of any of the SHARES without the prior written consent of the LENDER;

(ii) ninety (90) days after TERMINATION OF EMPLOYMENT;

(iii) eighteen (18) months after a LIQUIDITY EVENT; or

(iv) such earlier date as may be required by LENDER upon acceleration of the DUE DATE in accordance with Section 5 of this NOTE.

d. "TERMINATION OF EMPLOYMENT" shall mean the voluntary or involuntary termination of BORROWER's employment relationship with LENDER for any reason or no reason, with or without cause.

e. "LIQUIDITY EVENT" shall mean (i) an acquisition of the LENDER in which the stockholders of the LENDER receive cash or publicly traded securities in exchange for their shares of stock of the LENDER, or (ii) the

first public offering by the LENDER of shares of its capital stock pursuant to a registration statement on Form S-1 under the Securities Act of 1933.

f. "PRIME RATE" shall mean an interest rate equal to the interest rate announced by the Federal Reserve Bank of San Francisco as its prime rate as of the date of

this NOTE.

2. Payments.

a. Commencing on the date hereof, interest on the unpaid principal balance of this NOTE shall accrue at the INTEREST RATE.

b. The NOTE shall be repayable according to the following schedule:

(i) On the first anniversary of this NOTE, all interest accrued under this NOTE to such date;

(ii) On the second anniversary of this NOTE, all interest accrued under this NOTE to such date;

(iii) 20% of the original principal balance of this NOTE on the third anniversary of this NOTE, plus all interest accrued under this NOTE to such date;

(iv) 20% of the original principal balance of this NOTE on the fourth anniversary of this NOTE, plus all interest accrued under this NOTE to such date;

(v) 20% of the original principal balance of this NOTE on the fifth anniversary of this NOTE, plus all interest accrued under this NOTE to such date; and

(vi) 40% of the original principal balance of this NOTE on the sixth anniversary of this NOTE, plus all interest accrued under this NOTE to such date.

Notwithstanding the foregoing, all principal and accrued interest on the principal balance of this NOTE shall be due and payable on the DUE DATE.

g. All payments shall be applied first against accrued interest, and secondly against principal.

3. Prepayment.

BORROWER may prepay all or any portion of the principal on this NOTE and the accrued interest without penalty or acceleration of the DUE DATE of this NOTE.

4. Security/Insurance.

This NOTE is secured by a pledge of the SHARES under the terms of a SECURITY AGREEMENT, substantially in the form attached hereto as Exhibit A (the "SECURITY AGREEMENT") and dated as of even date hereof, and is subject to all of the provisions thereof.

5. Acceleration of DUE DATE.

The entire unpaid principal of this NOTE and accrued interest thereon shall at the election of the LENDER, become immediately due and payable upon the occurrence of any of the following, irrespective of the DUE DATE as otherwise defined in this NOTE:

a. BORROWER fails to make any payment when the same is

due;

b. BORROWER fails to perform or observe any of the covenants or obligations of BORROWER set forth in this NOTE or contained in the SECURITY AGREEMENT for a period of ten (10) days after written notice thereof from LENDER;

c. A bankruptcy or insolvency proceeding is instituted by or against BORROWER, or if a receiver is appointed for the property of BORROWER; or

d. BORROWER makes an assignment for the benefit of creditors.

6. Collection Costs Borne by BORROWER.

In the event of any failure on the part of BORROWER to make any payment when the same is due, LENDER shall be entitled to recover from BORROWER all costs of effecting collection of the same, including reasonable attorneys' fees. Unpaid principal and interest subject to collection shall bear interest at the maximum rate allowed under California law for nonexempt lenders.

7. Certification of BORROWER.

So long as the NOTE shall remain outstanding, BORROWER shall not sell, assign, transfer, convey, pledge, or grant a lien against the SHARES. In the event of any involuntary (by act of law or otherwise) sale, conveyance, pledge, lien, alienation or other transfer by BORROWER of any of the SHARES, BORROWER shall immediately notify LENDER.

BORROWER also warrants that, upon the written request of LENDER, BORROWER shall deliver to LENDER a written confirmation that a sale, conveyance, pledge, lien, alienation or other transfer of the SHARES has not occurred.

8. Full Recourse.

The holder of this NOTE shall have full recourse against the BORROWER, and shall not be required to proceed against the collateral securing the NOTE pursuant to the SECURITY AGREEMENT in the event of the occurrence of an event set forth in Section 5 of this NOTE.

9. No Right to Continued Employment.

Nothing contained herein shall be construed to confer on BORROWER any right to continued employment with the LENDER.

10. Governing Law.

This NOTE shall be governed by and construed in accordance with the internal laws of the State of California. BORROWER consents to personal jurisdiction in any court in San Mateo County, California.

11. Successors.

This NOTE shall be binding upon and shall inure to the benefit of the parties hereto and their respective representatives, heirs, administrators, successors and assigns.

Effective as of the date set forth above.

BORROWER:

/s/ Jay Trautman

Name: Jay Trautman

ACCEPTED AND ACKNOWLEDGED:

LENDER:

CYTOKINETICS, INCORPORATED, a Delaware corporation

By: /s/ James Sabry

Name:

Title:

By: /s/ Robert Blum

Name: Robert I. Blum

Title: SVP. Corp. Dev. & Finance & CFO

EXHIBIT A

SECURITY AGREEMENT

This Security Agreement is made as of July 12, 2002 between Cytokinetics, Incorporated, a Delaware corporation ("Pledgee"), Jay Trautman ("Pledgor"), and Secretary of Pledgee, as the agent of Pledgee and holder of the Collateral, as defined below, pledged hereunder ("Pledgeholder").

Recitals

Pursuant to the Promissory Note dated July 12, 2002 (the "Note"), between Pledgor and Pledgee, the Pledgee has loaned to Pledgor the principal amount of $215,000 (the "Loan").

NOW, THEREFORE, it is agreed as follows:

1. Creation and Description of Security Interest. In consideration of the Loan, Pledgor, pursuant to the California Uniform Commercial Code, hereby pledges 125,000 shares of Common Stock of the Pledgee presently owned by Pledgor which shall to the maximum extent permitted consist at all times of vested shares (i.e. shares that are not subject to Pledgee's repurchase option) (herein sometimes referred to as the "Collateral") and herewith delivers any certificates currently held by Pledgor representing such Collateral to Pledgeholder, who shall hold said certificates on behalf of Pledgee subject to the terms and conditions of this Security Agreement.

The Collateral (together with an executed blank stock assignment or assignments in substantially the form attached hereto as Annex 1) shall be held by Pledgeholder on behalf of Pledgee as security for the repayment of the Note, and any extensions or renewals thereof, to be executed by Pledgor pursuant to the terms of the Note, and Pledgeholder shall not sell, assign, transfer, pledge, encumber or dispose of such Collateral except in accordance with the provisions of this Security Agreement.

2. Pledgor's Representations and Covenants. To induce Pledgee to enter into this Security Agreement, Pledgor represents and covenants to Pledgee, its successors and assigns, as follows:

(a) Payment of Indebtedness. Pledgor will pay the principal sum of the Note secured hereby, and interest thereon, at the time and in the manner provided in the Note.

(b) Encumbrances. The Collateral is free of all other adverse claims, encumbrances, defenses and liens (other than restrictions on transfer imposed by applicable securities laws), except for (i) Pledgee's rights to repurchase the Collateral in connection with the termination of Pledgor's service relationship with the Pledgee, (ii) the pledge of the Collateral hereunder as security for payment of the Note, and (iii) the pledge of the Collateral as security for payment of other obligations between the Pledgor and Pledgee, and Pledgor will not further encumber the Collateral without the prior written consent of Pledgee.

3. Voting Rights. During the term of this pledge and so long as all payments of principal and interest are made as they become due under the terms of the Note, Pledgor shall have the right to vote all of the Collateral pledged hereunder.

4. Stock Adjustments. In the event that during the term of the pledge any stock dividend, reclassification, readjustment or other changes are declared or made in the capital structure of Pledgee, all new, substituted and additional shares or other securities issued by reason of any such change shall be delivered to and held by the Pledgee under the terms of this Security Agreement in the same manner as the Collateral originally pledged hereunder. In the event of substitution of such securities, Pledgor, Pledgee and Pledgeholder shall cooperate and execute such documents as are reasonable so as to provide for the substitution of such Collateral and, upon such substitution, references to "Collateral" in this Security Agreement shall include the substituted investment property of Pledgor as a result thereof.

5. Options and Rights. In the event that, during the term of this pledge, subscription options or other rights or options shall be issued in connection with the pledged Collateral, such rights and options shall be the property of Pledgor and, if exercised by Pledgor, all new stock or other securities so acquired by Pledgor as it relates to the pledged Collateral then held by Pledgeholder shall be immediately delivered to Pledgeholder, to be held under the terms of this Security Agreement in the same manner as the Collateral pledged.

6. Default. Pledgor shall be deemed to be in default of the Note and of this Security Agreement in the event:

(a) Payment of principal or interest on the Note becomes delinquent; or

(b) Pledgor fails to perform or observe any of the covenants or obligations of Pledgor set forth in the Note or contained in this Security Agreement for a period of 10 days after written notice thereof from Pledgee; or

(c) A bankruptcy or insolvency proceeding is instituted by or against Pledgor, or if a receiver is appointed for the property of Pledgor; or

(d) Pledgor makes an assignment for the benefit of creditors.

In the case of a default, as set forth above, Pledgee shall have the right to accelerate payment of the Note, and Pledgee shall thereafter be entitled to pursue its remedies under the California Uniform Commercial Code.

7. Withdrawal or Substitution of Collateral. Pledgor shall not sell, assign, transfer, withdraw, pledge, substitute or otherwise dispose of all or

any part of the Collateral without the prior written consent of Pledgee.

8. Term. The within pledge of Collateral shall continue until the payment of all indebtedness secured hereby.

9. Insolvency. Pledgor agrees that if a bankruptcy or insolvency proceeding is instituted by or against Pledgor, or if a receiver is appointed for the property of Pledgor, or if Pledgor makes an assignment for the benefit of creditors, the entire amount unpaid on the Note shall become immediately due and payable, and Pledgee may proceed as provided in the case of default.

10. Pledgeholder Liability.

(a) Pledgeholder shall not be liable to any party for any of its acts, or omissions to act, as Pledgeholder unless Pledgeholder is proved to have acted in bad faith. Any act done or omitted pursuant to the advice of legal counsel, other than an act or omission involving gross or willful negligence, shall be deemed to be done or omitted in good faith.

(b) Pledgeholder shall be entitled to employ such legal counsel and other experts as Pledgeholder may deem necessary to properly advise Pledgeholder in connection with its obligations hereunder, and Pledgeholder may rely upon the advice of such counsel. Such counsel's reasonable fees and costs shall be borne 50% by Pledgor and 50% by Pledgee.

(c) It is understood and agreed that should any dispute arise with respect to the delivery and/or ownership or right of possession of the securities held by Pledgeholder hereunder, Pledgeholder is authorized and directed to retain in Pledgeholder's possession as agent of Pledgee without liability to anyone all or any part of said securities until such disputes shall have been settled either by mutual written agreement of the parties concerned or by a final order, decree or judgment of arbitration or of a court of competent jurisdiction after the time for appeal has expired and no appeal has been perfected, but Pledgeholder shall be under no duty whatsoever to institute or defend any such proceedings.

In addition, upon any dispute Pledgeholder should be entitled to engage legal counsel, one-half of whose fees and expenses shall be borne by Pledgor and one-half by Pledgee.

11. Invalidity of Particular Provisions. Pledgor and Pledgee agree that the enforceability or invalidity of any provision or provisions of this Security Agreement shall not render any other provision or provisions herein contained unenforceable or invalid.

12. Successors or Assigns. Pledgor and Pledgee agree that all of the terms of this Security Agreement shall be binding on their respective successors and assigns, and that the term "Pledgor" and the term "Pledgee" as used herein shall be deemed to include, for all purposes, the respective designees, successors, assigns, heirs, executors and administrators.

13. Governing Law. This Security Agreement shall be interpreted and governed under the laws of the State of California.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

"PLEDGOR" By: _____
Name: _____

_____
Address

"PLEDGEE"

Cytokinetics, Incorporated,
a Delaware corporation

By: _____

Title: _____

"PLEDGEHOLDER"

_____
Secretary of Pledgee

ANNEX 1

STOCK POWER AND ASSIGNMENT

SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED and pursuant to that certain Security Agreement dated as of _____, 200__ the undersigned hereby sells, assigns and transfers unto _____, shares of the Common Stock of Cytokinetics, Incorporated, a Delaware corporation (the "Company"), standing in the undersigned's name on the books of the Company represented by Certificate No. _____ delivered herewith, and does hereby irrevocably constitute the Secretary of the Company as attorney-in-fact, with full power of substitution, to transfer said stock on the books of the Company.

Dated: _____, 20____

_____
(Signature)

_____
(Print Name)

THIS STOCK POWER MAY ONLY BE UTILIZED IN CONNECTION WITH THE PROVISIONS OF THE SECURITY AGREEMENT DATED AS OF _____, 200__, BY AND BETWEEN THE SIGNATORY HERETO AND THE COMPANY.

Exhibit 10.38

PROMISSORY NOTE

South San Francisco, California $200,000.00
November 12, 2001

FOR VALUE RECEIVED, the undersigned James H. Sabry ("EMPLOYEE") and Sandra J. Spence, (collectively, "BORROWER") hereby promises to pay to the order of Cytokinetics, Inc., a Delaware corporation ("LENDER" also known as "Cytokinetics") at 280 East Grand Avenue, South San Francisco, California (or at such other address as the holder of this NOTE may designate by notice to BORROWER), in lawful money of the United States of America, the sum of Two Hundred Thousand Dollars ($200,000.00), as set forth below:

1. Definitions.

   a. "CODE" shall mean the Internal Revenue Code of 1986, as amended.

   b. "APPLICABLE FEDERAL RATE" shall mean the monthly long-term applicable Federal or other rate (as defined in the CODE) as the date of the occurrence of this NOTE.

   c. "DUE DATE" shall mean the earliest of any of the following:

      i. thirty (30) days after TERMINATION OF EMPLOYMENT of EMPLOYEE; or

      ii. November 12, 2010, provided that if BORROWER is unable to repay this NOTE at such time, LENDER in its discretion shall consider extending the DUE DATE.

   d. "TERMINATION OF EMPLOYMENT" shall mean the voluntary or involuntary termination of EMPLOYEE'S employment relationship with LENDER for any reason or no reason, with or without cause.

2. Payments.

   a. Interest on the unpaid principal balance of this NOTE shall accrue at the APPLICABLE FEDERAL RATE, compounded monthly, commencing on the date hereof.

   b. No payment of principal or interest shall be due and payable until the DUE DATE, at which time all accrued interest on the principal balance of this NOTE shall be due and payable.

   c. All payments shall be applied first against accrued interest, and secondly against principal.

3. Prepayment.

   BORROWER may prepay all or any portion of this NOTE and the accrued interest without penalty or acceleration of the DUE DATE of this NOTE.

4. Unsecured Note.

   This NOTE is unsecured.

5. Collection Costs Borne by BORROWER.

In the event of any failure on the part of BORROWER to make any payment when the same is due, LENDER shall be entitled to recover from BORROWER all costs of effecting collection of the same, including reasonable attorneys' fees. Unpaid principal and interest subject to collection shall bear interest at the maximum rate allowed under California law for nonexempt lenders.

6. Termination.

The obligation of BORROWER hereunder shall terminate upon the indefeasible payment in full by BORROWER of all of its obligations evidenced by this NOTE.

7. Forgiveness of NOTE and/or Accrued Interest.

a. In the event EMPLOYEE remains an employee in good standing of LENDER, as determined in LENDER'S sole discretion, on the fifth (5th) anniversary date of this NOTE, one quarter (1/4) of the then outstanding principal balance of this NOTE shall be forgiven on such date. Thereafter, in the event EMPLOYEE remains an employee in good standing of LENDER, as determined in LENDER'S sole discretion, on each succeeding anniversary date of this NOTE through and including the eighth (8th) anniversary date hereof, one quarter (1/4) of the then outstanding principal balance of this NOTE shall be forgiven on each such date.

b. In the event EMPLOYEE remains an employee in good standing of LENDER, as determined in LENDER'S sole discretion, on each anniversary date of this NOTE, all accrued interest shall be forgiven on such date.

c. In the event that EMPLOYEE dies or becomes permanently disabled, any outstanding principal balance of this NOTE and all accrued interest shall be forgiven on such date.

d. In the event of any such forgiveness of principal and/or interest, BORROWER shall be responsible for all taxes related thereto.

8. Governing Law.

This NOTE shall be governed by and construed in accordance with the internal laws of the State of California. BORROWER consents to personal jurisdiction in any court in San Mateo County, California.

9. Successors.

This NOTE shall be binding upon and share inure to the benefit of the parties hereto and their respective representatives, heirs, administrators, successors and assigns.

Effective as of the date set forth above.

BORROWER:

/s/ James H. Sabry

James H. Sabry

/s/ Sandra J. Spence

Sandra J. Spence

ACCEPTED AND ACKNOWLEDGED:

LENDER

CYTOKINETICS, INC., a Delaware corporation

By: /s/ Robert I. Blum

Name: Robert I. Blum
Title: Senior Vice President,
Corporate Development & Finance,
Chief Financial Officer

EXHIBIT C

LOAN

The Company is offering you a loan for up to $200,000. The loan will be interest free and will also be forgivable over a nine-year period of time during your employment with the Company.

At the end of the fifth year one-quarter of the loan is forgiven; at the end of the sixth, seventh and eight year one-quarter of the loan on each of those years will be forgiven. Should you decide to voluntarily terminate your position with the Company prior to the end of your fifth year of employment at Cytokinetics, you will be responsible for reimbursing the Company for your full loan upon departure from the Company. If you voluntarily leave anytime during the sixth, seventh or eighth year, the amount of the loan minus the forgiven portion is due to the Company upon your departure.

You are required to pay imputed taxes as regular income on the interest rate (set at Prime Rate) of the interest "free" loan. At the end of the fifth, sixth, seventh and eighth year you will be required to pay taxes only on the forgivable portion of the loan (one-quarter of the loan each year).

Exhibit 10.39

CYTOKINETICS, INCORPORATED

CASH BONUS AGREEMENT

This Cash Bonus Agreement (the "Agreement") is entered into effective as of SEPTEMBER 1, 2002(the "Effective Date"), by and between Cytokinetics, Incorporated, a Delaware corporation (the "Company"), and Robert I. Blum (the "Employee").

1. Cash Bonus. The Company hereby agrees to pay Employee cash bonuses in the amount of: (i) $7,000, less applicable withholding taxes, on June 30, 2003, (ii) $7,000, less applicable withholding taxes, on June 30, 2004, (iii) $27,000, less applicable withholding taxes, on June 30, 2005, (iv) $25,000 less applicable withholding taxes, on June 30, 2006, (v) $24,000, less applicable withholding taxes, on June 30, 2007 and (vi) $3,000, less applicable withholding taxes, on June 30, 2008 (collectively, the "Cash Bonus"), provided that Employee remains an employee in good standing of the Company, as determined in the Company's sole discretion, on each such date.

2. No Right To Continued Employment. Nothing contained herein shall be construed to confer on Employee any right to continued employment with the Company. The Company or Employee may terminate the employment relationship of Employee with the Company for any reason or no reason, with or without cause, and after such termination Employee shall not have any right to receive any further payments of Cash Bonus remaining unpaid at such time.

3. Taxes. Employee shall be responsible for all taxes related to the Cash Bonus.

4. Integration; No Assignment. This Agreement represents the entire agreement and understanding between the parties as to the Cash Bonus, and supersedes all prior or contemporaneous agreements whether written or oral; provided, however, that this Agreement is meant to be in addition to any other compensation arrangements Employee may have with the Company. No waiver, alteration, or modification of any of the provisions of this Agreement shall be binding unless in writing and signed by the parties hereto or their duly authorized representatives. Neither this Agreement nor any rights of Employee hereunder may be assigned or transferred by Employee.

5. Applicable Law. This Agreement shall be governed by and construed in accordance with the internal substantive laws, but not the choice of law rules, of the State of California.

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year first above written.

CYTOKINETICS, INCORPORATED

By: /s/ James Sabry

Title:

EMPLOYEE

/s/ Robert Blum

Signature

Robert I. Blum

Name

Exhibit 10.40

CYTOKINETICS, INCORPORATED

AMENDED AND RESTATED CASH BONUS AGREEMENT

This Amended and Restated Cash Bonus Agreement (the "Agreement") is entered into effective as of December 1, 2002 (the "Effective Date"), by and between Cytokinetics, Incorporated, a Delaware corporation (the "Company"), and Robert I. Blum (the "Employee").

WHEREAS the Company and the Employee entered into a Cash Bonus Agreement dated as of September 1, 2002 (the "Prior Agreement"); and

WHEREAS the Company and the Employee desire to amend and restated the Prior Agreement in its entirety with this Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company and the Employee hereby agree as follows:

1. Amendment and Restatement. The Company and the Employee hereby amend and restate the Prior Agreement in its entirety with this Agreement.

2. Cash Bonus. The Company hereby agrees to pay Employee cash bonuses in the amount of: (i) $9000, less applicable withholding taxes, on December 15, 2003 (ii) $9,000, less applicable withholding taxes, on June 30, 2004, (iii) $40,100, less applicable withholding taxes, on June 30, 2005, (iv) $38,300, less applicable withholding taxes, on June 30, 2006 (v) $36,500, less applicable withholding taxes, on June 30, 2007 and (vi) $3,600, less applicable withholding taxes, on June 30, 2008 (collectively, the "Cash Bonus"), provided that Employee remains an employee in good standing of the Company, as determined in the Company's sole discretion, on each such date.

3. No Right To Continued Employment. Nothing contained herein shall be construed to confer on Employee any right to continued employment with the Company. The Company or Employee may terminate the employment relationship of Employee with the Company for any reason or no reason, with or without cause, and after such termination Employee shall not have any right to receive any further payments of Cash Bonus remaining unpaid at such time.

4. Taxes. Employee shall be responsible for all taxes related to the Cash Bonus.

5. Integration; No Assignment. This Agreement represents the entire agreement and understanding between the parties as to the Cash Bonus, and supersedes all prior or contemporaneous agreements, including, without limitation, the Prior Agreement, whether written or oral; provided, however, that this Agreement is meant to be in addition to any other compensation arrangements Employee may have with the Company. No waiver, alteration, or modification of any of the provisions of this Agreement shall be binding unless in writing and signed by the parties hereto or their duly authorized representatives. Neither this Agreement nor any rights of Employee hereunder may be assigned or transferred by Employee.

6. Applicable Law. This Agreement shall be governed by and construed in accordance with the internal substantive laws, but not the choice of law rules, of the State of California.

[remainder of this page intentionally left blank]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year first above written.

CYTOKINETICS, INCORPORATED

By: _____

Title: _____

EMPLOYEE

_____
Signature

_____
Name

Exhibit 10.41

CYTOKINETICS, INCORPORATED

CASH BONUS AGREEMENT

This Cash Bonus Agreement (the "Agreement") is entered into effective as of SEPTEMBER 1, 2002 (the "Effective Date"), by and between Cytokinetics, Incorporated, a Delaware corporation (the "Company"), and David Morgans (the "Employee").

1. Cash Bonus. The Company hereby agrees to pay Employee cash bonuses in the amount of: (i) $5,000, less applicable withholding taxes, on June 30, 2003, (ii) $5,000, less applicable withholding taxes, on June 30, 2004, (iii) $22,000 less applicable withholding taxes, on June 30, 2005, (iv) $21,000, less applicable withholding taxes, on June 30, 2006, (v) $20,000, less applicable withholding taxes, on June 30, 2007 and (vi) $2,000, less applicable withholding taxes, on June 30, 2008 (collectively, the "Cash Bonus"), provided that Employee remains an employee in good standing of the Company, as determined in the Company's sole discretion, on each such date.

2. No Right To Continued Employment. Nothing contained herein shall be construed to confer on Employee any right to continued employment with the Company. The Company or Employee may terminate the employment relationship of Employee with the Company for any reason or no reason, with or without cause, and after such termination Employee shall not have any right to receive any further payments of Cash Bonus remaining unpaid at such time.

3. Taxes. Employee shall be responsible for all taxes related to the Cash Bonus.

4. Integration; No Assignment. This Agreement represents the entire agreement and understanding between the parties as to the Cash Bonus, and supersedes all prior or contemporaneous agreements whether written or oral; provided, however, that this Agreement is meant to be in addition to any other compensation arrangements Employee may have with the Company. No waiver, alteration, or modification of any of the provisions of this Agreement shall be binding unless in writing and signed by the parties hereto or their duly authorized representatives. Neither this Agreement nor any rights of Employee hereunder may be assigned or transferred by Employee.

5. Applicable Law. This Agreement shall be governed by and construed in accordance with the internal substantive laws, but not the choice of law rules, of the State of California.

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year first above written.

CYTOKINETICS, INCORPORATED

By: /s/ James Sabry

Title:

EMPLOYEE

/s/ David Morgans

Signature

David Morgans, Jr.

Name

Exhibit 10.42

CYTOKINETICS, INCORPORATED

AMENDED AND RESTATED CASH BONUS AGREEMENT

This Amended and Restated Cash Bonus Agreement (the "Agreement") is entered into effective as of December 1, 2003 (the "Effective Date"), by and between Cytokinetics, Incorporated, a Delaware corporation (the "Company"), and David Morgans (the "Employee").

WHEREAS the Company and the Employee entered into a Cash Bonus Agreement dated as of September 1, 2002 (the "Prior Agreement"); and

WHEREAS the Company and the Employee desire to amend and restated the Prior Agreement in its entirety with this Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company and the Employee hereby agree as follows:

1. Amendment and Restatement. The Company and the Employee hereby amend and restate the Prior Agreement in its entirety with this Agreement.

2. Cash Bonus. The Company hereby agrees to pay Employee cash bonuses in the amount of: (i) $7,400.00, less applicable withholding taxes, on December 15, 2003, (ii) $7,400.00, less applicable withholding taxes, on June 30, 2004, (iii) $33,100.00, less applicable withholding taxes, on June 30, 2005, (iv) $31,600.00, less applicable withholding taxes, on June 30, 2006, (v) $30,200.00, less applicable withholding taxes, on June 30, 2007 and (vi) $3,000.00, less applicable withholding taxes, on June 30, 2008 (collectively, the "Cash Bonus"), provided that Employee remains an employee in good standing of the Company, as determined in the Company's sole discretion, on each such date.

3. No Right To Continued Employment. Nothing contained herein shall be construed to confer on Employee any right to continued employment with the Company. The Company or Employee may terminate the employment relationship of Employee with the Company for any reason or no reason, with or without cause, and after such termination Employee shall not have any right to receive any further payments of Cash Bonus remaining unpaid at such time.

4. Taxes. Employee shall be responsible for all taxes related to the Cash Bonus.

5. Integration; No Assignment. This Agreement represents the entire agreement and understanding between the parties as to the Cash Bonus, and supersedes all prior or contemporaneous agreements, including, without limitation, the Prior Agreement, whether written or oral; provided, however, that this Agreement is meant to be in addition to any other compensation arrangements Employee may have with the Company. No waiver, alteration, or modification of any of the provisions of this Agreement shall be binding unless in writing and signed by the parties

hereto or their duly authorized representatives. Neither this Agreement nor any rights of Employee hereunder may be assigned or transferred by Employee.

6. Applicable Law. This Agreement shall be governed by and construed in accordance with the internal substantive laws, but not the choice of law rules, of the State of California.

[remainder of this page intentionally left blank]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year first above written.

CYTOKINETICS, INCORPORATED

By: _____

Title: _____

EMPLOYEE

_____
Signature

_____
Name

Exhibit 10.43

CYTOKINETICS, INCORPORATED

CASH BONUS AGREEMENT

This Cash Bonus Agreement (the "Agreement") is entered into effective as of SEPTEMBER 1, 2002 (the "Effective Date"), by and between Cytokinetics, Incorporated, a Delaware corporation (the "Company"), and Jay Trautman (the "Employee").

1. Cash Bonus. The Company hereby agrees to pay Employee cash bonuses in the amount of: (i) $13,000, less applicable withholding taxes, on June 30, 2003, (ii) $13,000, less applicable withholding taxes, on June 30, 2004, (iii) $55,000, less applicable withholding taxes, on June 30, 2005, (iv) $53,000, less applicable withholding taxes, on June 30, 2006, (v) $51,000, less applicable withholding taxes, on June 30, 2007 and (vi) $5,000, less applicable withholding taxes, on June 30, 2008 (collectively, the "Cash Bonus"), provided that Employee remains an employee in good standing of the Company, as determined in the Company's sole discretion, on each such date.

2. No Right To Continued Employment. Nothing contained herein shall be construed to confer on Employee any right to continued employment with the Company. The Company or Employee may terminate the employment relationship of Employee with the Company for any reason or no reason, with or without cause, and after such termination Employee shall not have any right to receive any further payments of Cash Bonus remaining unpaid at such time.

3. Taxes. Employee shall be responsible for all taxes related to the Cash Bonus.

4. Integration; No Assignment. This Agreement represents the entire agreement and understanding between the parties as to the Cash Bonus, and supersedes all prior or contemporaneous agreements whether written or oral; provided, however, that this Agreement is meant to be in addition to any other compensation arrangements Employee may have with the Company. No waiver, alteration, or modification of any of the provisions of this Agreement shall be binding unless in writing and signed by the parties hereto or their duly authorized representatives. Neither this Agreement nor any rights of Employee hereunder may be assigned or transferred by Employee.

5. Applicable Law. This Agreement shall be governed by and construed in accordance with the internal substantive laws, but not the choice of law rules, of the State of California.

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year first above written.

CYTOKINETICS, INCORPORATED

By: /s/ James Sabry

Title:

EMPLOYEE

/s/ Jay Trautman

Signature

Jay Trautman

Name

Exhibit 10.44

CYTOKINETICS, INCORPORATED

AMENDED AND RESTATED CASH BONUS AGREEMENT

This Amended and Restated Cash Bonus Agreement (the "Agreement") is entered into effective as of December 1, 2003 (the "Effective Date"), by and between Cytokinetics, Incorporated, a Delaware corporation (the "Company"), and Jay Trautman (the "Employee")

WHEREAS the Company and the Employee entered into a Cash Bonus Agreement dated as of September 1, 2002 (the "Prior Agreement"); and

WHEREAS the Company and the Employee desire to amend and restated the Prior Agreement in its entirety with this Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company and the Employee hereby agree as follows:

1. Amendment and Restatement. The Company and the Employee hereby amend and restate the Prior Agreement in its entirety with this Agreement.

2. Cash Bonus. The Company hereby agrees to pay Employee cash bonuses in the amount of: (i) $19,300, less applicable withholding taxes, on December 15, 2003, (ii) $19,300 less applicable withholding taxes, on June 30, 2004, (iii) $86,200, less applicable withholding taxes, on June 30, 2005 (iv) $82,300, less applicable withholding taxes, on June 30, 2006, (v) $78,500, less applicable withholding taxes, on June 30, 2007 and (vi) $7,700, less applicable withholding taxes, on June 30, 2008 (collectively, the "Cash Bonus"), provided that Employee remains an employee in good standing of the Company, as determined in the Company's sole discretion, on each such date.

3. No Right To Continued Employment. Nothing contained herein shall be construed to confer on Employee any right to continued employment with the Company. The Company or Employee may terminate the employment relationship of Employee with the Company for any reason or no reason, with or without cause, and after such termination Employee shall not have any right to receive any further payments of Cash Bonus remaining unpaid at such time.

4. Taxes. Employee shall be responsible for all taxes related to the Cash Bonus.

5. Integration; No Assignment. This Agreement represents the entire agreement and understanding between the parties as to the Cash Bonus, and supersedes all prior or contemporaneous agreements, including, without limitation, the Prior Agreement, whether written or oral; provided, however, that this Agreement is meant to be in addition to any other compensation arrangements Employee may have with the Company. No waiver, alteration, or modification of any of the provisions of this Agreement shall be binding unless in writing and signed by the parties hereto or their duly authorized representatives. Neither this Agreement nor any rights of Employee hereunder may be assigned or transferred by Employee.

6. Applicable Law. This Agreement shall be governed by and construed in accordance with the internal substantive laws, but not the choice of law rules, of the State of California.

[remainder of this page intentionally left blank]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year first above written.

CYTOKINETICS, INCORPORATED

By: _____

Title: _____

EMPLOYEE

_____
Signature

_____
Name

EXHIBIT 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the use in this Registration Statement on Form S-1 of our report dated March 21, 2003, except for note 13 as to which the date is January 21, 2004, relating to the financial statements and our report dated March 21, 2003 relating to the financial statement schedule of Cytokinetics, Incorporated (a development stage enterprise), which appear in such Registration Statement. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

San Jose, California
January 26, 2004