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As filed with the Securities and Exchange Commission on April 27, 2004
Registration No. 333-112261

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 3

TO

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. ☐

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.

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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 April 27, 2004.

5,800,000 Shares

CYTOKINETICS

Common Stock

This is an initial public offering of shares of common stock of Cytokinetics, Incorporated. All of the 5,800,000 shares of common stock are being sold by Cytokinetics.

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 $11.00 and $13.00. Application has been made for quotation of the common stock on the Nasdaq National Market under the symbol "CYTK".

See "Risk Factors" on page 8 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 5,800,000 shares of common stock, the underwriters have the option to purchase up to an additional 870,000 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.

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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 and the private placement described below, our financial statements and notes to those financial statements that appear elsewhere in this prospectus.

Cytokinetics, Incorporated

We are a 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, a drug candidate for the treatment of acute 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. SB-715992 and SB-743921 are being developed through our strategic alliance with GlaxoSmithKline. In addition, we expect to initiate Phase I clinical development for a drug candidate, CK-1213296, for the treatment of acute congestive heart failure in the second half of 2004. Our strategy involves developing our own commercialization capabilities for those of our drug candidates that are directed towards large concentrated markets, and to enter into strategic alliances to develop and commercialize drug candidates for other markets. We do not currently have any commercial capabilities, and it is possible that we may never be able to demonstrate safety and efficacy and successfully commercialize any of our drug candidates. Our leading drug candidates are in clinical or earlier stages of development, and we have neither received regulatory approval for, nor derived commercial revenues from, any of them and we expect to incur increasing losses over the next several years.

Our Focus on the Cytoskeleton

We believe that 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

- ***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 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.

  We are participating in the development of SB-715992 which is being conducted by GlaxoSmithKline, or GSK, under 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 and ovarian 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 for CK-1213296, our drug candidate for the treatment of acute congestive heart failure, in the second half of 2004, and, assuming no action by the FDA, to initiate a Phase I clinical trial by the end of 2004.** Our drug candidate specifically targets a cytoskeletal protein, cardiac myosin, which is essential for cardiac muscle contraction. In animal models, CK-1213296 improves cardiac function without detrimental effects on heart rhythm, heart rate or blood pressure that limit the effectiveness of existing drugs. However, results in animal models are not necessarily predictive of results in humans, and we will not have data regarding the efficacy of CK-1213296 in humans until we complete clinical trials of this drug candidate.

Our drug candidates are in the early stages of development, and we must complete clinical trials to determine if they are safe and effective in humans. Results of early stages of development may not be predictive of results in later stages of development, and clinical trials may fail to demonstrate the safety and efficacy of our drug candidates, preventing or delaying the completion of development and regulatory approval.

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 seeking to discover suitable compounds that may potentially address unmet clinical needs and shortcomings of existing drugs. From among these compounds we may choose a drug candidate for Phase I clinical trials.

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, SB-743921 and CK-1213296, 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 December 31, 2003, we had incurred $94.1 million in net losses since inception. Because our leading 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.

Private Sale of Shares to GSK

We have entered into an agreement pursuant to which we will sell an affiliate of GSK approximately $7.0 million of our common stock immediately prior to the completion of this offering at a per share price equal to our per share initial public offering price. Assuming an initial public offering price of $12.00 per share, an affiliate of GSK will purchase 583,333 restricted shares of our common stock at a price of $12.00 per share.

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	5,800,000 shares
Common stock to be outstanding after this offering	25,790,215 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 CK-1213296, our 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 2,307,258 shares of common stock outstanding as of December 31, 2003 and also reflects the automatic conversion of preferred stock into 17,099,624 shares of common stock. This number does not include, as of December 31, 2003:

- 2,244,378 shares of common stock issuable upon exercise of options outstanding, at a weighted average exercise price of $1.06 per share;
- 100,000 shares of common stock issuable upon the exercise of warrants to purchase common stock and 181,983 shares of preferred stock issuable upon the exercise of warrants to purchase preferred stock (which will become exercisable for 90,991 shares of common stock upon consummation of this offering);
- 390,677 shares of common stock reserved for issuance under our 1997 Stock Option/ Stock Issuance Plan; and
- 2,100,000 shares of common stock to be reserved for future issuance under our 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;
- gives effect to a 1-for-2 reverse stock split effected by Cytokinetics on April 26, 2004;
- gives effect to the sale of 583,333 shares of common stock to an affiliate of GSK in a concurrent private placement based on an assumed initial public offering price of $12.00 per share; and
- assumes no exercise by the underwriters of their option to purchase 870,000 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, 2001, 2002 and 2003 are derived from our audited financial statements included in this prospectus. 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." See Note 10 to our financial statements for information regarding pro forma common shares outstanding and pro forma net loss per share.

	Years Ended December 31,			Cumulative Period from August 5, 1997 (date of Inception) to December 31,
	2001	2002	2003	2003
	(in thousands, except for per share data)			
Statement of Operations Data:				
Revenues:				
Research and development revenues from related party	$ 6,764	$ 8,470	$ 7,703	$ 22,937
Research and development and grant revenues	302	126	74	502
License revenues from related party	1,400	2,800	2,800	7,000
	8,466	11,396	10,577	30,439
Operating expenses:				
Research and development (1)	20,961	28,424	34,004	100,817
General and administrative (1)	5,897	6,953	9,163	28,136
Total operating expenses	26,858	35,377	43,167	128,953
Loss from operations	(18,392)	(23,981)	(32,590)	(98,514)
Interest and other income (expense), net	2,518	901	(95)	4,440
Net loss	$(15,874)	$(23,080)	$(32,685)	$ (94,074)
Net loss per share:				
Basic and diluted	$ (11.18)	$ (13.25)	$ (17.10)	
Pro forma net loss per share:				
Basic and diluted (unaudited) (2)			$ (1.81)	
Weighted-average number of shares used in pro forma per share calculation:				
Basic and diluted (unaudited) (2)			18,025	

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

(2) Gives effect to the conversion of all outstanding shares of preferred stock into 17,099,624 shares of our common stock effective upon the closing of this offering. See Note 10 to our financial statements.

	As of December 31, 2003		
	Actual	Pro Forma	Pro Forma, As Adjusted
		(in thousands)	
Balance Sheet Data:			
Cash, cash equivalents, short-term and long-term investments	$ 43,045	$ 43,045	$112,897
Restricted cash	7,199	7,199	7,199
Working capital(1)	27,619	27,619	97,471
Total assets	62,873	62,873	132,725
Long-term portion of equipment financing lines	8,075	8,075	8,075
Convertible preferred stock	133,172	—	—
Deficit accumulated during the development stage	(94,074)	(94,074)	(94,074)
Total stockholders' (deficit) equity	(92,031)	41,141	110,993

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 17,099,624 shares of our common stock immediately upon the closing of this offering and the pro forma as adjusted numbers reflect the sale of 583,333 shares of our common stock to an affiliate of GSK based on an assumed initial offering price of $12.00 per share and the sale of 5,800,000 shares of our common stock at an assumed initial public offering price of $12.00 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 fiscal years ended December 31, 2003, 2002 and 2001 was $32.7 million, $23.1 million and $15.9 million, respectively. As of December 31, 2003, we had an accumulated deficit of $94.1 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 year ended December 31, 2003, our cash outflow to fund operations was approximately $30.5 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. According to industry sources, the entire drug development and testing process takes on average 12 to 15 years. According to industry studies, the fully capitalized resource cost of new drug development is approximately $800 million, however, individual trials and individual drug candidates may incur a range of costs above or below this average. 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 various issued United States patents and pending United States and foreign patent applications assigned to Cellomics, Inc. relating to an automated method for analyzing cells. One of these applications is proceeding to grant in Europe. Cellomics or a third party may assert that our Cytometrix technologies fall within the scope of and thus, infringe, one or more of these patents. We have received a letter from Cellomics notifying us that Cellomics believes we may be practising one or more of their patents and that Cellomics offers a use license for such patents through its licensing program. 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. If we decide to obtain a license to these patents, 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, particularly James H. Sabry, M.D., Ph.D., our President and Chief Executive Officer and Robert I. Blum, our Executive Vice President, Corporate Development

and Finance and Chief Financial Officer. Our employment agreements with these individuals and our other personnel are terminable at will with short or no notice. We carry key person life insurance on James H. Sabry, M.D., Ph.D. 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 CK-1213296, our 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 39.2 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 and the private placement. 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 CK-1213296, our 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 or develop 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.

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 $7.70 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 $12.00. 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 CK-1213296, our 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 5,800,000 shares of common stock in this offering are estimated to be approximately $62.9 million, based on an assumed offering price of $12.00 per share, after deducting estimated underwriting discounts and commissions and estimated offering expenses, which are payable by us. In addition, we will receive approximately $7.0 million of additional proceeds as a result of the private placement to an affiliate of GSK.

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

- approximately $15.0 million 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;
- approximately $15.0 million to continue preclinical activities and conduct clinical development of CK-1213296, our drug candidate for the treatment of acute congestive heart failure;
- approximately $10.0 million to advance our other research programs;
- approximately $5.0 million to scale up our development, sales, marketing and manufacturing operations; and
- approximately $5.0 million to potentially in-license or develop technology and acquire or invest in businesses, products or technologies that we believe are complementary to our own.

We believe that the net proceeds of this offering and the private placement, 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.

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 December 31, 2003:

- on an actual basis;
- on a pro forma basis, reflecting the conversion of all of our preferred stock into an aggregate of 17,099,624 shares of common stock immediately upon the closing of this offering; and
- on a pro forma as adjusted basis, to give effect to:
  - our sale of 5,800,000 shares of common stock in this offering at an assumed initial public offering price of $12.00 per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us; and
  - our sale of 583,333 shares of common stock to an affiliate of GSK based on an assumed initial public offering price of $12.00 per share for aggregate cash proceeds of $7.0 million.

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 December 31, 2003		Pro Forma As Adjusted
	Actual	Pro Forma	
	(in thousands)		
Long-term portion of equipment financing lines	$ 8,075	$ 8,075	$ 8,075
Convertible preferred stock, $0.001 par value, 37,300,000 shares authorized, 34,124,308 shares issued and outstanding, actual, no shares issued and outstanding pro forma and pro forma as adjusted	133,172	—	—
Stockholders' equity (deficit):			
Common stock, $0.001 par value, 61,500,000 shares authorized, 2,307,258 shares issued and outstanding, actual; 19,406,882 shares outstanding pro forma and 25,790,215 shares outstanding pro forma as adjusted	2	19	26
Additional paid-in capital	5,646	138,801	208,646
Deferred stock-based compensation	(3,651)	(3,651)	(3,651)
Accumulated other comprehensive income	46	46	46
Deficit accumulated during the development stage	(94,074)	(94,074)	(94,074)
Total stockholders' equity (deficit)	(92,031)	41,141	110,993
Total capitalization	$ 49,216	$ 49,216	$ 119,068

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

- 2,244,378 shares subject to stock options outstanding as of December 31, 2003;
- 390,677 shares reserved for issuance under our 1997 Stock Option/ Stock Issuance Plan as of December 31, 2003;
- 100,000 shares of common stock issuable upon the exercise of warrants to purchase common stock and 181,983 shares of preferred stock issuable upon the exercise of warrants to purchase preferred stock (which will become exercisable for 90,991 shares of common stock upon consummation of this offering) outstanding at December 31, 2003; and
- 2,100,000 shares of common stock to be reserved for future issuance under our 2004 Equity Incentive Plan and our 2004 Employee Stock Purchase Plan.

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 and the private placement. Our historical net tangible book value as of December 31, 2003 was approximately $(92.0) million or $(39.89) per share. 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 $12.00 per share and our sale of 583,333 shares of common stock to an affiliate of GSK based on an assumed initial offering price of $12.00 per share for aggregate cash proceeds of $7.0 million 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 December 31, 2003 would have been approximately $111.0 million, or $4.30 per share of common stock. This represents an immediate increase in pro forma net tangible book value of $2.18 per share to existing stockholders and an immediate dilution of $7.70 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		$12.00
Historical net tangible book value per share as of December 31, 2003	$(39.89)	
Increase per share due to assumed conversion of all shares of convertible preferred stock	42.01	
Pro forma net tangible book value per share as of December 31, 2003	2.12	
Increase per share attributable to new investors	2.18	
Pro forma as adjusted net tangible book value per share after this offering and the private placement		4.30
Dilution per share to new investors in this offering		$ 7.70

The following table summarizes as of December 31, 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, new investors purchasing shares of our common stock in this offering and an affiliate of GSK in the private placement. The table assumes an initial public offering and private placement price of $12.00 per share, before deducting 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	19,406,882	75%	$135,064,385	64%	$ 6.96
New investors	5,800,000	23	69,600,000	33	12.00
New investment by an affiliate of GSK	583,333	2	7,000,000	3	12.00
Total	25,790,215	100%	$211,664,385	100%	

The above discussion and tables are based on 2,307,258 shares of common stock issued and outstanding as of December 31, 2003 and excludes:

- 2,244,378 shares subject to stock options outstanding as of December 31, 2003;
- 390,677 shares reserved for issuance under our 1997 Stock Option/ Stock Issuance Plan as of December 31, 2003;
- 100,000 shares of common stock issuable upon the exercise of warrants to purchase common stock and 181,983 shares of preferred stock issuable upon the exercise of warrants to purchase preferred stock (which will become exercisable for 90,991 shares of common stock upon consummation of this offering) outstanding at December 31, 2003; and
- 2,100,000 shares of common stock to be reserved for future issuance under our 2004 Equity Incentive Plan and our 2004 Employee Stock Purchase Plan.

Assuming the exercise in full of all options and warrants outstanding as of December 31, 2003, the number of shares purchased by existing stockholders would be increased by 2,435,369 shares to 21,842,251 shares, total consideration paid by them would be increased by approximately $2,828,000 to $137,892,000 and the average price per share paid by them would be decreased by $0.65 per share to $6.31 per share.

The exercise of options and warrants, all of which have an exercise price less than the assumed initial public offering price would increase the dilution to new investors an additional $0.27 per share, to $7.97 per share.

If the underwriters exercise their over-allotment option in full, the percentage of shares of common stock held by existing stockholders will be approximately 75% of the total number of shares of our common stock outstanding after this offering, and the number of shares held by new investors will be increased to 7,253,333, or approximately 25% of the total number of shares of our common stock outstanding after this offering.

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. See also Note 10 to our financial statements for information regarding pro forma common shares outstanding and pro forma net loss per share. The selected financial data for the years ended December 31, 1999 and 2000 and as of December 31, 1999, 2000 and 2001 are derived from our audited financial statements not included in this prospectus. The selected financial data for the years ended December 31, 2001, 2002 and 2003 and as of December 31, 2002 and 2003 are derived from our audited financial statements included in this prospectus. The historical results are not necessarily indicative of results to be expected in any future period.

	Year Ended December 31,				
	1999	2000	2001	2002	2003
Statement of Operations Data:					
Revenues:					
Research and development revenues from related party	$ —	$ —	$ 6,764	$ 8,470	$ 7,703
Research and development and grant revenues	—	—	302	126	74
License revenues from related party	—	—	1,400	2,800	2,800
Total revenues	—	—	8,466	11,396	10,577
Operating expenses:					
Research and development	6,103	10,403	20,961	28,424	34,004
General and administrative	1,515	3,390	5,897	6,953	9,163
Total operating expenses	7,618	13,793	26,858	35,377	43,167
Operating loss	(7,618)	(13,793)	(18,392)	(23,981)	(32,590)
Interest and other income	378	902	3,232	2,232	2,395
Interest and other expense	(101)	(188)	(714)	(1,331)	(2,490)
Net loss	$(7,341)	$(13,079)	$(15,874)	$(23,080)	$(32,685)
Net loss per common share:					
Basic and diluted	$ (9.44)	$ (13.55)	$ (11.18)	$ (13.25)	$ (17.10)
Weighted average shares used in computing net loss per common share, basic and diluted	778	965	1,420	1,742	1,911
Pro forma net loss per common share, basic and diluted (unaudited)					$ (1.81)
Weighted average shares used in computing pro forma net loss per common share, basic and diluted (unaudited)					18,025

	As of December 31,				
	1999	2000	2001	2002	2003
Balance Sheet Data:					
Cash, cash equivalents, short-term and long-term investments	$14,823	$ 56,787	$ 62,314	$ 30,461	$ 43,045
Restricted cash	225	225	6,236	13,106	7,199
Working capital	12,888	42,781	43,887	18,571	27,619
Total assets	17,644	61,038	79,019	56,168	62,873
Long-term portion of equipment financing lines	892	1,079	3,525	7,077	8,075
Deficit accumulated during the development stage	(9,356)	(22,435)	(38,309)	(61,389)	(94,074)
Total convertible preferred stock	24,604	79,462	93,304	93,304	133,172
Total stockholders' deficit	$ (9,121)	$(21,818)	$(37,352)	$(60,588)	$ (92,031)

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 leading 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, one which is in Phase II clinical trials and the other which is expected to enter Phase I clinical trials in early 2004. We are also pursuing CK-1213296 as a drug candidate for the treatment of acute congestive heart failure and we expect to file an IND and initiate clinical trials for that compound in the second half of 2004. In addition, we 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 December 31, 2003, we had an accumulated deficit of $94.1 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 CK-1213296 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.

A Phase II clinical trial program for SB-715992 for the treatment of cancer commenced in the fourth quarter of 2003. We anticipate that this Phase II program will be completed in 2005. A Phase III clinical trial program will then be initiated. We expect that it will take several years before we can commercialize SB-715992. Accordingly, we cannot reasonably estimate when and to what extent SB-715992 will generate revenues or material net cash flows, which may vary widely depending on numerous factors, including the effectiveness and safety profile of the drug, market acceptance, and then-prevailing reimbursement policies, competition and other market conditions. GSK funds all research and development costs associated with SB-715992 pursuant to our strategic alliance. We expect to determine whether and to what extent we will exercise our co-funding option during the conduct of our clinical trials for this drug candidate, taking into consideration clinical results and our business, finances and prospects at that time. If we exercise our option to co-fund certain later stage development activities associated with SB-715992, our expenditures relating to research and development of this drug candidate will increase significantly.

We expect that a Phase I clinical trial for SB-743921 will commence in early 2004. The clinical trial program for SB-743921 will proceed for several years, and we will not be in a position to generate any revenues or material net cash flows from the drug candidate until the program is

successfully completed, regulatory approval is achieved and a drug is commercialized. SB-743921 is at too early a stage of development for us to predict when this may occur. GSK funds all research and development costs associated with SB-743921. If we exercise our option to co-fund certain later-stage development activities associated with SB-743921, our expenditures relating to research and development of this drug candidate will increase significantly.

We plan to file an IND and initiate Phase I clinical trials for CK-1213296 in the second half of 2004. As with our other drug candidates, CK-1213296 is at too early a stage of development for us to predict if and when we will be in a position to generate any revenues or material net cash flows from the drug candidate. We currently fund all research and development costs associated with CK-1213296. For the years ended December 31, 2001, 2002 and 2003 we incurred costs of approximately $6.4 million, $8.8 million and $11.4 million, respectively, for research and development activities relating to our congestive heart failure program that gave rise to CK-1213296. We anticipate that our expenditures relating to research and development of CK-1213296 will increase significantly as we advance this drug candidate into clinical development.

The successful development of our drug candidates is highly uncertain. We cannot estimate with certainty or know the exact nature, timing and estimated costs of the efforts necessary to complete the development of our drug candidates or the date of completion of these development efforts. We cannot estimate with certainty any of the foregoing due to the numerous risks and uncertainties associated with developing our drug candidates, including:

- the uncertainty of the timing of completion of patient registration in our pivotal Phase III clinical trials;
- the possibility of delays in the collection of clinical trial data and the uncertainty of the timing of the interim analyses of our pivotal Phase III clinical trials;
- the uncertainty of clinical trial results;
- extensive governmental regulation, both foreign and domestic, for approval of new therapies; and
- the uncertainty related to the completion of construction and qualification of a commercial scale manufacturing facility.

If we fail to complete the development of our drug candidates in a timely manner, it could have a material adverse effect on our operations, financial position and liquidity. In addition, any failure by us to obtain, or any delay in obtaining, regulatory approvals could have a material adverse effect on our results of operations. A further discussion of the risks and uncertainties associated with completing our projects on schedule, or at all, and certain consequences of failing to do so are set forth in the risk factors entitled *"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," "Clinical trials may fail to demonstrate the safety and efficiency of our drug candidates, which could prevent or significantly delay completion of clinical development and regulatory approval"* and *"Clinical trials are expensive, time consuming and subject to delay,"* as well as other risk factors.

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 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 $2.0 million, $6.4 million, $3.5 million, $0.6 million and $1.3 million under equipment financing arrangements in

the years ending December 31, 2003, 2002, 2001, 2000, and 1999, respectively. Interest earned on investments in the years ending December 31, 2003, 2002, 2001, 2000 and 1999 was $2.4 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 our drug candidate for the treatment of acute congestive heart failure, CK-1213296, 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. During the period from inception through December 31, 2003, we incurred costs of approximately $33.0 million for research and development activities relating to the discovery of mitotic kinesin inhibitors, $29.2 million for our congestive heart failure program, $24.9 million for our PUMA system and Cytometrix technologies and $13.7 million for all other programs.

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 $4.0 million of deferred stock-based compensation and $536,000 of amortization of deferred stock-based compensation related to options granted to employees during the year ended December 31, 2003. We have recorded $736,000 of deferred stock-based compensation for the period from inception through December 31, 2003 related to options granted to non-employees through 2002. We recorded amortization of non-employee deferred compensation of $93,000, $6,000, $232,000 and $555,000 for the years ended December 31, 2001, 2002 and 2003, and for the period from August 5, 1997 (date of inception) through December 31, 2003 respectively. We recorded non-employee stock-based compensation for the year ended December 31, 2003 of $158,000. We expect the remaining $3.7 million to be amortized as follows: $1,122,000 in 2004, $942,000 in 2005, $924,000 in 2006, $413,000 in 2007 and $250,000 in 2008, 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

Years ended December 31, 2001, 2002 and 2003

Revenues

We recorded revenues of $8.5 million, $11.4 million and $10.6 million for the years ended December 31, 2001, 2002 and 2003, 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 each of the years ended December 31, 2002 and 2003 resulted from a full year of revenue recognition in 2002 and 2003 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, and $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 and grant revenues of $7.8 million for the year ended December 31, 2003 comprised $7.1 million of reimbursement for FTEs, $0.2 million of milestone revenues, and $0.5 million of various research related expenses. The $0.4 million increase in 2003 compared to 2002 FTE reimbursement resulted from an annual expense index adjustment to the GSK FTE reimbursement effective June 20, 2003 and the initial $0.1 million FTE reimbursement from a newly negotiated collaboration with Astra Zeneca. GSK milestone revenues decreased $0.8 million in 2003 compared to 2002 and various research related expenses also decreased by $0.4 million.

Research and development expenses

Research and development expenses were $21.0 million for the year ended December 31, 2001 compared with $28.4 million for the year ended December 31, 2002. The increase in research and development expense was primarily due to increased salary and benefit costs of $3.8 million resulting from the hiring of additional research and development personnel and $1.1 million of outsourced contracted services and laboratory consumables. Research and development expenses were $34.0 million for the year ended December 31, 2003, an increase of $5.6 million from the year before. The increase was primarily due to the hiring of additional research and development personnel of $3.2 million and increased spending for contracted services and laboratory consumables of $2.4 million.

For the years ended December 31, 2001, 2002 and 2003 we incurred costs of approximately $7.9 million, $8.9 million and $6.7 million, respectively, for research and development activities relating to the discovery of mitotic kinesin inhibitors, of which GSK reimbursed $4.8 million, $7.5 million and $7.5 million, respectively. During the same periods, we incurred costs of approximately $6.4 million, $8.8 million and $11.4 million, respectively, for research and development activities relating to our congestive heart failure program, $1.8 million, $3.2 million and $7.2 million, respectively, for all other research programs and $4.9 million, $7.5 million and $8.7 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.

We expect that research and development expenditures will continue to increase substantially during 2004 and subsequent years if we exercise our options to co-fund certain later-stage research and development activities relating to SB-715992 and SB-743921, advance research and development of CK-1213296 and expand our cardiovascular clinical program, pursue additional clinical programs and build associated development of systems and infrastructure. We expect to expand the scope of our research and development programs in future periods which may result in substantial increases in research and development expenses.

General and administrative expenses

General and administrative expenses were $5.9 million for the year ended December 31, 2001 compared with $7.0 million for the year ended December 31, 2002. The increase of $1.1 million was primarily due to increased salary and benefit costs resulting from the hiring of additional general and administrative personnel. General and administrative expenses were $9.2 million for the year ended December 31, 2003, an increase of $2.2 million from the year before. The increase was primarily due to $0.3 million increased salary and benefit costs resulting from the hiring of additional general and administrative personnel and $1.5 million increased spending for contracted services.

We expect that general and administrative expenditures will continue to increase during 2004 and subsequent years due to increasing expenses associated with payroll, operating as a publicly traded company, support of our initial commercialization efforts, business development costs and expanded operational infrastructure. General and administrative expenses consist primarily of the costs of administrative personnel and related facility costs along with legal, accounting and other professional fees.

Interest and Other Income and Expense

Interest and other income (expense), net was $2.5 million for the year ended December 31, 2001 compared with $0.9 million and $(0.1) million for the years ended December 31, 2002 and 2003, respectively. 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. The $1.0 million decrease in interest and other income (expense), net from the year ended December 31, 2002 as compared with the year ended December 31, 2003 was primarily due to an increase in interest and other expenses from $1.3 million in 2002 to $2.5 million in 2003. The increase was due to increased debt as a result of loans entered into for capital lease financings. Interest and other income increased from $2.2 million to $2.4 million in 2003. The increase in interest income was due to higher average balances of cash, cash equivalents and investments in 2003.

Liquidity and Capital Resources

Our cash, cash equivalents and investments totaled $43.0 million, and our restricted cash totaled $7.2 million at December 31, 2003. From August 5, 1997, date of inception, through December 31, 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 December 31, 2003, we have received $36.9 million in non-equity payments from GSK. We have received $2.0 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

years ending December 31, 2003, 2002, 2001, 2000 and 1999 was $2.4 million, $2.2 million, $3.1 million, $0.8 million and $0.3 million, respectively.

Net cash used in operating activities was $1.8 million, $22.3 million and $30.5 million for the years ended December 31, 2001, 2002 and 2003, respectively, and resulted primarily from net losses of $15.9 million, $23.1 million and $32.7 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.

Related party accounts receivable decreased $1.1 million from 2001 to 2002. This decrease was primarily due to a GSK clinical expense reimbursement payment of $0.9 million received in 2002.

Accrued liabilities increased $1.2 million from 2001 to 2002 due to a $1.0 million increase in general accruals and a $0.2 million increase in the PTO accrual. This 2002 increase was offset by the $1.2 million decrease in accounts payable from 2001 to 2002. Accrued liabilities increased $0.8 million from 2002 to 2003 due to additional consumable expense and outside professional services. Accounts payable increased $0.5 million from 2002 to 2003 due to increased legal and patent expense.

Net cash used in investing activities of $23.5 million and $15.1 million for the years ended December 31, 2001 and 2003, 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 $22.6 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 $17.0 million, $4.9 million and $40.2 million for the years ended December 31, 2001, 2002 and 2003, respectively. The net cash provided by financing activities was primarily attributable to the sale of preferred stock which generated $13.8 million in 2001 and $39.9 million in 2003.

As of December 31, 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	$1,689	$ 3,208	$ 3,168	$7,128	$ 15,193
Equipment financing line	2,008	3,950	4,125	—	10,083
Total	$3,697	$ 7,158	$ 7,293	$7,128	$25,276

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. We expect to determine whether and to what extent we will exercise our co-funding option based on clinical results and our business, finances and prospects at the time we receive the results. 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 CK-1213296, our 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 other current or future drug candidates, including our drug candidate for the treatment of acute congestive heart failure, CK-1213296;
- 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 and the private placement, 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 December 31, 2001, 2002 and 2003, 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 a 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, an acute congestive heart failure drug candidate, 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 CK-1213296, our drug candidate for treating 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 and ovarian 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 CK-1213296, our drug candidate for the treatment of acute congestive heart failure, in the second half of 2004. CK-1213296 specifically targets and activates 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.

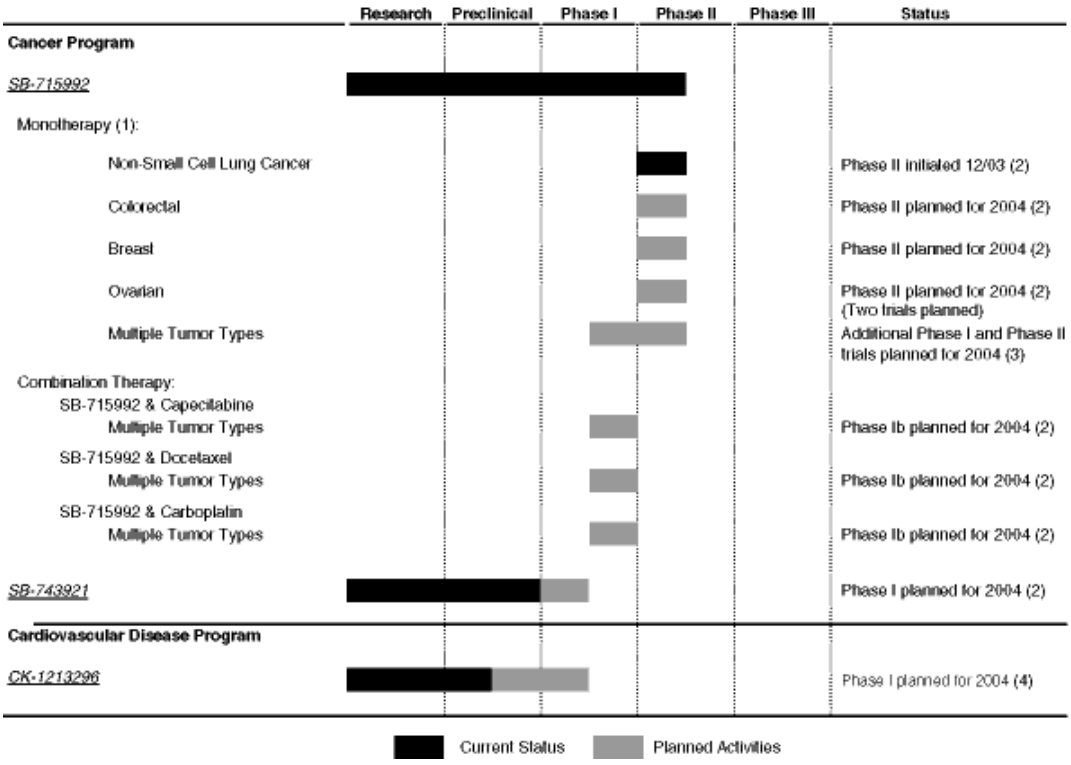
Another multi-protein cytoskeletal structure, called the cardiac sarcomere, contains a highly ordered array of cardiac myosin interacting with actin filaments. The movement of myosin along actin filaments generates the cell contraction responsible for cardiac muscle function. Our program in congestive 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 colorectal, kidney, head and neck, prostate, melanoma and hematological cancers, 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.

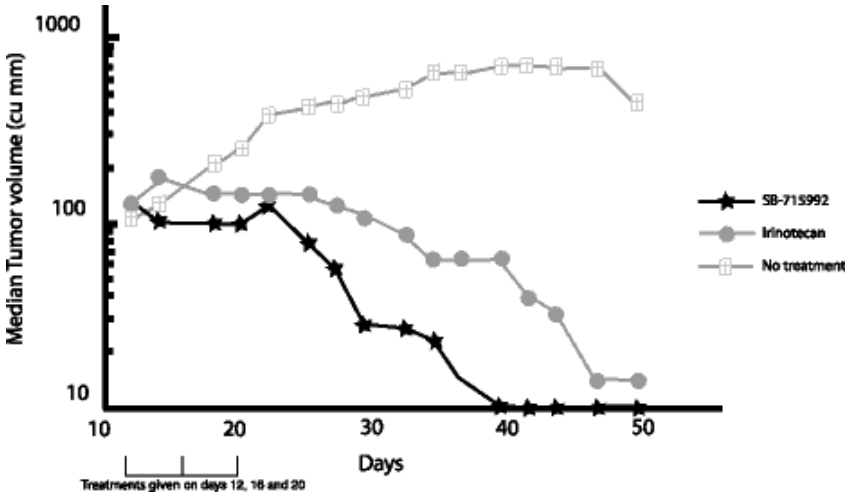
Our small molecule inhibitors of KSP are highly potent and specific. We have performed detailed biochemical studies to understand the precise molecular mechanism by which our drug candidates inhibit KSP activity. By inhibiting KSP, a cell cannot undertake the first step of mitosis, the separation of the two poles of the mitotic spindle; as a result, a monopolar mitotic spindle is created. Interruption of proper cell division through this mechanism in cancer cells results in cell death. 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



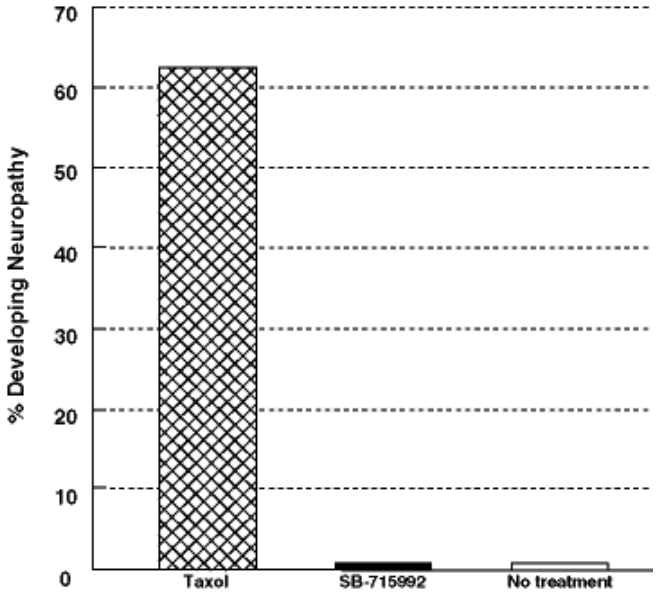
SB-715992 causes colon tumor reduction in a mouse model. This graph shows the size of human colon tumors implanted in a mouse as treated with SB-715992 (shown on the lower curve with stars), irinotecan, a drug that is commonly used in treating colon cancer (middle curve with circles) or no treatment (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 indicate 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 and ovarian 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 colorectal, kidney, head and neck, prostate, melanoma and hematological cancers, respectively. In aggregate, we anticipate that Phase II clinical trials for SB-715992 will enroll approximately 500 patients at approximately 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 March 1, 2004, 45 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 thirteen patients with colorectal, liver, head and neck, prostate, ovarian, pancreatic and kidney cancers over three to thirteen courses of treatment. In addition, trial investigators reported tumor shrinkage in five patients with colorectal, kidney, prostate 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, CK-1213296, our drug candidate in this program, improves 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 CK-1213296 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 CK-1213296 in

the second half of 2004. We are conducting additional chemical optimization activities for other 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, the fundamental unit of muscle contraction in the heart that is 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 drug candidate for the treatment of acute congestive heart failure, CK-1213296, increases cardiac contractility by specifically targeting and directly activating cardiac myosin so that it attaches to actin to generate contractile force in the cardiac sarcomere.

We believe we are the first to develop potential drug candidates that specifically 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 CK-1213296 works 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 CK-1213296 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. While we view the preclinical data on CK-1213296 as promising, it may not be predictive of clinical results in humans, which we would need to complete before we can determine whether the drug is safe and effective.

We believe that CK-1213296 could be safer and more effective than existing congestive heart failure drugs. Potential advantages of compounds arising from this program 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.

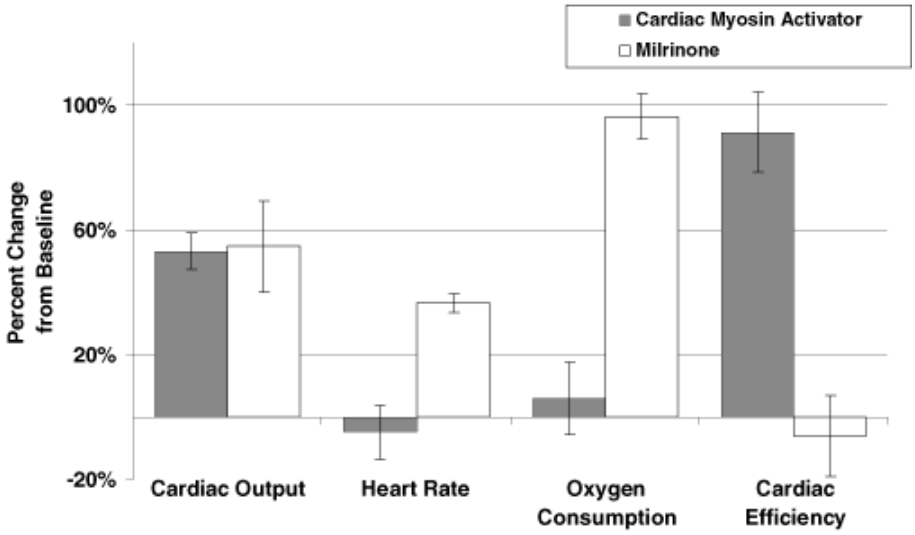
- ***Favorable safety profile.*** Our preclinical testing indicates that compounds arising from this program may enhance cardiac output without significantly increasing heart rate, decreasing blood pressure or causing cardiac arrhythmias.

We expect that the properties of CK-1213296 could result in its 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, a precursor compound to CK-1213296 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



A cardiac myosin activator efficiently increases cardiac output. This graph shows the percentage change of cardiac output, heart rate, oxygen consumption and cardiac efficiency in rat hearts 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 for CK-1213296. In addition, some of our other 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 CK-1213296. We expect to file an IND and initiate a Phase I clinical trial with CK-1213296 for the treatment of acute congestive heart failure in the second half of 2004 although we can not be certain that the FDA will approve our IND and allow our clinical trial to proceed on a timely basis, if at all. 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, such as CK-1213296, 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 CK-1213296 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 $19.7 million in FTE and other 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. Under this strategic alliance, AstraZeneca has committed to reimburse us for four FTEs in our technology department over the two-year research term, pay annual licensing fees and make a milestone payment to us upon the successful achievement of certain agreed-upon performance criteria. If we successfully achieve the agreed-upon performance criteria and AstraZeneca elects to license certain technology and intellectual property developed pursuant to the collaboration in exchange for additional annual license payments to us for the full potential maximum term of such license, then the combined FTE, milestone and licensing payments to us will total approximately $9.5 million. Through March 31, 2004, we have received $374,000 in FTE reimbursement payments from AstraZeneca.

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. 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. If approved for marketing by the FDA, depending on the approved clinical indication, our cancer drug candidates could compete against existing cancer treatments such as paclitaxel or docetaxel, vincristine, vinorelbine or navelbine and potentially against other novel cancer drug candidates that are currently in development such as those that are reformulated taxanes, other tubulin binding compounds or epothilones. If our cardiovascular drug candidate is approved for marketing by the FDA for acute heart failure, that compound could compete against current generically available therapies, such as milrinone, dobutamine or digoxin or newer drugs such as nesiritide as well as potentially against other novel drug candidates in development such as levosimendan. 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.(1)(2)(3)	76	Director
Michael Schmertzler	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 our company in August 1997 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, the sub-advisor to Credit Suisse First Boston Equity Partners, L.P., a private equity fund, and the Chair of the investment committee. 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 our company in August 1997 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 2005 annual meeting of stockholders. Directors James Spudich and Charles Homcy will be in the class of directors whose initial term expires at the 2006 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 2007 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, A. Grant Heidrich and William J. Rutter 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 currently compensate them for their services as board or committee members. Our board of directors has approved a policy for cash compensation of non-employee directors following the offering. Non-employee directors will receive an annual retainer of $15,000 and $750 for attendance to each board and committee meeting or $500 for each such meeting attended by telephone. The Compensation and the Nominating and Governance Committee chairperson shall receive, in lieu of the per meeting fees described above, $1,500 for attendance in person and $1,000 for attendance by telephone; the Audit Committee chairperson shall receive $2,250 for attendance in person and $1,500 for attendance by telephone. 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 and March 2004, our board of directors and stockholders, respectively, 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 10,000 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 7,500 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

Name and Principal Positions	Year	Annual Compensation ($) Salary	Bonus	Other	Long-Term Compensation Securities Underlying Options (#)	All Other Compensation(7)
James H. Sabry, M.D., Ph.D.,	2003	$ 354,167	$ 86,760	$10,610(2)	75,000(8)	$ 1,031
President and Chief	2002	317,917	71,190	10,610(2)	300,000(9)	660
Executive Officer	2001	277,083	52,500	1,152(2)	—	618
Robert I. Blum,	2003	268,404	210,290	6,248(3)	179,425(10)	604
Executive Vice President,	2002	268,484	42,525	8,987(3)	150,000(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)	54,500(12)	1,239
Senior Vice President,	2002	226,208	34,965	8,935(5)	50,000(13)	1,146
Drug Discovery and Development	2001	192,708	—	8,935(5)	15,000(14)	609
Jay K. Trautman, Ph.D.,	2003	223,333	39,800	—	27,500(15)	736
Vice President, Technology(1)	2002	126,992	60,000	11,506(6)	62,500(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 553,514 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					
Name	Number of Securities Underlying Options Granted	Percent of Total Options Granted to Employees During Period (%)	Exercise Price Per Share ($)	Expiration Date	Potential Realizable Value at Assumed Annual Rates of Stock Appreciation for Option Term ($) 5%	10%
James H. Sabry, M.D., Ph.D.	75,000	13.5%	$ 1.20	5/21/13	1,394,632	2,209,198
Robert I. Blum	37,500	6.8	1.20	5/21/13	697,316	1,104,599
	141,925	25.6	2.00	12/18/13	2,504,912	3,888,397
David J. Morgans, Jr., Ph.D.	54,500	9.9	1.20	5/21/13	1,013,433	1,605,350
Jay K. Trautman, Ph.D.	27,500	5.0	1.20	5/21/13	511,365	810,039

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 $12.00 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.	—	—	687,500(3)	—	7,618,750	—
Robert I. Blum	—	—	441,925(4)	—	4,729,000	—
David J. Morgans, Jr., Ph.D.	17,500	199,850	182,000(5)	—	2,007,350	—
Jay K. Trautman, Ph.D.	30,000	324,000	60,000(6)	—	648,000	—

(1) Based upon the assumed initial public offering price of $12.00 per share less the exercise price per share.

(2) Value is determined by subtracting the exercise price of an option from an assumed $12.00 per share fair market value of our common stock.

(3) If Dr. Sabry's employment with us terminated, 351,771 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, 303,436 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, 98,136 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, 61,406 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 4,416,172 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 2,244,378 shares of our common stock were issued and outstanding, and a total of 1,781,117 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 March 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 1,600,000 shares of our common stock for issuance pursuant to the 2004 Equity Incentive Plan. The 2004 Equity Incentive Plan became effective upon adoption by our board of directors. In addition, the shares reserved for issuance under our 2004 Equity Incentive Plan include 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 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 and ending after our fiscal year beginning in 2009, equal to the lesser of:

- 3.5% of the outstanding shares of common stock on the first day of our fiscal year,
- 1,500,000 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 750,000 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 750,000 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 10,000 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 7,500 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 2014, 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 500,000 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 1,250 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 50 years or older 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-0.5 basis. Our Series D preferred stock is convertible into shares of our common stock on a 1-for-0.5160639 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)(11)	—	—	—	—	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)	250,000	3,750	—	—	—	—	—	—
Robert I. Blum	112,500	22,500	—	—	—	—	—	—
Jay K. Trautman, Ph.D.	30,000		—	—	—	—	—	—
David J. Morgans, Jr., Ph.D.	17,500	10,150	—	—	—	—	—	—
James A. Spudich, Ph.D.(6)	275,000	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)(11)	—	—	—	—	4,210,527	—	2,000,000	30,000,003
William J. Rutter, Ph.D.(10)	3,500	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 (which will convert into an aggregate of 3,690 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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. (which will convert into an aggregate of 1,615,716 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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. (which will convert into an aggregate of 127,235 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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. (which will convert into an aggregate of 755,631 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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. (which will convert into an aggregate of 15,421 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (f) 1,251,900 shares of Series E preferred stock held by Sevin Rosen Fund VII L.P.; (which will convert into an aggregate of 625,950 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); and (g) 48,100 shares of Series E preferred stock held by Sevin Rosen VII Affiliates Fund L.P. (which will convert into an aggregate of 24,050 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split).

(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. (which will convert into 2,227,896 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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. (which will convert into 622,754 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (c) 288,000 shares of Series C preferred stock held by EMA Private Equity Fund 2000, L.P. (which will convert into 144,000 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (d) 217,263 shares of Series C preferred stock held EMA Partners Fund 2000, L.P. (which will convert into 108,631 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); 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 (which will convert into 1,982 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split). 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 (which will convert into 1,876,359 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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 (which will convert into 98,755 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (c) 285,790 shares of Series C preferred stock held by Cell Trust (which will convert into 142,895 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); and (d) 27,410 shares of Series E preferred stock by Cell Trust II (which will convert into 13,705 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split).

(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. (which will convert into 982,891 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); 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 (which will convert into 48,687 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split).

(5) Dr. Sabry purchased his shares of common stock in January 1998, at $0.015 per share. Our right to repurchase those shares lapsed as to all of the shares as of January 2002.

(6) Dr. Spudich purchased 250,000 of his shares of common stock in January 1998, at $0.015 per share, and 25,000 of his shares in June 1999, at $0.20 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 35,000 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 (which will convert into 3,690 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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. (which will convert into 1,615,716 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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. (which will convert into 127,235 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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. (which will convert into 755,631 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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. (which will convert into 15,421 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (f) 1,251,900 shares of Series E preferred stock held by Sevin Rosen Fund VII L.P. (which will convert into 625,950 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); and (g) 48,100 shares of Series E preferred stock held by Sevin Rosen VII Affiliates Fund L.P. (which will convert into 24,050 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split). 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 (which will convert into 1,560,129 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (b) 285,790 shares of Series C preferred stock held by Cell Trust (which will convert into 142,895 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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. (which will convert into 16,643 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (f) 27,410 shares of Series E preferred stock held by Cell Trust II (which will convert into 13,705 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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 (which will convert into 82,112 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (h) 278,499 shares of Series C preferred stock and 353,961 shares of Series E preferred stock held by Mayfield IX, L.P. (which will convert into 316,230 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); 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 (which will convert into 29,040 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split). A. 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. (which will convert into 2,227,896 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (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. (which will convert into 622,754 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (c) 288,000 shares of Series C preferred stock held by EMA Private Equity Fund 2000, L.P. (which will convert into 144,000 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (d) 217,263 shares of Series C preferred stock held EMA Partners Fund 2000, L.P. (which will convert into 108,631 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); 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. (which will convert into 1,982 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split). Michael Schmertzler is a Managing Director of Aries Advisors, LLC, the 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 these shares.

(10) Represents: 344,827 shares of Series B preferred stock (which will convert into 172,413 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split) and 3,500 shares of common stock. Dr. Rutter purchased 3,500 shares of common stock in December 2003 at $0.20 per share. Dr. Rutter subsequently transferred an aggregate of 3,500 shares of common stock. Our right to repurchase those shares lapsed as to all of the shares as of May 2003.

(11) At the completion of the offering, all of these shares, except for shares constituting 4.99% of the outstanding common stock of the Company upon the closing of this offering (after giving effect to the issuance of the shares in this offering and the private placement, including shares issued (if any) at the closing pursuant to exercise of the over-allotment option) of these shares will be deposited in a voting trust having Wells Fargo Bank, N.A. as the trustee. Under the terms of the voting trust agreement, the trustee has the power to vote these shares as it believes in its sole judgment is in the best interests of the stockholders of Cytokinetics. In addition, the trustee is required to vote the shares to prevent the election of more than one CSFB affiliate as a director of Cytokinetics. Each entity which deposits shares will retain the power to remove its shares from the voting trust or sell its shares to third parties so long as the transferee is not affiliated with CSFB or is otherwise considered an eligible transferee under the terms of the voting trust agreement. The voting trust agreement will expire in April 2014 or such earlier time as CSFB ceases to be an affiliate of Cytokinetics.

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 Cytokinetics 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 (which will convert into 1,204,149 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split). 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 December 31, 2003, we have recognized a total of $7.0 million, $3.2 million and $19.7 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 (which will convert into 300,000 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split).

Investment of GlaxoSmithKline in Concurrent Private Placement

In March 2004, Glaxo Group Limited entered into a stock purchase agreement whereby it will purchase 583,333 shares of common stock based on an assumed initial public offering price of $12.00 per share for aggregate cash proceeds of $7.0 million in a private placement to close immediately prior to this offering.

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. At the completion of the offering and the private placement, all of these shares, except for shares constituting 4.99% of the outstanding common stock of the Company upon the closing of this offering (after giving effect to the issuance of the shares in this offering, including shares issued (if any) at the closing pursuant to exercise of the over-allotment option) of these shares will be deposited in a voting trust having Wells Fargo Bank, N.A. as the trustee. Under the terms of the

voting trust agreement, the trustee has the power to vote these shares as it believes in its sole judgment is in the best interests of the stockholders of Cytokinetics. In addition, the trustee is required to vote the shares to prevent the election of more than one CSFB affiliate as a director of Cytokinetics. Each entity which deposits shares will retain the power to remove its shares from the voting trust or sell its shares to third parties so long as the transferee is not affiliated with CSFB or is otherwise considered an eligible transferee under the terms of the voting trust agreement. The voting trust agreement will expire in April 2014 or such earlier time as CSFB ceases to be an affiliate of Cytokinetics.

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 December 31, 2003, the amount of the loan is $150,000, and we made interest payments totaling $8,000, $9,000 and $9,000 in 2001, 2002 and 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 Cytokinetics 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 62,500 shares of Common Stock at an exercise price of $0.20. 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 30,000 shares of our common stock at an exercise price of $1.20. 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 Cytokinetics consulting in the specialized field of drug discovery and development. In exchange for these services, we granted Dr. Homcy an option to purchase 12,500 shares of Common Stock at an exercise price of $1.20 per share. 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 10,000 shares of our common stock at an exercise price of $1.20 per share in connection with his services on our scientific advisory board. Such options vest monthly over a two-year period.

On March 8, 2004, we granted to Dr. James Sabry, Dr. David Morgans and Dr. Jay Trautman options to purchase 86,500, 34,000 and 25,000 shares, respectively, of our common stock under our 2004 Equity Incentive Plan at an exercise price of $6.50 per share. These options were granted and approved at the March 8, 2004 compensation committee meeting.

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 and in the private placement 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 and Private Placement
5% Stockholders			
Entities affiliated with Sevin Rosen Funds(2) Two Galleria Tower 13455 Noel Road Dallas, TX 75240	3,167,694	16.2%	12.2%
Entities affiliated with Credit Suisse First Boston(3)(18) Eleven Madison Ave New York, NY 10010	3,105,263	15.9%	12.0%
Vulcan Ventures, Inc.(17) 505 Union Station, 505 Fifth Ave. South, Suite 900 Seattle, WA 98104	2,314,700	11.9%	8.9%
Entities affiliated with Mayfield(4) 2800 Sand Hill Road Suite 250 Menlo Park, CA 94025	2,131,714	10.9%	8.2%
Glaxo Group Limited Glaxo Wellcome House Berkeley Avenue Greenford Middlesex England UB6 ONN	1,504,149	7.7%	8.1%

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 and Private Placement
Biomedicine, L.P.(17) Cayman National Bldg., 4th Floor Elgin Ave P.O. Box 1790 George Town Grand Cayman Cayman Islands	1,067,331	5.5%	4.1%
Entities affiliated with Alta Biopharma Group(5) One Embarcadero Center Suite 4050 San Francisco, CA 94111	1,031,579	5.3%	4.0%
Executive Officers and Directors			
James H. Sabry, M.D., Ph.D(6)	937,500	4.6%	3.5%
Robert I. Blum(7)	554,425	2.8%	2.1%
David J. Morgans, Jr., Ph.D(8)	199,500	1.0%	*
Jay K. Trautman, Ph.D(9)	90,000	*	*
Stephen Dow(10) Two Galleria Tower 13455 Noel Road Dallas, TX 75240	3,167,694	16.2%	12.2%
A. Grant Heidrich, III(11) Mayfield Fund 2800 Sand Hill Road Suite 250 Menlo Park, CA 94025	2,160,755	11.1%	8.3%
William J. Rutter, Ph.D.(12) One Market Suite 1475 Steuart Tower San Francisco, CA 94105	231,413	1.2%	*
Michael Schmertzler(13)(18) Eleven Madison Ave New York, NY 10010	3,105,263	15.9%	12.0%
James A. Spudich, Ph.D.(14) Stanford School of Medicine Beckman Center Room B405 Stanford, CA 94305-5307	250,000	1.3%	1.0%
Charles Homcy, M.D.(15) Portola Pharmaceuticals 270 East Grand Avenue South San Francisco, CA 94080	42,500	*	*
All directors and named executive officers as a group (10 persons)	10,739,050	51.2%	39.2%

* 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 19,528,836 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) 3,690 shares of common stock held by Sevin Rosen Bayless Management Company; (b) 1,615,716 shares of common stock held by Sevin Rosen VI L.P.; (c) 127,235 shares of common stock held by Sevin Rosen Fund VI Affiliates Fund L.P.; (d) 755,631 shares of common stock held by Sevin Rosen Fund VIII L.P.; (e) 15,421 shares of common stock held by Sevin Rosen VIII Affiliates Fund L.P.; (f) 625,950 shares of common stock held by Sevin Rosen Fund VII L.P.; and (g) 24,050 shares of common stock held by Sevin Rosen VII Affiliates Fund L.P.

(3) Represents: (a) 2,227,896 shares of common stock held by Credit Suisse First Boston Equity Partners, L.P.; (b) 622,754 shares of common stock held by Credit Suisse First Boston Equity Partners (Bermuda), L.P.; (c) 144,000 shares of common stock held by EMA Private Equity Fund 2000, L.P.; (d) 108,631 shares of common stock held EMA Partners Fund 2000, L.P.; and (e) 1,982 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) 1,876,359 shares of common stock held by Mayfield IX; (b) 98,755 shares of common stock held by Mayfield Associates Fund IV, L.P.; (c) 142,895 shares of common stock held by Cell Trust; and (d) 13,705 shares of common stock held by Cell Trust II.

(5) Represents: (a) 982,891 shares of common stock held by Alta BioPharma Partners II, L.P.; and (b) 48,687 shares of common stock held by Alta Embarcadero BioPharma II, LLC. Farah Champsi, Managing Director, has voting and investment power with respect to these shares.

(6) Represents: (a) 250,000 shares of common stock held by Dr. Sabry; and (b) options granted to Dr. Sabry to purchase 687,500 shares of common stock that are immediately exercisable. 341,042 shares underlying the option would remain subject to our repurchase right upon termination of Dr. Sabry's employment.

(7) Represents: (a) 92,500 shares of common stock held by Mr. Blum; (b) 10,000 shares of common stock held by The Brittany Blum 2003 Irrevocable Trust; (c) 10,000 shares of common stock held by The Bridget Blum 2003 Irrevocable Trust; and (d) options granted to Mr. Blum to purchase 441,925 shares of common stock that are immediately exercisable. 298,696 shares underlying the option would remain subject to our repurchase right upon termination of Mr. Blum's employment.

(8) Represents (a) 17,500 shares of common stock held by Dr. Morgans and (b) options granted to Dr. Morgans to purchase 182,000 shares of common stock that underlying the option immediately exercisable. 95,855 shares underlying the option would remain subject to our repurchase right upon termination of Dr. Morgans' employment.

(9) Represents: (a) 60,000 shares of common stock held by Dr. Trautman, 29,531 shares of which are subject to our right of repurchase; and (b) options granted to Dr. Trautman to purchase 30,000 shares of common stock that are immediately exercisable. 30,000 shares underlying the option would remain subject to our repurchase right upon termination of Dr. Trautman's employment.

(10) Represents: (a) 3,690 shares of common stock held by Sevin Rosen Bayless Management Company; (b) 1,615,716 shares of common stock held by Sevin Rosen VI L.P.; (c) 127,235 shares of common stock held by Sevin Rosen Fund VI Affiliates Fund L.P.; (d) 755,631 shares of common stock held by Sevin Rosen Fund VIII L.P.; (e) 15,421 shares of common stock held by Sevin Rosen VIII Affiliates Fund L.P.; (f) 625,950 shares of common stock held by Sevin Rosen Fund VII L.P.; and (g) 24,050 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) 1,876,359 shares of common stock held by Mayfield IX; (b) 98,755 shares of common stock held by Mayfield Associates Fund IV; (c) 142,895 shares of common stock held by Cell Trust; (d) 13,705 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. A. 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) 115,266 shares of common stock owned by the William J. Rutter Revocable Trust; (b) 57,147 shares of common stock held by Rutter Investments, L.P.; and (c) options granted to Dr. Rutter to purchase 59,000 shares of common stock that are immediately exercisable.

(13) Represents: (a) 2,227,896 shares of common stock held by Credit Suisse First Boston Equity Partners, L.P.; (b) 622,754 shares of common stock held by Credit Suisse First Boston Equity Partners (Bermuda), L.P.; (c) 144,000 shares of common stock held by EMA Private Equity Fund 2000, L.P.; (d) 108,631 shares of common stock held EMA Partners Fund 2000, L.P.; and (e) 1,982 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, the 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) 240,000 shares of common stock held by held by Dr. Spudich; and (b) options granted to Dr. Spudich to purchase 10,000 shares of common stock that are immediately exercisable. 1,667 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 42,500 shares of common stock that are immediately exercisable. 28,125 shares underlying the option would remain subject to repurchase right upon termination of Dr. Homcy's employment.

(16) Michael Kranda, Director of Biotechnology Venture Investments, has voting and investment power with respect to these shares.

(17) Philip J. Sutcliffe, Director or International BM Biomedicine Holdings (Cayman) Ltd., the General Partner of Biomedicine, L.P., has voting and investment power with respect to these shares.

(18) At the completion of the offering and the private placement, all of these shares, except for shares constituting 4.99% of the outstanding common stock of the Company upon the closing of this offering (after giving effect to the issuance of the shares in this offering, including shares issued (if any) at the closing pursuant to exercise of the over-allotment option) of these shares will be deposited in a voting trust having Wells Fargo Bank, N.A. as the trustee. Under the terms of the voting trust agreement, the trustee has the power to vote these shares as it believes in its sole judgment is in the best interests of the stockholders of Cytokinetics. In addition, the trustee is required to vote the shares to prevent the election of more than one CSFB affiliate as a director of Cytokinetics. Each entity which deposits shares will retain the power to remove its shares from the voting trust or sell its shares to third parties so long as the transferee is not affiliated with CSFB or is otherwise considered an eligible transferee under the terms of the voting trust agreement. The voting trust agreement will expire in April 2014 or such earlier time as CSFB ceases to be an affiliate of Cytokinetics.

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 17,099,624 shares of common stock, as of January 15, 2004, we had 19,528,836 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 190,991 shares of our capital stock:

- 100,000 shares of our common stock at an exercise price of $0.58 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 33,750 shares of our common stock, at an exercise price of $1.00 per share, terminating 2005;
- 100,000 shares of our Series B preferred stock, which are convertible into 50,000 shares of our common stock, at an exercise price of $2.90 per share, terminating 2006; and

- 14,483 shares of our Series B preferred stock, which are convertible into 7,241 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

Following this offering and the private placement, the holders of 17,099,624 shares of common stock issuable upon conversion of preferred stock, 583,333 shares of common stock sold to an affiliate of GSK based on an assumed initial public offering price of $12.00 per share for aggregate cash proceeds of $7.0 million, and 190,991 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 Mellon Investor Services LLC.

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 and the private placement, we will have outstanding 25,912,169 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 19,528,836 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 7,335,423 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, additional restrictions contained in the GSK private placement purchase agreement, 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:

- 100,000 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 19,645,927 shares that become eligible for sale beginning 180 days after the effective date of this offering;
- an additional 2,896,957 shares that become eligible for sale upon exercise of vested options 90 days after the date of this prospectus and an additional 3,064,450 shares that become eligible for sale upon the exercise of vested options 180 days after the date of this prospectus; and

Following the expiration of the lock-up period, 2,856,856 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 259,121 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 2,186,732 shares of common stock were outstanding. Beginning 90 and 180 days after the effective date of this offering, approximately 2,896,957 shares and 3,064,450 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 and the private placement, the holders of an aggregate of 17,099,624 shares of outstanding common stock, 583,333 shares of common stock sold to an affiliate of GSK for cash proceeds of $7.0 million at a purchase price equal to the assumed initial public offering price of $12.00 per share and 190,991 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	5,800,000

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 870,000 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 870,000 additional shares, and exclude approximately $7,500 to be reimbursed by Cytokinetics of filing fees incident to, and fees and disbursements of counsel for the underwriters in connection with, securing any required review by the National Association of Securities Dealers, Inc. of the terms of the sale of the shares being offered.

	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.

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, the private placement of up to $7.0 million of the Company's common stock issued to an affiliate of GlaxoSmithKline immediately prior to the completion of the offering 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; provided that the recipient of any such shares agrees to be bound by the restrictions described in this paragraph. 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 will be 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.

In connection with the Company's Series C and Series E preferred stock financings, affiliates of Credit Suisse Group purchased an aggregate of 4,210,527 shares of Series C preferred stock and 2,000,000 shares of Series E preferred stock for an aggregate purchase price of $20,000,003 and $10,000,000, respectively (which are convertible into 3,105,263 shares of common stock upon consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split). Because Credit

Suisse First Boston LLC is an underwriter and, as a result of its affiliation with Credit Suisse Group and the Company, the underwriters may be deemed to have a "conflict of interest" under Rule 2720(b)(7) of the Conduct Rules of the National Association of Securities Dealers, Inc. Accordingly, this offering will be made in compliance with the applicable provisions of Rule 2720 of the conduct rules. Rule 2720 requires that the initial public offering price can be no higher than that recommended by a "qualified independent underwriter," as defined by the NASD. Goldman, Sachs & Co. has served in that capacity and performed due diligence investigations and reviewed and participated in the preparation of the registration statement of which this Prospectus forms a part. Goldman, Sachs & Co. has received $10,000 from the Company as compensation for such role.

At the completion of the offering and the private placement, all of the shares held by affiliates of Credit Suisse Group, except for shares constituting 4.99% of the outstanding common stock of the Company upon the closing of this offering (after giving effect to the issuance of the shares in this offering, including additional shares issued (if any) at the closing pursuant to exercise of the underwriters' option described herein) these shares will be deposited in a voting trust having Wells Fargo Bank, N.A. as the trustee. Under the terms of the voting trust agreement, the trustee has the power to vote these shares as it believes in its sole judgment is in the best interests of the stockholders of Cytokinetics. In addition, the trustee is required to vote the shares to prevent the election of more than one CSFB affiliate as a director of Cytokinetics. Each entity which deposits shares will retain the power to remove its shares from the voting trust or sell its shares to third parties so long as the transferee is not affiliated with CSFB or is otherwise considered an eligible transferee under the terms of the voting trust agreement. The voting trust agreement will expire in April 2014 or such earlier time as CSFB ceases to be an affiliate of Cytokinetics.

In addition, CSFB and its affiliates have agreed with the underwriters that any of their shares of the Company's common stock or securities convertible or exchangeable for shares of common stock shall not be sold during the offering, or sold, transferred, assigned pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of effectiveness or commencement of sales of the public offering, except with the prior written consent of the representatives. Therefore, in reliance on Rule 2710(d)(5)(D), any proceeds that CSFB or its affiliates receive following any subsequent disposition of such shares will not be deemed to be "underwriting compensation".

A prospectus in electronic format will 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, 2002 and 2003 and for each of the three years in the period ended December 31, 2003 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)

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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, 2002 and 2003, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2003 and, cumulatively, for the period from August 5, 1997 (date of inception) to December 31, 2003 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 10, 2004, except for Note 13
as to which the date is April 26, 2004

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CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Balance Sheets

(in thousands, except share and per share data)

	December 31,		Pro forma Stockholders' Equity at December 31,
	2002	2003	2003
			(Note 10) (unaudited)
Assets			
Current assets:			
Cash and cash equivalents	$ 16,388	$ 10,991	
Short-term investments	10,425	24,197	
Accounts receivable	8	74	
Related party accounts receivable	8	189	
Prepaids and other current assets	1,117	1,625	
Total current assets	27,946	37,076	
Long-term investments	3,648	7,857	
Property and equipment, net	9,742	8,870	
Related party notes receivable	1,146	1,146	
Restricted cash	13,106	7,199	
Other assets	580	725	
Total assets	$ 56,168	$ 62,873	
Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)			
Current liabilities:			
Accounts payable	$ 1,609	$ 1,589	
Accrued liabilities	2,241	3,060	
Short-term portion of equipment financing lines	2,415	2,008	
Short-term portion of deferred revenue	3,110	2,800	
Total current liabilities	9,375	9,457	
Long-term portion of equipment financing lines	7,077	8,075	
Long-term portion of deferred revenue	7,000	4,200	
Total liabilities	23,452	21,732	
Commitments (Note 7)			
Convertible preferred stock, $0.001 par value:			
Authorized: 37,300,000 shares			
Issued and outstanding: 26,108,859 shares in 2002, 34,124,308 shares in 2003 and none pro forma (unaudited) (Note 10)			
(Liquidation preference: $94,300 in 2002 and $134,377 in 2003)	93,304	133,172	$ —
	93,304	133,172	—
Stockholders' equity (deficit):			
Common stock, $0.001 par value:			
Authorized: 61,500,000 shares			
Issued and outstanding: 1,926,596 shares in 2002, 2,307,258 shares in 2003 and 19,406,882 shares pro forma (unaudited) (Note 10)	2	2	19
Additional paid-in capital	809	5,646	138,801
Deferred stock-based compensation	(50)	(3,651)	(3,651)
Accumulated other comprehensive income	40	46	46

Deficit accumulated during the development stage	(61,389)	(94,074)	(94,074)
Total stockholders' equity (deficit)	(60,588)	(92,031)	$ 41,141
Total liabilities, convertible preferred stock and stockholders' equity (deficit)	$ 56,168	$ 62,873	

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,			Period from August 5, 1997 (date of inception) to December 31,
	2001	2002	2003	2003
Revenues:				
Research and development revenues from related party	$ 6,764	$ 8,470	$ 7,703	$ 22,937
Research and development and grant revenues	302	126	74	502
License revenues from related party	1,400	2,800	2,800	7,000
Total revenues	8,466	11,396	10,577	30,439
Operating expenses:				
Research and development (1)	20,961	28,424	34,004	100,817
General and administrative (1)	5,897	6,953	9,163	28,136
Total operating expenses	26,858	35,377	43,167	128,953
Operating loss	(18,392)	(23,981)	(32,590)	(98,514)
Interest and other income	3,232	2,232	2,395	9,271
Interest and other expense	(714)	(1,331)	(2,490)	(4,831)
Net loss	$(15,874)	$(23,080)	$(32,685)	$ (94,074)
Net loss per share:				
Basic and diluted	$ (11.18)	$ (13.25)	$ (17.10)	
Weighted-average number of shares used in per share calculations:				
Basic and diluted	1,420	1,742	1,911	
Pro forma net loss per share:				
Basic and diluted (unaudited) (Note 10)			$ (1.81)	
Weighted-average number of shares used in pro forma per share calculations:				
Basic and diluted (unaudited) (Note 10)			18,025	
(1) Includes the following stock-based compensation charges:				
Research and development	$ 86	$ 4	$ 609	$ 922
General and administrative	27	2	317	347
	$ 113	$ 6	$ 926	$ 1,269

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

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Statements of Stockholders' Deficit

(in thousands, except share and per share data)

	Common Stock		Additional Paid-In	Deferred Stock-Based	Accumulated Other Comprehensive	Deficit Accumulated During the Development	Total Stockholders'
	Shares	Amount	Capital	Compensation	Income (Loss)	Stage	Deficit
Issuance of common stock upon exercise of stock options for cash at $0.015 per share	147,625	$ —	$ 2	$ —	$ —	$ —	$ 2
Issuance of common stock to founders at $0.015 per share in exchange for cash in January 1998	563,054	1	7	—	—	—	8
Net loss	—	—	—	—	—	(2,015)	(2,015)
Balances, December 31, 1998.	710,679	1	9	—	—	(2,015)	(2,005)
Issuance of common stock upon exercise of stock options for cash at $0.015-$0.58 per share	287,500	—	69	—	—	—	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	998,179	1	356	(114)	(8)	(9,356)	(9,121)
Issuance of common stock upon exercise of stock options for cash at $0.015-$0.58 per share	731,661	1	194	—	—	—	195
Deferred stock-based compensation	—	—	93	(93)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	101	—	—	101
Components of comprehensive loss:							
Net change in unrealized gain (loss) on investments	—	—	—	—	86	—	86
Net loss	—	—	—	—	—	(13,079)	(13,079)
Total comprehensive loss	—	—	—	—	—	—	(12,993)
Balances, December 31, 2000	1,729,840	2	643	(106)	78	(22,435)	(21,818)
Issuance of common stock upon exercise of stock options for cash at $0.015-$1.20 per share	102,480	—	56	—	—	—	56
Repurchase of common stock	(33,334)	—	(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	1,798,986	2	745	(58)	268	(38,309)	(37,352)
Issuance of common stock upon exercise of stock options for cash at $0.015-$1.20 per share	131,189	—	68	—	—	—	68
Repurchase of common stock	(3,579)	—	(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	1,926,596	2	809	(50)	40	(61,389)	(60,588)
Issuance of common stock upon exercise of stock options for cash at $0.20-$1.20 per share	380,662	—	310	—	—	—	310
Stock-based compensation	—	—	158	—	—	—	158
Deferred stock-based compensation	—	—	4,369	(4,369)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	768	—	—	768
Components of comprehensive loss:							
Net change in unrealized gain on investments	—	—	—	—	6	—	6
Net loss	—	—	—	—	—	(32,685)	(32,685)
Total comprehensive loss	—	—	—	—	—	—	(32,679)
Balances, December 31, 2003	2,307,258	$ 2	$ 5,646	$ (3,651)	$ 46	$ (94,074)	$ (92,031)

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

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CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Statements of Cash Flows

(in thousands)

	Years Ended December 31,			Period from August 5, 1997 (date of inception) to December 31,
	2001	2002	2003	2003
Cash flows from operating activities:				
Net loss	$(15,874)	$(23,080)	$(32,685)	$ (94,074)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	1,614	2,849	3,181	8,895
Loss on disposal of equipment	156	14	224	394
Gain on sale of investments	(84)	—	—	(84)
Allowance for doubtful accounts	386	(195)	—	191
Non-cash expense related to warrants issued for equipment financing lines and facility lease	7	7	—	41
Non-cash interest expense	—	—	59	59
Non-cash compensation expense for acceleration of options	20	—	—	20
Stock-based compensation	93	6	926	1,249
Changes in operating assets and liabilities:				
Accounts receivable	—	—	(66)	(74)
Related party accounts receivable	(1,261)	1,054	(181)	(380)
Prepaids and other assets	(444)	(342)	(33)	(1,150)
Accounts payable	1,280	(1,173)	498	1,589
Accrued liabilities	132	1,222	819	3,060
Other assets	(406)	(175)	(145)	(725)
Deferred revenue	12,600	(2,490)	(3,110)	7,000
Net cash used in operating activities	(1,781)	(22,303)	(30,513)	(73,989)
Cash flows from investing activities:				
(Increase) decrease in restricted cash	(6,011)	(6,870)	5,907	(7,199)
Purchases of property and equipment	(3,808)	(6,570)	(3,051)	(18,183)
Proceeds from sale of equipment	24	—	—	24
Issuance of notes receivable	(200)	(750)	—	(1,146)
Purchases of investments	(65,422)	—	(54,971)	(171,231)
Proceeds from sales and maturities of investments	51,889	36,768	36,995	139,307
Net cash provided by (used in) investing activities	(23,528)	22,578	(15,120)	(58,428)
Cash flows from financing activities:				
Proceeds from issuance of preferred stock, net of issuance costs	13,842	(50)	39,868	133,172
Proceeds from issuance of common stock	56	68	310	708
Repurchase of common stock	(19)	(2)	—	(21)
Proceeds from equipment financing lines	3,545	6,373	1,971	13,802
Repayment of equipment financing lines	(396)	(1,520)	(1,913)	(4,253)
Net cash provided by financing activities	17,028	4,869	40,236	143,408
Net increase (decrease) in cash and cash equivalents	(8,281)	5,144	(5,397)	10,991
Cash and cash equivalents, beginning of period	19,525	11,244	16,388	—
Cash and cash equivalents, end of period	$ 11,244	$ 16,388	$ 10,991	$ 10,991
Supplemental disclosure of cash flow information:				
Cash paid for interest	$ 180	$ 697	$ 833	$ 1,709

Cash paid for taxes	$ 6	$ 63	$ 15	$ 84
Supplemental disclosure of significant non-cash investing and financing activities:				
Deferred stock-based compensation	$ 45	$ (2)	$ 4,369	$ 4,742
Purchases of property and equipment through accounts payable	$ 2,502	$ 518	$ —	$ 3,020
Penalty on restructuring of equipment financing lines	$ —	$ —	$ 475	$ 475

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

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Notes to 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. The Company has been primarily engaged in conducting research, developing drug candidates and product technologies, recruiting personnel and raising capital.

Note 2 — Summary of Significant Accounting Policies:

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% of the Company's revenues for the year ended December 31, 2001 and 99% of the Company's revenues for both the years ended December 31, 2002 and 2003 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

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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, 2003, 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.

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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,		
	2001	2002	2003
Numerator:			
Net loss	$(15,874)	$(23,080)	$(32,685)
Denominator:			
Weighted-average number of common shares outstanding	1,766	1,877	1,978
Less: Weighted-average shares subject to repurchase	(346)	(135)	(67)
Weighted-average number of common shares outstanding used in computing basic and diluted net loss per share	1,420	1,742	1,911

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Notes to Financial Statements — (Continued)

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,		
	2001	2002	2003
Convertible preferred stock (as if converted)	13,092	13,092	17,100
Options to purchase common stock	1,412	2,061	2,244
Common stock subject to repurchase	216	89	144
Warrants to purchase common stock	100	100	100
Warrants to purchase convertible preferred stock (as if converted)	84	84	91
	14,904	15,426	19,679

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.

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Notes to Financial Statements — (Continued)

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,		
	2001	2002	2003
Net loss, as reported	$(15,874)	$(23,080)	$(32,685)
Add: Stock-based employee compensation expense included in reported net loss	20	—	536
Deduct: Total stock-based employee compensation determined under fair value based method for all awards	(88)	(79)	(619)
Adjusted net loss	$(15,942)	$(23,159)	$(32,768)
Net loss per common share, basic and diluted:			
As reported	$ (11.18)	$ (13.25)	$ (17.10)
Adjusted	$ (11.23)	$ (13.29)	$ (17.15)

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,		
	2001	2002	2003
Risk-free interest rate	6.33%	2.78%	2.80%
Expected life (in years)	5	5	5
Dividend yield	0.00%	0.00%	0.00%

Based on the above assumptions, the weighted average estimated minimum values of options granted were $0.30, $0.53 and $4.67 per share for the years ended December 31, 2001, 2002 and 2003, 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

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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, 2002 and 2003 are as follows (in thousands):

	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	

	December 31, 2003				
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Maturity Dates
US Corporate Bonds	$24,182	$ 16	$ (1)	$24,197	1/04 - 8/04
Total short-term investments	24,182	16	(1)	24,197	
US Corporate Bonds	7,826	31	—	7,857	7/05 - 8/05
Total long-term investments	$ 7,826	$ 31	$ —	$ 7,857	

There were no realized gains or losses in 2002 or 2003.

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Notes to Financial Statements — (Continued)

Note 4 — Balance Sheet Components (in thousands):

	December 31,	
	2002	2003
Property and equipment, net:		
Computer and laboratory equipment	$13,830	$15,531
Furniture and fixtures	387	246
Leasehold improvements	982	823
	15,199	16,600
Less: Accumulated depreciation and amortization	(5,457)	(7,730)
	$ 9,742	$ 8,870

	December 31,	
	2002	2003
Accrued liabilities:		
Payroll related	$ 928	$1,348
Consulting and professional fees	452	464
Other accrued expenses	861	1,248
	$2,241	$3,060

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 2001, 2002 and 2003, $125,000, $56,000 and $45,000 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 year ended December 31, 2001, $1,400,000 was recognized as license revenue under this agreement and for each of the years ended December 31, 2002 and 2003, $2,800,000 has been recognized as license revenue under this agreement. At December 31, 2002 and 2003, license revenue of $9,800,000 and $7,000,000, respectively, was deferred. The Company also received and recognized as revenue $2,000,000, $1,000,000 and $200,000 in performance milestone payments and $4,764,000, $7,470,000 and $7,488,000 in FTE and other reimbursements for the years ended December 31, 2001, 2002 and 2003 respectively, as no ongoing performance obligations exist.

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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 2002 the Company extended loans totaling $650,000 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. The Company did not extend any loans to executives or employees of the Company in 2001 or 2003. At December 31, 2003, $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, 2003, the amount of the loan is $150,000, and the Company made interest payments totaling $8,000, $9,000 and $9,000 in 2001, 2002 and 2003 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 connection with this line the Company issued warrants (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 connection with this line, the Company issued warrants (Note 8).

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 (Note 7).

In July 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 (Note 7).

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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 of $614,000 on the $7,500,000 line of credit with an effective interest rate of 4.25% and a term of 60 months. In connection with this line, the Company is obligated to maintain a security deposit as collateral (Note 7).

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

2004	$ 2,008
2005	1,933
2006	2,017
2007	2,104
2008	2,021
Total minimum principal payments	$10,083

Note 7 — Commitments:

Leases

The Company leases office space and equipment under noncancelable operating leases with various expiration dates through 2013. Rent expense was $2,250,000, $2,220,000, $2,200,100 and $8,450,500 for the years ended December 31, 2001, 2002 and 2003, and for the period from August 5, 1997 (date of inception) through December 31, 2003, 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
2004	$ 1,689
2005	1,656
2006	1,552
2007	1,598
2008 through end of lease	8,698
	$ 15,193

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

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headcount. During 2003, the Company changed credit card issuers and this collateral is no longer required.

The Company also had a restricted certificate of deposit in the amount of $150,000 during 2003 and 2002 (see Note 5) pledged as collateral on a loan.

In 2001, the Company purchased a $6,000,000 certificate of deposit to collateralize 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 collateralize 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 was included in restricted cash. Due to debt restructuring during 2003, this certificate of deposit is no longer required.

The Company further pledged $7,500,000 of its investment account in July 2002 to collateralize 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 was included in restricted cash. Due to debt restructuring during 2003, this certificate of deposit is no longer required.

In October 2003, the Company entered into a debt restructure with GE Capital (Note 6). Per the terms of the Security Pledge agreements, the Company was required to pledge $7,049,000, which is included in restricted cash at December 31, 2003.

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 $39,868,000.

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Notes to Financial Statements — (Continued)

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 December 31, 2003, 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
Series E	10,000,000	8,015,449	39,868	$ 5.00	$ 0.50
	37,300,000	34,124,308	$ 133,172		

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, 2003.

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 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

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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. A change of control or sale of substantially all of the assets of the Company is considered to be a liquidation event; accordingly, the Convertible Preferred Stock is considered redeemable under generally accepted accounting principles and therefore classified as temporary equity.

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 17,099,624 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. As of December 31, 2003 the Company has issued 8,015,449 shares of Series E Convertible Preferred Stock for consideration of $5.00 per share.

As of December 31, 2003 each share of Series A, Series B, Series C and Series E Convertible Preferred stock is convertible into common stock on a 2-for-1 basis and each share of Series D Convertible Preferred Stock is convertible into common stock on a 1.94-for-1 basis.

Warrants for Convertible Preferred Stock

In connection with an equipment line of credit, the Company issued a warrant 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

CYTOKINETICS, INCORPORATED
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Notes to Financial Statements — (Continued)

$7,000, $7,000, none and $30,000 for the years ended December 31, 2001, 2002, 2003 and for the period from August 5, 1997 (date of inception) through December 31, 2003, respectively.

In connection with obtaining Series B Convertible Preferred Stock financing in August 1999, the Company agreed to issue warrants to purchase Series B Convertible Preferred Stock at $2.90 per share. The Company determined in July 2001 that the number of shares issuable under the warrant was 100,000 shares. The warrant was 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 warrant relates to preferred stock issuance costs, the valuation was recorded as an issuance cost as an offset to Convertible Preferred Stock.

In connection with an equipment line of credit, the Company issued a warrant to purchase shares of Series B Convertible Preferred Stock at $2.90 per share. The Company determined in February 2004 that the number of shares issuable under the warrant is 14,483 shares. The value of the warrant was calculated using the Black-Scholes pricing model and was deemed insignificant.

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 this warrant remained exercisable for shares of Convertible Preferred Stock.

Note 9 — Stockholders' Deficit:

Common Stock

The Company's Certificate 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 at the original purchase price of the stock 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, 2003, 144,327 shares had been exercised under the employee stock option plan and are subject to repurchase. At December 31, 2003, in accordance with the provisions of EITF Issue No. 00-23 "Issues Related to the Accounting for Stock Compensation under APB 25 and FIN 44," the Company recorded the refundable exercise price related to the unvested shares which are subject to repurchase as a liability of $95,000.

In connection with the building lease, the Company issued warrants to purchase 100,000 shares of Common Stock for $0.58 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 $11,000 from August 5, 1997 (date of inception) through December 31, 2003.

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 4,416,172 shares of Common Stock for issuance under the Plan.

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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	1,461,945	—	$ —
Options granted	(833,194)	833,194	0.10
Options exercised	—	(147,625)	0.015
Options canceled	—	—	—
Balances at December 31, 1998	628,751	685,569	0.12
Options granted	(582,750)	582,750	0.39
Options exercised	—	(287,500)	0.24
Options canceled	50,625	(50,625)	0.20
Balances at December 31, 1999	96,626	930,194	0.25
Increase in authorized shares	1,704,227	—	—
Options granted	(967,500)	967,500	0.58
Options exercised	—	(731,661)	0.27
Options canceled	68,845	(68,845)	0.30
Balances at December 31, 2000	902,198	1,097,188	0.52
Options granted	(525,954)	525,954	1.12
Options exercised	—	(102,480)	0.55
Options canceled	109,158	(109,158)	0.67
Balances at December 31, 2001	485,402	1,411,504	0.73
Increase in authorized shares	1,250,000	—	
Options granted	(932,612)	932,612	1.20
Options exercised	—	(131,189)	0.64
Options canceled	152,326	(152,326)	0.78
Balances at December 31, 2002	955,116	2,060,601	0.95
Options granted	(613,764)	613,764	1.39
Options exercised	—	(380,662)	1.02
Options canceled	49,325	(49,325)	0.89
Balances at December 31, 2003	390,677	2,244,378	1.06

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Notes to Financial Statements — (Continued)

The options outstanding and currently exercisable by exercise price at December 31, 2003 are as follows:

	Options Outstanding at December 31, 2003		
Exercise Price	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Number Vested
$0.20	72,250	5.56	72,250
$0.58	560,375	6.69	406,235
$1.00	85,244	7.12	61,010
$1.20	1,384,584	8.67	448,781
$2.00	141,925	9.96	—
	2,244,378		988,276

As of December 31, 2003 the weighted average exercise price of outstanding, exercisable and vested options was $1.06 per share. As of December 31, 2002, there were 704,781 options outstanding, exercisable and vested at a weighted average exercise price of $0.74 per share.

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 year ended December 31, 2003, the Company recorded deferred stock compensation in the amount of $4.0 million. During the year ended December 31, 2003, the Company recorded amortization of stock-based compensation of $536,000 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.

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Notes to Financial Statements — (Continued)

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:

	Years Ended December 31,	
	2002	2003
Risk-free interest rate	4.48%	3.35%
Expected life (in years)	10	10
Dividend yield	0.00%	0.00%
Volatility	70%	70%

Based on the above assumptions, the weighted average fair values of options granted were $4.13 and $6.96 per share for the years ended December 31, 2002 and 2003, respectively. There were no options granted to non-employees in 2001.

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 December 31, 2003, the Company has recorded $736,000 of deferred stock-based compensation related to options granted to non-employees. In connection with the grant of stock options to non-employees, the Company has recorded $93,000, $6,000 and $390,000 of stock-based compensation expense in 2001, 2002 and 2003, respectively, and $713,000 for the period from August 5, 1997 (date of inception) through December 31, 2003.

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

The pro forma common shares outstanding at December 31, 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 year ended December 31, 2003 reflect the automatic conversion of all shares of convertible preferred stock outstanding into 17,099,624 shares of common stock as if such conversion had occurred on January 1, 2003 or the date of issuance, if later, in connection with the Company's contemplated initial public offering.

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Notes to Financial Statements — (Continued)

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, 2003
Numerator:	
Net loss	$(32,685)
Denominator:	
Weighted-average number of shares outstanding used in computing basic net loss per share	1,911
Adjustments to reflect the effect of the assumed conversion of the preferred stock from the date of issuance	16,114
Weighted-average number of shares used in computing basic and diluted pro forma net income per share	18,025

Note 11 — Employee Benefit Plans:

The Company sponsors a 401(k) defined contribution plan covering all employees. There were no employer contributions in 2001, 2002 or 2003.

Note 12 — Taxes:

The Company did not record an income tax provision in the years ended December 31, 2001, 2002 and 2003 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, 2002	December 31, 2003
Deferred tax assets:		
Fixed assets	$ 1,814	$ 997
Reserves and accruals	6,333	5,166
Net operating loss carryforwards	16,119	29,829
Research and development credits	3,658	6,079
	27,924	42,071
Less: Valuation allowance	(27,924)	(42,071)
	$ —	$ —

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 $81.0 million and $36.8 million at December 31, 2003. The federal and state operating loss carryforwards expire in 2018 and 2008, respectively, if not utilized.

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Notes to Financial Statements — (Continued)

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:

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 1,600,000 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:

- 1,500,000 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. 500,000 shares of common stock were reserved for issuance pursuant to the Purchase Plan.

Stock Split

On March 9, 2004, the Company's Board of Directors approved a one-for-two reverse stock split of the Company's common stock (the "reverse stock split"). Stockholder approval of the reverse stock split was obtained on March 10, 2004. The Company effected the reverse stock split on April 26, 2004. All share and per share amounts for the Company's common stock for all periods

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Notes to Financial Statements — (Continued)

presented in the accompanying financial statements have been retroactively adjusted to give effect to the reverse stock split.

Restricted stock agreement

On March 10, 2004, the Company entered into an agreement to sell $7,000,000 of restricted common stock to an affiliate of GSK upon the completion of the initial public offering at a per share price equal to the per share initial public offering price.

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.

5,800,000 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	9,125.00
Nasdaq National Market Listing Fee	100,000.00
Printing Costs	275,000.00
Legal Fees and Expenses	750,000.00
Accounting Fees and Expenses	500,000.00
Blue Sky Fees and Expenses	10,000.00
Transfer Agent and Registrar Fees	25,000.00
Miscellaneous	200,000.00
Total	$1,666,102.63

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 (which will convert into 1,204,149 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split).

(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 (which will convert into 4,007,722 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split).

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 2,136,644 shares of our common stock at prices ranging from $1.00 to $2.00 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 736,285 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 $671,460.

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
1.1†	Form of Underwriting Agreement.
3.1†	Form of Amended and Restated Certificate of Incorporation of the Registrant to be filed after the closing of the offering made under this Registration Statement.
3.2†	Form of Amended and Restated 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†	Loan and Security Agreement, dated September 25, 1998, by and between the Registrant and Comdisco.
4.4†	Amendment No. One to Loan and Security Agreement, dated February 1, 1999.
4.5†	Warrant for the purchase of shares of Series A preferred stock, dated September 25, 1998, issued by the Registrant to Comdisco.
4.6†	Loan and Security Agreement, dated December 16, 1999, by and between the Registrant and Comdisco
4.7†	Amendment No. 1 to Loan and Security Agreement, dated June 29, 2000, by and between the Registrant and Comdisco.
4.8†	Warrant for the purchase of shares of Series B preferred stock, dated December 16, 1999, issued by the Registrant to Comdisco.
4.9†	Master Security Agreement, dated February 2, 2001, by and between the Registrant and General Electric Capital Corporation.
4.10†	Cross-Collateral and Cross-Default Agreement by and between the Registrant and Comdisco.
4.11†	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to Bristow Investments, L.P.
4.12†	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.
4.13†	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to Slough Estates USA Inc.

Exhibit Number	Description
4.14†	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.
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.
10.24(1)†	Letter Amendment to Collaboration Agreement, dated July 28, 2003, by and between the Registrant and Glaxo Group Limited.

Exhibit Number	Description
10.25(1)†	Letter Amendment to Collaboration Agreement, dated July 28, 2003, by and between the Registrant and Glaxo Group Limited.
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 Board of Trustees of the Leland Stanford Junior University, The Regents of the University of California, 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.
10.35†	David J. Morgans and Sandra Morgans Promissory Note, dated October 18, 2000.
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10.40†	Robert I. Blum 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.
10.45†	Common Stock Purchase Agreement, dated March 10, 2004, by and between the Registrant and Glaxo Group Limited.
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 10, 2004, except for Note 13, as to which the date is April 26, 2004, appearing in Amendment No. 3 to the Registration Statement on Form S-1 of Cytokinetics, Incorporated also included an audit of the Schedule II, Valuation and Qualifying Accounts, in 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 10, 2004

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, 2001	$ —	$ 386	$ —	$ 386
Year ended December 31, 2002	386	(195)	(191)	—
Year ended December 31, 2003	$ —	$ —	$ —	$ —

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 April 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

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)*	April 27, 2004
/s/ ROBERT I. BLUM Robert I. Blum	Executive Vice President, Finance & Corporate Development and Chief Financial Officer *(Principal Financial and Accounting Officer)*	April 27, 2004
* Stephen Dow	Director	April 27, 2004
* A. Grant Heidrich, III	Director	April 27, 2004
* Charles Homcy, M.D.	Director	April 27, 2004
* William J. Rutter, Ph.D.	Director	April 27, 2004
* Michael Schmertzler	Director	April 27, 2004
* James A. Spudich, Ph.D.	Director	April 27, 2004
By: /s/ JAMES H. SABRY, M.D., PH.D. James H. Sabry, M.D., Ph.D. Attorney-in-Fact		

Table of Contents

EXHIBIT INDEX

Exhibit Number	Description
1.1†	Form of Underwriting Agreement.
3.1†	Form of Amended and Restated Certificate of Incorporation of the Registrant to be filed after the closing of the offering made under this Registration Statement.
3.2†	Form of Amended and Restated 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†	Loan and Security Agreement, dated September 25, 1998, by and between the Registrant and Comdisco.
4.4†	Amendment No. One to Loan and Security Agreement, dated February 1, 1999
4.5†	Warrant for the purchase of shares of Series A preferred stock, dated September 25, 1998, issued by the Registrant to Comdisco.
4.6†	Loan and Security Agreement, dated December 16, 1999, by and between the Registrant and Comdisco
4.7†	Amendment No. 1 to Loan and Security Agreement, dated June 29, 2000, by and between the Registrant and Comdisco.
4.8†	Warrant for the purchase of shares of Series B preferred stock, dated December 16, 1999, issued by the Registrant to Comdisco.
4.9†	Master Security Agreement, dated February 2, 2001, by and between the Registrant and General Electric Capital Corporation.
4.10†	Cross-Collateral and Cross-Default Agreement by and between the Registrant and Comdisco.
4.11†	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to Bristow Investments, L.P.
4.12†	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.
4.13†	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to Slough Estates USA Inc.
4.14†	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.
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.

Exhibit Number	Description
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.
10.24(1)†	Letter Amendment to Collaboration Agreement, dated July 28, 2003, by and between the Registrant and Glaxo Group Limited.
10.25(1)†	Letter Amendment to Collaboration Agreement, dated July 28, 2003, by and between the Registrant and Glaxo Group Limited.
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 Board of Trustees of the Leland Stanford Junior University, The Regents of the University of California 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.

Exhibit Number	Description
10.31(1)	Collaboration Agreement, dated December 28, 2001, by and between Exelixis, Inc. and the Registrant.
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* 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.

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EXHIBIT 4.1

COMMON STOCK

NUMBER

CYTK

COMMON STOCK

SHARES

THIS CERTIFICATE IS TRANSFERABLE IN NEW YORK, N.Y. AND RIDGEFIELD PARK, N.J.

SEE REVERSE FOR CERTAIN DEFINITIONS AND A STATEMENT AS TO THE RIGHTS, PREFERENCES, PRIVILEGES AND RESTRICTIONS ON TRANSFER

CUSIP 23282W 10 0

(CYTOKENETICS LOGO)

INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

THIS CERTIFIES THAT

IS THE RECORD HOLDER OF

FULLY PAID AND NONASSESSABLE SHARES OF COMMON STOCK, $.001 PAR VALUE, OF

---------- CYTOKINETICS, INCORPORATED ----------

transferable on the books of the Corporation by the holder hereof in person or by duly authorized attorney upon surrender of this certificate properly endorsed. This certificate is not valid until countersigned and registered by the Transfer Agent and Registrar.

WITNESS the facsimile seal of the Corporation and the facsimile signatures of its duly authorized officers.

Dated:

/s/ Robert Blum
SECRETARY

/s/ James Sabry
PRESIDENT

(CYTOKINETICS CORPORATE SEAL)

COUNTERSIGNED AND REGISTERED:
MELLON INVESTOR SERVICES LLC
TRANSFER AGENT AND REGISTRAR BY

AUTHORIZED SIGNATURE

CYTOKINETICS, INCORPORATED

The Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and 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. Such requests shall be made to the Corporation's Secretary at the principal office of the Corporation.

KEEP THIS CERTIFICATE IN A SAFE PLACE, IF IT IS LOST, STOLEN, OR DESTROYED THE CORPORATION WILL REQUIRE A BOND OF INDEMNITY AS A CONDITION TO THE ISSUANCE OF A REPLACEMENT CERTIFICATE.

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM- as tenants in common
TEN ENT- as tenants by the entireties
JT TEN- as joint tenants with right of survivorship and not as tenants in common

UNIF GIFT MIN ACT- _____ (Cust) Custodian _____ (Minor)
under Uniform Gifts to Minors Act

(State)

UNIF TRF MIN ACT- Custodian (until age)

(Cust)
under Uniform Transfers

(Minor)
to Minors Act

(State)

Additional abbreviations may also be used though not in the above list.

FOR VALUE RECEIVED, hereby sell, assign
---
and transfer unto

PLEASE INSERT SOCIAL SECURITY OR
OTHER IDENTIFYING NUMBER OF ASSIGNEE

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING ZIP CODE, OF ASSIGNEE)

Shares
---
of the common stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

Attorney
---
to transfer the said stock on the books of the within named Corporation with full power of substitution in the premises.

Dated X

X

NOTICE: THE SIGNATURE(S) TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME(s) AS WRITTEN UPON THE FACE OF THE CERTIFICATE IN EVERY PARTICULAR, WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATEVER.

Signature(s) Guaranteed

By

THE SIGNATURE(S) MUST BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (BANKS, STOCKBROKERS, SAVINGS AND LOAN ASSOCIATIONS AND CREDIT UNIONS WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM), PURSUANT TO S.E.C. RULE 17Ad-15.

EXHIBIT 10.17

[*] 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).

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:

* 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.

ARTICLE I - DEFINITIONS

The following terms shall have the following meanings as used in this

Agreement:

1.1 "ABANDONED PRODUCT" shall have the meaning ascribed to it in Section 4.5.4.

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 reasonably necessary or useful 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.

(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 May 18, 2000, 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 May 18, 2000, 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.

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.

(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 first anniversary of the end of the Research Term and any extensions thereto under Section 2.8.

1.26 "EXTENSION PERIOD" shall mean a one-year 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

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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 reasonably necessary for the discovery, development, manufacture, use or sale of Compounds, Development Compounds, Licensed Products, or (ii) GSK has utilized or incorporated 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 as reasonably necessary for the discovery, development, manufacture, use or sale of such CK Compound or CK Product, or (y) used or applied 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 applied to a Compound prior to its becoming a CK Compound shall not later become GSK Existing Technology with respect to such CK Compound (or a CK Product incorporating such CK Compound) regardless of whether such GSK drug delivery technology is reasonably necessary 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 May 18, 2000, 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, toxicological 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 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 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;

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(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.

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 one (1) 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

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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.

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

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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 Party 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;

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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 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 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.

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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 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

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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 GSK, the Research Plan may not at any time require more than [*] ([*]) CK FTEs performing synthetic and analytical chemistry.

2.6.4 Gene Therapy; Antisense. During Contract Year One, CK and GSK shall discuss a broadening of the Research Plan to include activities specifically directed at the discovery and development of Gene Therapy Products and/or Antisense Products 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,

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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 first anniversary of the Effective Date, then the Research Plan shall be modified as so agreed, Gene Therapy Products and Antisense Products 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 first anniversary 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 Gene Therapy Products and Antisense Products for any therapeutic purpose, and shall also exclude any diagnostic product for use in connection with such Gene Therapy Products or Antisense Products.

(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.

(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).

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(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.

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

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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
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]

(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.

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(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 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

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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 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 three (3) 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,

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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 three (3) additional [*] periods beyond Contract Year Five, provided GSK has 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

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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 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) shall be owned by GSK, 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

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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 "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

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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 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 the date paid by CK. GSK agrees to keep CK informed on

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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 greater than [*] 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.

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

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[*] 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).

(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 [*] costs 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.

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(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 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

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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, GSK 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 [*].

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.

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(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 second anniversary of the expiration of the Exclusivity Period, or in the case of a Collaboration Target that was an Extended Target, before the second anniversary of the end of the Extension Period for such

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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 Extendable Unselected Target (as described in paragraph (e) below), on a Target-by-Target basis for up to an additional two (2) 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 one-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 one (1) 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 [*]

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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 two (2) 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 Targets for a single one-year 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 three (3) 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 fund [*] 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

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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.

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, GSK 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 reasonable 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) to the extent reasonably transferable and specifically developed or used 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 disclosures and transfers 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 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

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transition and uninterrupted research and development of CK Targets, CK Compounds or CK Products. CK shall promptly reimburse GSK's [*] costs with respect to activities and materials provided by GSK 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 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 thirteenth 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

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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:

(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 [*] 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

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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.

(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

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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 may be, in each case if such royalties had not been adjusted under Section 4.5.2(b) above.

(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

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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 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 JDC.

(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 Abandoned 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 Abandoned Products. For

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such purposes, "Abandoned 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 other than (i) under Section [*] or (ii) by reason of [*] failure to [*] a Development Compound for such Target within the time period specified in Section [*] 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. 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).

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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 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

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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 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 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);

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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:

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

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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 Party 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.

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

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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"):

	MILESTONE	CASH PAYMENT (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 [*].

(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:

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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 [*], 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.

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(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 [*] 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

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[*], 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 [*] percent ([*]%),

(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.

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

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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.

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 [*]

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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 [*] 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 [*]:

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TOTAL ANNUAL NET SALES	NO CO-FUNDING	[*]% CO-FUNDING	[*]% CO-FUNDING
< $[*]	[*]%	[*]%	[*]%
$[*] - $[*]	[*]%	[*]%	[*]%
> $[*]	[*]%	[*]%	[*]%

(b) For Licensed Products that [*]:

TOTAL ANNUAL NET SALES	NO CO-FUNDING	[*]% CO-FUNDING	[*]% CO-FUNDING
< $[*]	[*]%	[*]%	[*]%
$[*] - $[*]	[*]%	[*]%	[*]%
> $[*]	[*]%	[*]%	[*]%

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.

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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 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

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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 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.

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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-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 [*] 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 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 [*]

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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 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

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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 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

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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. Each Party shall be responsible for costs associated with the Prosecution and Maintenance of such Patents within the Collaboration Technology or Post-Collaboration Technology that it owns solely. 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 Patent Costs 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.

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

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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.

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.

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(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 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:

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(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 May 18, 2000 (including amendments) and the Materials Transfer Agreement between the Parties dated May 18, 2000, 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

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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 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

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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.

(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) fifteen (15) 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 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 six (6) 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 six (6) 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 11.3.2 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 six (6) 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 sixty (60) 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.

11.5 Intentionally left blank.

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 May 18, 2000, 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 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:

(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.

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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 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 FDA (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.

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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 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 JDC, 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

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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 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 State of New York, 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:

(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 Section [*] 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 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.

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(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.

(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

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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

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

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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: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

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

[*]

* 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 4.5.1

CLINICAL REPORT FORM

[*]

* 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

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

[*]

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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 10.30

[*] 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

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.

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,

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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.

1.43 "PROSCRIBED COMPOUND" means:

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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;

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);

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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 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

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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.

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.

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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 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.

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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 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.

* 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.

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, 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,

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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 five (5) 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 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.

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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 (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.

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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 [*] which could have application in or out of the Field so long as such [*] are not used in the Field. 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 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

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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

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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 [*] 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 attempt to determine the chemical structure of, or otherwise characterize, 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

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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 attempt to determine the chemical structure of, or otherwise characterize, 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.

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.

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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).

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,

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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 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.

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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 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.

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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 (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

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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 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;

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(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

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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.

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

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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 twelve (12) months following payment by AZ of the tenth (10th) 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 sixth (6th) through tenth (10th) 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 SIXTH YEAR OF THE FULL LICENSE TERM. At any time after the Research Term and prior to the sixth 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.

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.]

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(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.

(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.

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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;

(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.

10.3 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 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.

* 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.

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.

[The remainder of this page left intentionally blank]

IN WITNESS WHEREOF, this Agreement is executed by the authorized representatives of the Parties as of the Effective Date.

ASTRAZENECA AB	CYTOKINETICS, INC.
By: _____	By: _____
Name: Jan Lundberg	Name: Robert I. Blum
Title: Executive Vice President, Discovery Research	Title: Senior Vice President, Finance and Corporate Development, and CFO

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.

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	[*]	[*]	[*]		[*]
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1036A	[*]	[*]	[*]		Pending
1036.1EP	[*]	[*]	[*]		Pending
1036.1GB	[*]	[*]	[*]		Pending
1037	[*]	[*]	[*]		Pending
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1037GB	[*]	[*]	[*]		Pending
1037EP	[*]	[*]	[*]		Pending

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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.

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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 [*].

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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

[*]
[*]
[*]
[*]

ALGORITHMS USED AS PART OF THE RESEARCH PLAN

[*]
[*]

[*]

[*]

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:

[*]

[*]

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

[*]	[*]	First Draft	2 pages Cytokinetics
[*]	[*]	Version 1.0	 AstraZeneca
[*]	[*]	Version 1.7	 AstraZeneca
[*]	[*]	Version 1.8	 Cytokinetics
[*]	[*]	Version 1.9	 Cytokinetics

[*] Cytokinetics	[*]	Version 2.0	
WSGSR	[*]	Version 2.1	Editing and consistency with main body of Agreement

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TABLE OF CONTENTS

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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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	[*]	
[*]	[*]	[*]
	[*]	[*]
[*]	[*]	

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[*]	[*] FTE	[*] FTE
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[*]	[*] FTE	
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[*]	[*] FTE	[*] FTE
	[*]	[*]
		[*]

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[*]	[*]FTE [*] [*]	[*]FTE [*] [*] [*]
[*]		[*]FTE [*]
[*]	[*]FTE [*]	[*]FTE [*] [*]
[*]	[*]FTE [*]	[*]FTE [*] [*] [*] [*] [*]

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[*]		[*] FTE [*]
[*]	[*] FTE [*] [*] [*]	[*] FTE [*] [*]
[*]	[*] FTE [*] [*] [*] [*] [*] [*]	[*] FTE [*]
[*]	[*] 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.

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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.

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 the 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 LC-MS, 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 Parties 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 [*], Ph.D., 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 be [*] 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 all respects as jointly owned Confidential Information of Exelixis and Cytokinetics, 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, co-exclusive 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, without any accounting to the other Party; provided, in each case, neither Party 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 one Party to the other under this Section 4.1, whether by implication, estoppel or otherwise, except as expressly set forth in this Section 4.1. The Parties 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, by one Party to the other pertaining to such analogs and derivatives. Subject to the confidentiality provisions contained herein, the Parties 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 Compounds and/or Program Compound Information (a) for contract research, contract development, contract manufacturing or Collaboration purposes, or (b) as a Drug Product.

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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 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.

5. CONFIDENTIAL INFORMATION.

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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) [*] U.S. Dollars ($[*]) upon signing of the Agreement, and (ii) [*] U.S. Dollars ($[*]) 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 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

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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 five (5) years from the Effective Date, as may be extended by Cytokinetics pursuant to Section 8.3 (the "Term").

8.2 PERMISSIVE TERMINATION. Commencing upon the second anniversary of the Effective Date, this Agreement may be terminated by Cytokinetics, with no penalty, at any time for any reason upon ninety (90) days prior written notice to Exelixis. Without limiting the foregoing right of Cytokinetics to terminate this Agreement, upon any such notice of termination under this Section 8.2, the Parties shall agree upon and issue a joint press statement announcing their decision to mutually terminate this Agreement.

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.

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omitted portions.

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. Either 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.

(b) If Cytokinetics elects to terminate this Agreement under Section 8.2, Cytokinetics shall pay Exelixis (i) in full (at the rate specified in Section 6.2) for any compounds submitted to Exelixis for synthesis by the JRC prior to Exelixis' receipt of notice of such termination; provided, such compounds meet the QCC or are accepted by the JRC as Compounds (or if the JRC 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,

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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 approved by Cytokinetics and are necessary to synthesize and deliver such Compounds), and subject to Exelixis using its best efforts 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 (as specified by the rate in Section 6.2), 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 approved by Cytokinetics 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 full (at the rate specified in Section 6.2) 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 using its best efforts 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 (as specified by the rate in Section 6.2), 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 full (at the rate specified in Section 6.2) 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 (as specified by the rate in Section 6.2) (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 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.

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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.

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

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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:_____	By:_____
Name:_____	Name:_____
Title:_____	Title:_____

Date:_____	Date:_____

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.

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APPENDIX B

QUALITY CONTROL CRITERIA

[*]

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EXHIBIT 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the use in this Amendment No. 3 to Registration Statement on Form S-1 of our report dated March 10, 2004, except for Note 13 as to which the date is April 26, 2004, relating to the financial statements and our report dated March 10, 2004 relating to the financial statement schedule of Cytokinetics, Incorporated, 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
April 26, 2004