

UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

**Form 10-K**

**ANNUAL REPORT UNDER SECTION 13 or 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934**

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2011

or  
TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number: 000-50633

**CYTOKINETICS, INCORPORATED**

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of  
incorporation or organization)

**94-3291317**

(I.R.S. Employer  
Identification Number)

**Robert I. Blum**  
**President and Chief Executive Officer**  
**280 East Grand Avenue**  
**South San Francisco, CA 94080**  
**(650) 624-3000**

(Address, including zip code, or registrant's principal executive offices and telephone number, including area code)

**Securities registered pursuant to Section 12(b) of the Act:**

**Title of Each Class**

**Name of Each Exchange on Which Registered**

Common Stock, \$0.001 par value

The NASDAQ Global Market

**Securities registered pursuant to Section 12(g) of the Act:**

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company   
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

The aggregate market value of the voting and non-voting common equity held by non-affiliates was \$85.8 million, computed by reference to the last sales price of \$1.25 as reported by the NASDAQ Global Market as of the last business day of the Registrant's most recently completed second fiscal quarter, June 30, 2011. This calculation does not reflect a determination that certain persons are affiliates of the Registrant for any other purpose. The number of shares of common stock held by non-affiliates excluded 3,617,620 shares of common stock held by directors, officers and affiliates of directors. The number of shares owned by affiliates of directors was determined based upon information supplied by such persons and upon Schedules 13D and 13G, if any, filed with the SEC. Exclusion of shares held by any person should not be construed to indicate that such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the Registrant, that such person is controlled by or under common control with the Registrant, or that such persons are affiliates for any other purpose.

The number of shares outstanding of the Registrant's common stock on February 29, 2012 was 76,376,801 shares.

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**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the Registrant's Proxy Statement for its 2012 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission, are incorporated by reference to Part III of this Annual Report on Form 10-K.

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**CYTOKINETICS, INCORPORATED**

**FORM 10-K**

**Year Ended December 31, 2011**

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## PART I

This report contains forward-looking statements that are based upon current expectations within the meaning of the Private Securities Litigation Reform Act of 1995. We intend that such statements be protected by the safe harbor created thereby. Forward-looking statements involve risks and uncertainties and our actual results and the timing of events may differ significantly from the results discussed in the forward-looking statements. Examples of such forward-looking statements include, but are not limited to, statements about or relating to:

- guidance concerning revenues, research and development expenses and general and administrative expenses for 2012;
- the sufficiency of existing resources to fund our operations for at least the next 12 months;
- our capital requirements and needs for additional financing;
- the initiation, design, enrollment, progress, timing and scope of clinical trials and development activities for our drug candidates and potential drug candidates conducted by ourselves or our partners, such as Amgen Inc., including the anticipated timing for initiation of clinical trials and anticipated dates of data becoming available or being announced from clinical trials;
- the results from the clinical trials and non-clinical and preclinical studies of our drug candidates and other compounds, and the significance and utility of such results;
- anticipated interactions with regulatory authorities regarding the clinical development of CK-2017357 and the potential outcomes of such interactions;
- our anticipated filing of an investigational new drug application (“IND”) for CK-2127107 with the U.S. Food and Drug Administration (“FDA”);
- our and our partners’, such as Amgen’s, plans or ability to conduct the continued research and development of our drug candidates and other compounds;
- our plans to seek one or more strategic partners to develop and commercialize CK-2017357 and CK-2127107 and our smooth muscle myosin inhibitors;
- our expected roles in research, development or commercialization under our strategic alliances, such as with Amgen;
- the properties and potential benefits of, and the potential market opportunities for, our drug candidates and other compounds, including the potential indications for which they may be developed;
- the sufficiency of the clinical trials conducted with our drug candidates to demonstrate that they are safe and efficacious;
- our receipt of milestone payments, royalties, reimbursements and other funds from current or future partners under strategic alliances, such as with Amgen;
- our ability to continue to identify additional potential drug candidates that may be suitable for clinical development;
- our plans or ability to commercialize drugs with or without a partner, including our intention to develop sales and marketing capabilities;
- the focus, scope and size of our research and development activities and programs;
- the utility of our focus on the cytoskeleton and our ability to leverage our experience in muscle contractility to other muscle functions;
- our ability to protect our intellectual property and to avoid infringing the intellectual property rights of others;
- expected future sources of revenue and capital;

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- losses, costs, expenses and expenditures;
- future payments under loan and lease obligations and equipment financing lines;
- potential competitors and competitive products;
- retaining key personnel and recruiting additional key personnel;
- expected future amortization of employee stock-based compensation; and
- the potential impact of recent accounting pronouncements on our financial position or results of operations.

Such forward-looking statements involve risks and uncertainties, including, but not limited to, those risks and uncertainties relating to:

- Amgen's decisions with respect to the timing, design and conduct of development activities for omecamtiv mecarbil, including decisions to postpone or discontinue research or development activities relating to omecamtiv mecarbil;
- our ability to obtain additional financing on acceptable terms, if at all;
- our ability to enter into partnership agreements for any of our programs on acceptable terms and conditions or in accordance with our planned timelines;
- our receipt of funds and access to other resources under our current or future strategic alliances;
- difficulties or delays in the development, testing, production or commercialization of our drug candidates;
- difficulties or delays in or slower than anticipated patient enrollment in our or our partners' clinical trials;
- adverse side effects, including potential drug-drug interactions, or inadequate therapeutic efficacy of our drug candidates that could slow or prevent product approval (including the risk that current and past results of preclinical research or non-clinical or clinical development may not be indicative of future clinical trials results);
- results from non-clinical studies that may adversely impact the timing or the further development of our drug candidates and potential drug candidates;
- the possibility that the FDA or foreign regulatory agencies may delay or limit our or our partners' ability to conduct clinical trials or may delay or withhold approvals for the manufacture and sale of our products;
- activities and decisions of, and market conditions affecting, current and future strategic partners;
- the availability of funds under our grant from the National Institute of Neurological Disorders and Stroke ("NINDS") in future periods;
- our ability to issue and sell of shares of our Common Stock under our At-The-Market Issuance Sales Agreement with McNicoll, Lewis & Vlak LLC;
- changing standards of care and the introduction of products by competitors or alternative therapies for the treatment of indications we target that may make our drug candidates commercially unviable;
- changes in laws and regulations applicable to drug development, commercialization or reimbursement;
- the uncertainty of protection for our intellectual property, whether in the form of patents, trade secrets or otherwise; and
- potential infringement or misuse by us of the intellectual property rights of third parties.

In addition such statements are subject to the risks and uncertainties discussed in the "Risk Factors" section and elsewhere in this document. Operating results reported are not necessarily indicative of results that may occur in future periods.

## **Item 1. Business**

### **Overview**

We were incorporated in Delaware in August 1997 as Cytokinetics, Incorporated. We are a clinical-stage biopharmaceutical company focused on the discovery and development of novel small molecule therapeutics that modulate muscle function for the potential treatment of serious diseases and medical conditions. Our research and development activities relating to the biology of muscle function have evolved from our knowledge and expertise regarding the cytoskeleton, a complex biological infrastructure that plays a fundamental role within every human cell. Our current research and development programs relating to the biology of muscle function are directed to small molecule modulators of the contractility of cardiac, skeletal and smooth muscle.

Our cardiac muscle contractility program is focused on the cardiac sarcomere, the basic unit of muscle contraction in the heart. Our lead drug candidate from this program, omecamtiv mecarbil (formerly known as CK-1827452), is a novel cardiac muscle myosin activator. Amgen holds an exclusive license to develop and commercialize omecamtiv mecarbil worldwide, except Japan, subject to our development and commercialization participation rights. An intravenous formulation of omecamtiv mecarbil is currently the subject of a Phase IIb clinical trial designed to evaluate its safety and efficacy in patients with left ventricular systolic dysfunction who are hospitalized with acute heart failure, known as ATOMIC-AHF (Acute Treatment with Omecamtiv Mecarbil to Increase Contractility in Acute Heart Failure). Oral formulations of omecamtiv mecarbil are being studied in healthy volunteers, and we anticipate that one or more of these oral formulations will also be studied in stable heart failure patients. We also are conducting joint research with Amgen directed to next-generation compounds in our cardiac muscle contractility program. Further details regarding our strategic alliance with Amgen can be found below in Item 1 of this report under “Muscle Contractility Focus — Cardiac Muscle Contractility Program — Amgen Strategic Alliance.”

CK-2017357 is the lead drug candidate from our skeletal sarcomere activator program. The skeletal muscle sarcomere is the basic unit of skeletal muscle contraction. We believe CK-2017357 may be useful in treating diseases or medical conditions associated with skeletal muscle weakness or wasting. We are currently conducting a Phase II clinical trials program for CK-2017357, including two ongoing Phase II clinical trials in patients with amyotrophic lateral sclerosis (also known as ALS or Lou Gehrig’s disease) and an ongoing Phase IIa clinical trial in patients with myasthenia gravis. We have also conducted a Phase IIa clinical trial of CK-2017357 in patients with claudication, which is pain or cramping in the leg muscles due to inadequate blood flow during exercise, associated with peripheral artery disease. CK-2017357 has received orphan drug designations from the FDA and the European Medicines Agency for the treatment of ALS. We are also advancing a structurally distinct, fast skeletal muscle sarcomere activator, CK-2127107, in non-clinical studies intended to enable the filing of an IND with the FDA. Our skeletal sarcomere activators selectively activate the fast skeletal muscle troponin complex, which is a set of regulatory proteins that modulates the contractility of the fast skeletal muscle sarcomere.

In our smooth muscle contractility program, we are conducting preclinical research on compounds that directly inhibit smooth muscle myosin, the motor protein central to the contraction of smooth muscle. These compounds cause the relaxation of contracted smooth muscle, and so may be useful as potential treatments for diseases and conditions complicated by bronchoconstriction, such as asthma and chronic obstructive pulmonary disease.

Two of our drug candidates directed to muscle contractility have now demonstrated pharmacodynamic activity in patients: omecamtiv mecarbil in patients with heart failure and CK-2017357 in patients with ALS and in patients with claudication associated with peripheral artery disease. In 2012, we expect to continue to focus on translating the observed pharmacodynamic activity of these compounds into potentially meaningful clinical benefits for patients. Our potential drug candidate CK-2127107 has demonstrated pharmacological activity in preclinical models.

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Following is a summary of the planned clinical and non-clinical development activities for our drug candidates and potential drug candidates directed to muscle contractility:

Potential/Drug Candidate (Mechanism of Action)	Mode of Administration	Potential Indication(s)	Development Status and Planned Development Activities
Omecamtiv mecarbil (cardiac muscle myosin activator)	intravenous	heart failure	<ul style="list-style-type: none"> <li>We anticipate that Amgen will continue to enroll and dose patients in the first cohort of the ATOMIC-AHF trial.</li> <li>We anticipate a decision regarding the potential progression to the second cohort of the ATOMIC-AHF trial in 1H 2012 following a review of data from the first cohort by an independent data monitoring committee.</li> </ul>
Omecamtiv mecarbil (cardiac muscle myosin activator)	oral	heart failure	<ul style="list-style-type: none"> <li>We anticipate that Amgen will continue to enroll and dose subjects in the Phase I clinical trial designed to assess the safety, tolerability and pharmacokinetics of multiple oral formulations of omecamtiv mecarbil in healthy volunteers.</li> <li>We and Amgen are discussing plans for the initiation of a trial designed to assess the safety, tolerability and pharmacokinetics of oral formulations of omecamtiv mecarbil in stable heart failure patients.</li> </ul>
CK-2017357 (fast skeletal muscle troponin activator)	oral	diseases and conditions associated with muscle weakness or wasting*	<ul style="list-style-type: none"> <li>We anticipate continuing to enroll and dose patients in Part B of the ongoing Phase II multiple-dose trial in patients with ALS who are also receiving riluzole (CY 4024). We anticipate data from Part B to be available in 1H 2012.</li> <li>We anticipate continuing to enroll and dose patients in the ongoing Phase II dose-titration trial in patients with ALS (CY 4025). We anticipate data from this trial to be available in 1H 2012.</li> <li>We anticipate continuing to enroll and dose patients in the ongoing Phase IIa evidence of effect clinical trial in patients with generalized myasthenia gravis (CY 4023). We anticipate data from this trial to be available in 1H 2012.</li> <li>We anticipate additional interactions in 2012 with U.S. and European regulatory authorities to discuss the development of CK-2017357 as a potential treatment for patients with ALS, including potential registration strategies.</li> </ul>
CK-2127107 (fast skeletal muscle troponin activator)	oral	diseases and conditions associated with muscle weakness or wasting*	<ul style="list-style-type: none"> <li>We intend to continue to conduct non-clinical development intended to enable the filing of an IND. We anticipate filing an IND by the end of 2012.</li> </ul>

\* e.g., ALS, claudication, sarcopenia, cachexia, myasthenia gravis

During 2012, we intend to continue preclinical research of our smooth muscle myosin inhibitors.

All of our drug candidates and potential drug candidates have arisen from our cytoskeletal research activities. Our focus on the biology of the cytoskeleton distinguishes us from other biopharmaceutical companies, and potentially positions us to discover and develop novel therapeutics that may be useful for the treatment of severe diseases and medical conditions. We believe that this focus and the resulting knowledge and expertise that

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we have developed, especially with our proprietary technologies that permit us to evaluate the function of cytoskeletal proteins in high information content biological assays, has allowed us to increase the efficiency of our drug discovery activities. Our research and development activities since our inception in 1997 have produced multiple drug candidates that have progressed into clinical testing and multiple potential drug candidates, including one currently in non-clinical development for which we plan to file an IND. Each of these drug candidates and potential drug candidates has a novel mechanism of action compared to currently marketed drugs, which we believe validates our focus on the cytoskeleton as a robust area for drug discovery. We intend to leverage our experience in muscle contractility in order to expand our current pipeline, and expect to continue to be able to identify additional potential drug candidates that may be suitable for clinical development.

### **Our Corporate Strategy**

Our goal is to discover, develop and commercialize novel drug products that modulate muscle function in ways that may benefit patients with serious diseases or medical conditions, with the intent of establishing a fully integrated biopharmaceutical company. We intend to achieve this by:

- *Focusing on drug discovery and development activities relating to the biology of muscle function.* We intend to capitalize on the knowledge and expertise we have acquired in each of our cardiac muscle, skeletal muscle and smooth muscle contractility research and development programs. In these programs, we are investigating potential treatments for diseases or medical conditions where impaired regulation of the contractile function of muscle plays a key role and such diseases or conditions may be amenable to treatment by modulation of muscle contractility, such as heart failure, and medical conditions associated with skeletal muscle weakness or wasting.
- *Leveraging our cytoskeletal expertise and proprietary technologies to increase the speed, efficiency and yield of our drug discovery and development processes.* We believe that our unique understanding of the cytoskeleton and our proprietary research technologies should enable us to discover and potentially to develop drug candidates with novel mechanisms of action that may offer potential benefits not provided by existing drugs. We expect that we may be able to leverage our expertise in muscle contractility to advance into other areas of muscle function which may impact serious medical diseases and conditions. This may allow us to develop a diversified pipeline of drug candidates cost-effectively while managing risk.
- *Focusing on comprehensive development programs that may enhance the success of our activities directed to potential registration.* We believe that by focusing on disease areas with well-organized physician-investigator groups, significant clinical unmet need, and strong patient and disease advocacy, we may enhance our effectiveness in enrolling and conducting clinical trials that may answer important questions about the dosing, tolerability, pharmacokinetics and pharmacodynamics as well as the potential safety and efficacy of our drug candidates. We believe that our considered clinical trial designs and well-executed development programs can improve our ability to realize value from our clinical development activities. We believe that our investing in these activities may result in more successful later-stage clinical development activities that may increase the likelihood of our achieving our objectives to develop effective therapeutics that may address the needs of patients with grievous diseases and conditions.
- *Building development and commercialization capabilities directed at concentrated and growing markets.* We focus our drug discovery and development activities on disease areas for which there are serious unmet medical needs. In particular, we direct our activities to potential commercial opportunities in concentrated and tractable customer segments, such as hospital specialists, that may be addressed by a smaller, targeted sales force. Many of these diseases and medical conditions affect the growing population of aging patients, a demographic that is the subject of increasing regulatory and reimbursement attention. Accordingly, targeting unmet medical needs in these areas may provide us competitive opportunities. In these markets, we believe that a company with limited resources may be able to compete effectively against larger, more established companies with greater financial and commercial resources. For these opportunities, we intend to develop clinical development and sales and marketing capabilities with the goal of becoming a fully-integrated biopharmaceutical company.



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- *Establishing select strategic alliances to support our drug development programs while preserving significant development and commercialization rights.* We believe that such alliances may allow us to obtain financial support and to capitalize on the therapeutic area expertise and resources of our partners that can potentially accelerate the development and commercialization of our drug candidates. Where we deem appropriate, we plan to retain certain rights to participate in the development of drug candidates and commercialization of potential drugs arising from our alliances, so that we can expand and capitalize on our internal development capabilities and build our commercialization capabilities.

### **Muscle Contractility Focus**

Our long-standing interest in the cytoskeleton has led us to focus our research and development activities on the biology of muscle function, and in particular, small molecule modulation of muscle contractility. We believe that our expertise in the modulation of the contractility of each of cardiac, skeletal and smooth muscle is an important differentiator for us. Our preclinical and clinical experience in muscle contractility may position us to discover and develop additional novel therapies that have the potential to improve the health of patients with severe and debilitating diseases or medical conditions.

Small molecules that affect muscle contractility may have several applications for a variety of serious diseases and medical conditions. For example, heart failure is a disease often characterized by impaired cardiac muscle contractility which may be treated by modulating the contractility of cardiac muscle; certain neuromuscular diseases and medical conditions associated with muscle weakness may be amenable to treatment by enhancing the contractility of skeletal muscle; and asthma and chronic obstructive pulmonary disease are diseases in which constriction of the airways may be treated by relaxation of the airway smooth muscle.

Because each muscle type may be relevant to multiple diseases or medical conditions, we believe we can leverage our expertise in each of cardiac, skeletal and smooth muscle contractility to more efficiently discover and develop as potential drugs compounds that modulate the applicable muscle type for multiple indications. In addition, muscle has biological functions other than contractility. Accordingly, our knowledge and expertise could also serve as an entry point to the discovery of novel treatments for disorders involving muscle functions other than muscle contractility, such as metabolism, growth and energetics.

We are currently developing a number of small molecule compounds arising from our muscle contractility programs. Omecamtiv mecarbil, a novel cardiac muscle myosin activator, was studied by Cytokinetics in a series of Phase I and Phase IIa clinical trials for the potential treatment of heart failure. As of 2009, Amgen is responsible for the clinical development of this drug candidate, subject to Cytokinetics' development and commercialization participation rights.

CK-2017357 is our lead drug candidate from our skeletal muscle contractility program, and is the subject of a Phase II clinical trials program. Potential indications for which this drug candidate may be useful include skeletal muscle weakness associated with neuromuscular diseases, such as ALS, and other medical conditions characterized by skeletal muscle weakness or wasting. We are also advancing a potential drug candidate from this program, CK-2127107, in non-clinical studies intended to enable the filing of an IND in 2012.

In addition, we are conducting preclinical research of compounds that inhibit smooth muscle myosin for potential use as bronchodilators, vasodilators, or both. We are continuing to conduct discovery, characterization and lead optimization activities for other compounds with the potential to modulate muscle contractility and other muscle functions, such as growth, energetics and metabolism.

### ***Cardiac Muscle Contractility Program***

*Overview.* Our cardiac muscle contractility program is focused on the cardiac sarcomere, the basic unit of muscle contraction in the heart. The cardiac sarcomere is a highly ordered cytoskeletal structure composed of

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cardiac muscle myosin, actin and a set of regulatory proteins. This program is currently directed towards the discovery and development of small molecule cardiac muscle myosin activators with the goal of developing novel drugs to treat acute and chronic heart failure. Cardiac muscle myosin is the cytoskeletal motor protein in the cardiac muscle cell. It is directly responsible for converting chemical energy into the mechanical force, resulting in cardiac muscle contraction. This program is based on the hypothesis that activators of cardiac muscle myosin may address certain adverse properties of existing positive inotropic agents. Current positive inotropic agents, such as beta-adrenergic receptor agonists or inhibitors of phosphodiesterase activity, increase the concentration of intracellular calcium, thereby increasing cardiac sarcomere contractility. The effect on calcium levels, however, also has been linked to potentially life-threatening side effects. In contrast, our novel cardiac muscle myosin activators work by a mechanism that directly stimulates the activity of the cardiac muscle myosin motor protein, without increasing the intracellular calcium concentration. They accelerate the rate-limiting step of the myosin enzymatic cycle and shift it in favor of the force-producing state. Rather than increasing the velocity of cardiac contraction, this mechanism instead lengthens the systolic ejection time, which results in increased cardiac function in a potentially more oxygen-efficient manner.

*Background on Heart Failure Market.* Heart failure is a widespread and debilitating syndrome affecting millions of people in the United States. The high and rapidly growing prevalence of heart failure translates into significant hospitalization rates and associated societal costs. About 5.8 million people in the United States have heart failure, resulting in nearly one million hospital discharges with the primary diagnosis of heart failure and approximately 300,000 deaths each year. For people over 65 years of age, heart failure incidences approach 10 per 1000 and approximately 50% of people diagnosed with heart failure will die within 5 years of diagnosis. These numbers are increasing due to the aging of the U.S. population and an increased likelihood of survival following acute myocardial infarctions. The costs to society attributable to the prevalence of heart failure are high, especially as many chronic heart failure patients suffer repeated acute episodes. Despite currently available therapies, readmission rates for heart failure patients remain high. A 2008 study estimated that between 13% and 33% of patients initially admitted to the hospital for chronic heart failure will be readmitted within 12 to 15 months of the initial admission. Mortality rates over the five-year period following a diagnosis of heart failure are approximately 60% in men and 45% in women. The high morbidity and mortality in the setting of current therapies points to the need for novel therapeutics that offer further reductions in morbidity and mortality. The annual cost of heart failure to the U.S. health care system is estimated to be \$39 billion. A portion of that cost is attributable to drugs used to treat each of chronic and acute heart failure. Approximately 70% of those costs are due to hospitalization, home health and physician care. New drug therapies that could reduce the number of hospitalizations could decrease the cost to the health care system.

*Amgen Strategic Alliance.* In December 2006, we entered into a collaboration and option agreement with Amgen to discover, develop and commercialize novel small molecule therapeutics that activate cardiac muscle contractility for potential applications in the treatment of heart failure, including omecamtiv mecarbil. The agreement provided Amgen with a non-exclusive license and access to certain technology. The agreement also granted Amgen an option to obtain an exclusive license worldwide, except Japan, to develop and commercialize omecamtiv mecarbil and other drug candidates arising from the collaboration. In May 2009, Amgen exercised its option.

In connection with the exercise of its option, Amgen paid us an exercise fee of \$50.0 million. As a result, Amgen is now responsible for the development and commercialization of omecamtiv mecarbil and related compounds at its expense worldwide (excluding Japan), subject to our development and commercialization participation rights. Under the agreement, Amgen will reimburse us for agreed research and development activities we perform. The agreement provides for potential pre-commercialization and commercialization milestone payments of up to \$600.0 million in the aggregate on omecamtiv mecarbil and other potential products arising from research under the collaboration, and royalties that escalate based on increasing levels of annual net sales of products commercialized under the agreement. The agreement also provides for us to receive increased royalties by co-funding Phase III development costs of drug candidates under the collaboration. If we elect to co-fund such costs, we would be entitled to co-promote omecamtiv mecarbil in North America and participate in agreed commercialization activities in institutional care settings, at Amgen's expense.

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*Omecamtiv Mecarbil (formerly CK-1827452).* Our lead drug candidate from this program is omecamtiv mecarbil, a novel cardiac muscle myosin activator. We conducted a clinical trials program for omecamtiv mecarbil comprised of multiple Phase I and Phase IIa clinical trials designed to evaluate the safety, tolerability, pharmacodynamics and pharmacokinetic profiles of both intravenous and oral formulations in a diversity of patients, including patients with stable heart failure and patients with ischemic cardiomyopathy. In these trials, omecamtiv mecarbil exhibited generally linear, dose-proportional pharmacokinetics across the dose ranges studied. The adverse effects observed at intolerable doses in humans appeared similar to the adverse findings which occurred in preclinical safety studies at similar plasma concentrations. These effects are believed to be related to the mechanism of action of this drug candidate which, at intolerable doses, resulted in an excessive prolongation of the systolic ejection time (i.e., the time in which the heart is contracting). However, these effects resolved promptly with discontinuation of the infusions of omecamtiv mecarbil.

We expect omecamtiv mecarbil to be developed as a potential treatment across the continuum of care in heart failure both as an intravenous formulation for use in the hospital setting and as an oral formulation for use in the outpatient setting.

*ATOMIC-AHF.* In April 2011, Amgen initiated an international, randomized, double-blind, placebo-controlled, Phase IIb clinical trial of an intravenous formulation of omecamtiv mecarbil, now known as ATOMIC-AHF (Acute Treatment with Omecamtiv Mecarbil to Increase Contractility in Acute Heart Failure), in patients with left ventricular systolic dysfunction hospitalized with acutely decompensated heart failure. This clinical trial is expected to enroll approximately 600 patients in three sequential, ascending-dose cohorts. In each cohort, patients will be randomized to receive omecamtiv mecarbil or placebo. The primary objective of this trial is to evaluate the effect of 48 hours of intravenous omecamtiv mecarbil compared to placebo on dyspnea (shortness of breath) in patients with left ventricular systolic dysfunction hospitalized for acute heart failure. The secondary objectives are to assess the safety and tolerability of three dose levels of intravenous omecamtiv mecarbil compared with placebo and to evaluate the effects of 48 hours of treatment with intravenous omecamtiv mecarbil on additional measures of dyspnea, patients' global assessments, change in N-terminal pro brain-type natriuretic peptide (a biomarker associated with the severity of heart failure) and short-term clinical outcomes in these patients. In addition, the trial will evaluate the relationship between omecamtiv mecarbil plasma concentrations and echocardiographic parameters in patients with acute heart failure.

Patient dosing in the first cohort of this trial is continuing. A review of data from the first cohort of this trial will be conducted by an independent data monitoring committee. A decision regarding the potential progression to the second cohort of the trial is anticipated in the first half of 2012.

*Oral Formulations.* In February 2012, Amgen initiated a Phase I clinical trial designed to assess the safety, tolerability and pharmacokinetics of multiple oral formulations of omecamtiv mecarbil in healthy volunteers. This clinical trial will be used to guide selection of an oral formulation of omecamtiv mecarbil for later-stage clinical trials. This clinical trial is a randomized, open-label, four-way cross-over study designed to determine the oral bioavailability of multiple formulations of omecamtiv mecarbil in healthy subjects. Approximately 60 subjects are planned to be enrolled in this study. Each subject will receive two of the six oral formulations included in the study, each administered as a single dose under fasted and fed conditions. The primary objective of this trial is to determine the effect of food on the bioavailability of omecamtiv mecarbil when administered in multiple oral formulations. The secondary objectives are to evaluate the bioavailability, safety, tolerability and pharmacokinetic profiles of omecamtiv mecarbil when administered in multiple oral formulations.

We and Amgen are discussing plans for the initiation of an additional clinical trial designed to assess the safety, tolerability and pharmacokinetics of oral omecamtiv mecarbil in stable heart failure patients.

*Ongoing Research in Cardiac Muscle Contractility.* In the fourth quarter of 2011, we agreed with Amgen to additional research activities intended to be conducted through 2012 under the research plan directed to next-generation compounds in our cardiac muscle contractility program. Under our collaboration agreement, Amgen will reimburse us for the agreed research activities we perform.

### ***Skeletal Muscle Contractility Program***

*Overview.* Our skeletal muscle contractility program is focused on the activation of the skeletal sarcomere, the basic unit of skeletal muscle contraction. The skeletal sarcomere is a highly ordered cytoskeletal structure composed of skeletal muscle myosin, actin, and a set of regulatory proteins, which include the troponins and tropomyosin. This program leverages our expertise developed in our ongoing discovery and development of cardiac sarcomere activators, including the cardiac muscle myosin activator omecamtiv mecarbil.

Our skeletal sarcomere activators have demonstrated pharmacological activity in preclinical studies that may lead to new therapeutic options for diseases and medical conditions associated with aging, muscle weakness and wasting and neuromuscular dysfunction. The clinical effects of muscle weakness and wasting, fatigue and loss of mobility can range from decreased quality of life to, in some instances, life-threatening complications. By directly improving skeletal muscle function, a small molecule activator of the skeletal sarcomere potentially could enhance functional performance and quality of life in patients suffering from diseases or medical conditions characterized or complicated by muscle weakness or wasting. These may include diseases and medical conditions associated with skeletal muscle weakness or wasting, such as ALS, claudication, myasthenia gravis, sarcopenia (general frailty associated with aging), post-surgical rehabilitation and general frailty associated with aging, and cachexia in connection with heart failure or cancer.

CK-2017357 is the lead drug candidate from this program. We are also advancing a potential drug candidate from this program, CK-2127107, in non-clinical studies intended to enable the filing of an IND. CK-2017357 and CK-2127107 are structurally distinct and selective small molecule activators of the fast skeletal sarcomere. These compounds activate the fast skeletal muscle troponin complex by increasing its sensitivity to calcium, leading to an increase in skeletal muscle contractility. We are evaluating the potential indications for which CK-2017357 and CK-2127107 may be useful.

Each of CK-2017357 and CK-2127107 has demonstrated encouraging pharmacological activity in preclinical models. In addition, with respect to CK-2017357, evidence of potentially clinically relevant pharmacodynamic effects has been observed in healthy volunteers, in patients with ALS, and in patients with peripheral artery disease and claudication. CK-2017357 has received an orphan drug designation from the FDA for the potential treatment of ALS. In July 2010, we were awarded a grant in the amount of approximately \$2.8 million by the National Institute of Neurological Disorders and Stroke, which is intended to support for up to three years our research and development of CK-2017357 for the potential treatment of myasthenia gravis. The grant was awarded under the American Recovery and Reinvestment Act of 2009.

In 2010, we initiated three “evidence of effect” Phase IIa clinical trials of CK-2017357. Two of these trials have been completed, one in patients with ALS and one in patients with symptoms of claudication associated with peripheral artery disease. A trial in patients with generalized myasthenia gravis is ongoing. Our evidence of effect clinical trials are randomized, double-blind, placebo-controlled, three-period cross-over studies of single doses of CK-2017357 administered to patients with impaired muscle function. These studies are intended to translate the mechanism of action of CK-2017357 into potentially clinically relevant pharmacodynamic effects (as we did in healthy volunteers), which may then form the basis for larger clinical trials designed to demonstrate proof of concept and possibly even to support registration.

In March 2010, CK-2017357 received an orphan drug designation from the FDA for the treatment of ALS. In March 2012, CK-2017357 received an orphan medicinal product designation from the European Medicines Agency.

*Market Potential for CK-2017357, CK-2127107 and Other Skeletal Sarcomere Activators.* Limited options exist for the treatment of ALS, which affects as many as 30,000 Americans, with an estimated 5,600 new cases diagnosed each year in the U.S. ALS is 20% more common in men than women; however, with increasing age, the prevalence becomes more equal between men and women. The life expectancy of an ALS patient

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averages two to five years from the time of diagnosis with 90 to 95% of those diagnosed with ALS having the sporadic form. Of the remaining ALS patient population, 5 to 10% have a family history of the disease (familial ALS). In cases of familial ALS, there is a 50% chance each offspring will develop the disease. Death is usually due to respiratory failure because of diminished strength in the skeletal muscles responsible for breathing.

Myasthenia gravis is a chronic, autoimmune, neuromuscular disease and is the most common primary disorder of neuromuscular transmission. The current prevalence of myasthenia gravis in the U.S. is estimated to be 20 per 100,000 people, i.e., between 53,000 and 60,000 cases. The actual prevalence may be higher because myasthenia gravis is frequently under diagnosed. Approximately 13,600 new cases of myasthenia gravis are diagnosed each year.

We are evaluating other market opportunities for our skeletal muscle sarcomere activators.

CK-2017357: Clinical Development

*Phase I (Healthy Volunteers).* A Phase I clinical trial of single doses of CK-2017357 in healthy volunteers demonstrated the maximum-tolerated single oral dose to be 2000 mg. In addition, single doses of CK-2017357 from 250 to 1000 mg were shown to produce concentration-dependent, statistically significant increases versus placebo in the force developed by the tibialis anterior muscles of healthy volunteers in response to transcutaneous neuronal stimulation. In a multiple dose Phase I clinical trial, CK-2017357 displayed generally dose-proportional pharmacokinetics and only modest accumulation during dosing to steady state. CK-2017357 was well-tolerated and no serious adverse events were reported in these Phase I trials.

ALS

*Phase I Drug-Drug Interaction (CY 4013).* In 2011, we conducted a Phase I drug-drug interaction study of CK-2017357 administered orally to healthy volunteers. The co-administration of CK-2017357 and riluzole, the current standard of care for ALS, approximately doubled the average maximum plasma levels of riluzole; it also reduced the variability of plasma levels of riluzole in the study subjects. Accordingly, we believe that in future CK-2017357 clinical trials, a standard dose adjustment to the riluzole dose could be made for all patients receiving CK-2017357, regardless of the dose level of CK-2017357. Data from the part of this study investigating the effect of food on the pharmacokinetics of CK-2017357 administered orally indicated that CK-2017357 may be best administered to patients in a fasting state.

*Phase IIa Evidence of Effect (CY 4021).* In April 2011, data from our Phase IIa Evidence of Effect clinical trial in ALS patients were presented at the Clinical Trials Session at the 63<sup>rd</sup> Annual Meeting of the American Academy of Neurology. In that trial, the single doses of CK-2017357 evaluated appeared generally well-tolerated. In addition, both patients and investigators perceived a positive change in the patients' overall status, in a dose-dependent fashion, at 6 hours after dosing with CK-2017357, based on a global assessment in which the patient and the investigator each independently assessed patients' status compared to prior to dosing. There was a clear relationship between improvements in global assessments and the CK-2017357 plasma concentration. Also at this 6-hour time point, there was a trend towards decreased muscle fatigability, as evidenced by data from a test of sub-maximal hand-grip endurance. Data from that clinical trial also demonstrated a statistically significant increase in the maximum volume of air patients could inhale and exhale in 12 seconds (Maximum Voluntary Ventilation) at both 6 and 24 hours after 500 mg of CK-2017357, and small but statistically significant increases in maximum strength of certain muscle groups tested.

*Phase II Multiple Dose (CY 4024).* In 2011, we initiated a two-part, Phase II safety, tolerability, pharmacokinetic and pharmacodynamic clinical trial of multiple doses of CK-2017357 in ALS patients. Part A of this trial, which was completed in 2011, enrolled 24 patients who were not taking riluzole. Part B of this trial, which is ongoing, is designed to evaluate 24 patients who are concurrently taking riluzole. In both Parts A and B, patients are randomized to one of four different treatment groups to receive daily oral doses of placebo or 125

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mg, 250 mg or 375 mg of CK-2017357, respectively, for two weeks. Clinical assessments take place at pre-determined times during the course of treatment. Patients also participate in follow-up evaluations one week after their final dose. The primary objective of this trial is to evaluate the safety and tolerability of multiple doses of CK-2017357 in patients with ALS. In addition, patients are asked to report their ALS symptoms using the ALS Functional Rating Scale-Revised (ALSFRS-R). Patients also undergo tests of muscle fatigability, certain indices of pulmonary function, and patients' and investigators' global status assessments.

In November 2011, data from Part A of this trial were presented at the 22<sup>nd</sup> International Symposium on ALS and Motor Neurone Diseases Meeting in Sydney, Australia. These data demonstrated that CK-2017357 appeared well-tolerated at all dose levels evaluated and that plasma concentrations of CK-2017357 increased in proportion with dose. The most common and dose-related side effect reported was dizziness. The incidence and persistence of dizziness appeared dose-related but was mild in severity in all patients who completed study drug treatment. Two patients withdrew early: one in the 375 mg dose group due to dizziness, and one in the 250 mg dose group due to dizziness in the setting of a presumed viral syndrome. Most reports of dizziness began early after initiating treatment and resolved spontaneously within the first week of treatment in all but one patient who nevertheless completed the trial. No serious adverse events were reported. Due to the small sample size, the large inter-patient variability and the short, two-week duration, Part A of this trial lacked the statistical power to detect significant differences in clinical outcome measures. However, trends to improved clinical outcome measures were observed, especially at the highest CK-2017357 dose of 375 mg daily. Four of five patients who completed treatment in this dose group reported improvement in their Global Assessments and three of these five patients improved at least 1 point on the ALSFRS-R. The changes observed in Maximum Voluntary Ventilation after two weeks of dosing at 375 mg compare favorably to improvements observed at 24 hours after a single 500 mg dose of CK-2017357 in the Phase IIa Evidence of Effect clinical trial in ALS patients.

We anticipate that data from Part B of this Phase II trial will be available in the first half of 2012.

*Phase II Dose Titration (CY 4025).* In November 2011, we initiated a Phase II, double-blind, randomized, placebo-controlled, ascending dose titration clinical study designed to evaluate the safety, tolerability, pharmacokinetics and pharmacodynamic effects of multiple ascending doses of CK-2017357. An estimated 24 patients with ALS who are also receiving riluzole are planned to be enrolled at eight to ten study centers in the United States. Patients will be randomized to one of two dosing groups and receive twice daily oral ascending doses of CK-2017357 or placebo. Clinical assessments will take place at pre-determined times during the course of treatment; patients will also participate in follow-up evaluations one week after their final dose. The primary objective of this trial is to assess the safety and tolerability of this alternative dosing regimen of CK-2017357 in patients with ALS. The secondary objectives of this clinical trial are to evaluate the ALSFRS-R, other measures of pulmonary function, muscle strength and fatigue, relationships between dose, plasma concentrations and functional effects and physician and patient global assessments in these patients while receiving two weeks of treatment with CK-2017357 at the indicated doses or placebo. We anticipate that data from this trial will be available in first half of 2012.

### Claudication

*Phase IIa Evidence of Effect (CY 4022).* In June 2010, we initiated a Phase IIa evidence of effect clinical trial of CK-2017357 in patients with symptoms of claudication associated with peripheral artery disease. The primary objective was to demonstrate an effect of single doses of CK-2017357 on measures of skeletal muscle function and fatigability in these patients. The secondary objectives were to evaluate and characterize the relationship, if any, between the doses and plasma concentrations of CK-2017357 and its pharmacodynamic effects, and to evaluate the safety and tolerability of CK-2017357 administered as single doses to these patients. Accordingly, in this hypothesis-generating trial, multiple pharmacodynamic assessments were made without specifying a single primary pharmacodynamic endpoint. 61 patients were enrolled in this trial. Patients were administered single oral doses of placebo and of 2 different dose levels of CK-2017357 in a double-blind fashion and in random order, at least 6 days apart. These dose levels were originally 375 mg and 750 mg; however, the

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protocol was amended to lower the 750 mg dose to 500 mg following reports of serious adverse events by two patients: dizziness and mental confusion in one and dizziness and dyskinesia (or abnormal movements) in the other.

In June 2011, at the 22<sup>nd</sup> Annual Scientific Sessions of the Society of Vascular Medicine, we presented final data from this clinical trial. As evidenced by heel raise testing, CK-2017357 increased calf muscle performance in these patients. The increases in calf muscle performance and the occurrence of adverse events both appeared related to increasing dose and plasma concentrations of CK-2017357. Conversely, performance on a 6-minute walk test was inversely related to increases in both the dose and plasma concentration of CK-2017357. Dose-related adverse events, particularly dizziness and others related to walking, may explain this negative effect on 6-minute walk performance. The authors concluded that CK-2017357 merits further study and that potential next steps could include studies to explore whether the adverse events observed, such as dizziness, might abate with repeated dosing, alternate dosing regimens and/or gradual dose titration.

***Myasthenia Gravis***

***Phase IIa Evidence of Effect (CY 4023).*** In January 2011, we initiated our Phase IIa evidence of effect clinical trial of CK-2017357 in patients with generalized myasthenia gravis. At least 36 and up to 78 patients may be enrolled in this trial. Patients receive, in a double-blind fashion and in random order, a single oral dose of placebo or 250 mg or 500 mg of CK-2017357, at least 7 days apart. The primary objective of this trial is to assess the effects of CK-2017357 on measures of muscle strength, muscle fatigue and pulmonary function. The secondary objectives of this clinical trial are to evaluate and characterize the relationship, if any, between the doses and plasma concentrations of CK-2017357 and its pharmacodynamic effects; to evaluate the safety and tolerability of CK-2017357 administered as single doses to patients with myasthenia gravis; and to evaluate the effect of CK-2017357 on investigator- and patient-determined global functional assessment and the Modified MG Symptom Score, an assessment combining patient reports and physician evaluations to assess the severity of symptoms due to myasthenia gravis. We are continuing to conduct this trial, and anticipate that data will be available from this trial in the first half of 2012.

***CK-2017357 Planned Clinical Development.*** We have met with the FDA Center for Drug Evaluation and Research's Division of Neurology Products and with the European Medicines Agency to discuss the progress in the development of CK-2017357 as a potential treatment for patients with ALS and our strategy for its further development, including potential registration strategies. Based on these discussions, we are assessing options that may enable the initiation of a registration program for CK-2017357. We anticipate additional interactions in 2012 with U.S. and European regulatory authorities to discuss the development of CK-2017357 as a potential treatment for patients with ALS, including potential registration strategies.

***CK-2127107 Planned Development.*** Throughout 2011, we progressed CK-2127107 in studies intended to support an IND or foreign equivalent. We expect to continue these studies and anticipate filing an IND for CK-2127107 by the end of 2012.

***Ongoing Research in Skeletal Muscle Activators.***

Our research on the direct activation of skeletal muscle continues in two areas. We are conducting translational research in preclinical models of disease and muscle function with fast skeletal troponin activators to explore the potential clinical applications of this novel approach in preclinical studies. We also intend to conduct preclinical research on other chemically and pharmacologically distinct mechanisms to activate the skeletal sarcomere.

***Smooth Muscle Contractility Program***

***Overview.*** Smooth muscle is a non-striated form of muscle that is found in the circulatory, respiratory, digestive and genitourinary organ systems and is responsible for the contractile properties of these tissues. The

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contractile elements in non-striated muscle are not arranged into sarcomeres and the regulation of smooth muscle differs from that in cardiac and skeletal muscles. Smooth muscle contractility is driven by smooth muscle myosin, a cytoskeletal motor protein that is directly responsible for converting chemical energy into mechanical force. Our smooth muscle contractility program is focused on the discovery and development of small molecule smooth muscle myosin inhibitors, and leverages our expertise in muscle function and its application to drug discovery. Our inhaled smooth muscle myosin inhibitors have demonstrated pharmacological activity in preclinical models of bronchoconstrictive diseases and may have applications for indications such as asthma or chronic obstructive pulmonary disease. Our smooth muscle myosin inhibitors, administered orally or intravenously, have also demonstrated pharmacological activity in preclinical models of vascular constriction.

*Ongoing research in smooth muscle myosin inhibitors.* We are continuing to conduct preclinical research activities to develop direct smooth muscle myosin inhibitor compounds for potential use in acute or chronic settings. Our research focus is to differentiate our compounds from existing drugs that are bronchodilators or vasodilators that act by indirectly causing smooth muscle relaxation, such as commonly used beta-agonists and calcium channel blockers. We are particularly interested in potential applications for our compounds where the benefits of currently available treatments are constrained by adverse side effects or limited effectiveness.

### **Research and Development Expense**

Our research and development expenses were \$37.2 million, \$38.0 million and \$39.8 million for 2011, 2010 and 2009, respectively, and \$452.5 million for the period from August 5, 1997 (date of inception) through December 31, 2011.

### **Our Patents and Other Intellectual Property**

Our policy is to seek patent protection for the technologies, inventions and improvements that we develop that we consider important to the advancement of our business. As of December 31, 2011, we had 119 issued U.S. patents and over 125 additional pending U.S. and foreign patent applications. We also rely on trade secrets, technical know-how and continuing innovation to develop and maintain our competitive position. Our commercial success will depend on obtaining and maintaining patent protection and trade secret protection for our drug candidates and technologies and our 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 cover them or we maintain them as trade secrets.

With regard to our drug candidates directed to muscle biology targets, we have a U.S. patent covering omecamtiv mecarbil and a U.S. patent covering our skeletal muscle sarcomere activators including, but not limited to, CK-2017357, each of which will expire in 2027 unless extended. We also have additional U.S. and foreign patent applications pending for each of our drug candidates and potential drug candidates. It is not known or determinable whether other patents will issue from any of our other pending applications or what the expiration dates would be for any other patents that do issue.

All of our drug candidates are still in clinical development and have not yet been approved by the FDA. If any of these drug candidates is approved, then pursuant to federal law, we may apply for an extension of the U.S. patent term for one patent covering the approved drug, which could extend the term of the applicable patent by up to a maximum of five additional years.

The degree of future protection of our proprietary rights is uncertain because legal means may not adequately protect our rights or permit us to gain or keep our competitive advantage. Due to evolving legal standards relating to the patentability, validity and enforceability of patents covering pharmaceutical inventions and the claim scope of these patents, our ability to enforce our existing patents and to obtain and enforce patents that may issue from any pending or future patent applications is uncertain and involves complex legal, scientific and factual questions. The standards that the U.S. Patent and Trademark Office and its foreign counterparts use to



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grant patents are not always applied predictably or uniformly and are subject to change. To date, no consistent policy has emerged regarding the breadth of claims allowed in biotechnology and pharmaceutical patents. Thus, we cannot be sure that any patents will issue from any pending or future patent applications owned by or licensed to us. Even if patents do issue, we cannot be sure that the claims of these patents will be held valid or enforceable by a court of law, will provide us with any significant protection against competitive products, or will afford us a commercial advantage over competitive products. 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 the inventions covered by our pending patent applications and issued patents;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- some or all of our or our licensors' pending patent applications may not result in issued patents or the claims that issue may be narrow in scope and not provide us with competitive advantages;
- our and our licensors' issued patents may not provide a basis for commercially viable drugs or therapies or may be challenged and invalidated by third parties;
- our or our licensors' patent applications or patents may be subject to interference, opposition or similar administrative proceedings that may result in a reduction in their scope or their loss altogether;
- we may not develop additional proprietary technologies or drug candidates that are patentable; or
- the patents of others may prevent us or our partners from discovering, developing or commercializing our drug candidates.

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

Our ability to commercialize drugs depends on our ability to use, manufacture and sell those drugs without infringing the patents or other proprietary rights of third parties. U.S. and foreign issued patents and pending patent applications owned by third parties exist that may be relevant to the therapeutic areas and chemical compositions of our drug candidates and potential drug candidates. While we are aware of certain relevant patents and patent applications owned by third parties, there may be issued patents or pending applications of which we are not aware that could cover our drug candidates. Because patent applications are often not published immediately after filing, there may be currently pending applications, unknown to us, which could later result in issued patents that our activities with our drug candidates could infringe.

The development of our drug candidates and the commercialization of any resulting drugs may be impacted by patents of companies engaged in competitive programs with significantly greater resources. This could result in the expenditure of significant legal fees and management resources.

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 often difficult to protect, especially outside of the United States. While we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, partners and other advisors may unintentionally or willfully disclose our trade secrets to competitors. Enforcing a claim that a third party illegally obtained and is using our trade secrets would be expensive and time-consuming, and the outcome would be unpredictable. Even if we are able to maintain our trade secrets as confidential, our competitors may independently develop information that is equivalent or similar to our trade secrets.

We seek to protect our intellectual property by requiring our employees, consultants, contractors and other advisors to execute nondisclosure and invention assignment agreements upon commencement of their

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employment or engagement, through which we seek to protect our intellectual property. Agreements with our employees also preclude them from bringing the proprietary information or materials of third parties to us. We also require confidentiality agreements or material transfer agreements from third parties that receive our confidential information or materials.

For further details on the risks relating to our intellectual property, please see the risk factors under Item 1A of this report, including, but not limited to, the risk factors entitled “Our success depends substantially upon our ability to obtain and maintain intellectual property protection relating to our drug candidates and research technologies” and “If we are sued for infringing third party intellectual property rights, it will be costly and time-consuming, and an unfavorable outcome would have a significant adverse effect on our business.”

### **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, 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 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 regulations;
- submission to the FDA of an investigational new drug application (“IND”), 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 drug candidate for each proposed indication in accordance with good clinical practices;
- submission of a new drug application (“NDA”) to the FDA, which must usually be accompanied by payment of a substantial user fee;
- satisfactory completion of an FDA preapproval inspection of the manufacturing facilities at which the product is produced to assess compliance with current good manufacturing practice (“cGMP”) regulations and FDA audits of select clinical investigator sites to assess compliance with good clinical practices (“GCP”); and
- FDA review and approval of the NDA prior to any commercial marketing, sale or shipment of the drug.

This 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, and studies to evaluate toxicity and pharmacokinetics 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 period, raises concerns or questions about the conduct of the clinical trial, including concerns that human research subjects may 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. Similar regulatory procedures generally apply in those countries outside of the United States where we conduct clinical trials. Our submission of an IND or a foreign equivalent, or those of our collaborators, may not result in authorization from the FDA or its foreign equivalent to commence a clinical trial.

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A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development. Further, an independent institutional review board (“IRB”) or its foreign equivalent 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 clinical trial until completed. The FDA, the IRB or their foreign equivalents, or the clinical trial 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 Trials.* For purposes of an NDA submission and approval, clinical trials are typically conducted in the following three sequential phases, which may overlap:

- *Phase I:* These clinical trials 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. In some cases, a sponsor may decide to conduct a “Phase Ib” clinical trial, which is a second, safety-focused Phase I trial typically designed to evaluate the pharmacokinetics and tolerability of the drug candidate in combination with currently approved drugs.
- *Phase II:* These clinical trials are generally conducted in a limited patient population to identify possible adverse effects and safety risks, to make an initial determination of potential 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. Phase IIa clinical trials generally are designed to study the pharmacokinetic or pharmacodynamic properties and to conduct a preliminary assessment of safety of the drug candidate over a measured dose response range. In some cases, a sponsor may decide to conduct a Phase IIb clinical trial, which is a second, typically larger, confirmatory Phase II trial that could, if positive and accepted by the FDA, serve as a pilot or pivotal clinical trial in the approval of a drug candidate.
- *Phase III:* These clinical trials are commonly referred to as pivotal clinical trials. If the Phase II clinical trials demonstrate that a dose range of the drug candidate is potentially effective and has an acceptable safety profile, Phase III clinical trials are then 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, known as Phase IV clinical trials.

The clinical trials we conduct for our drug candidates, both before and after approval, and the results of those trials, are generally required to be included in a clinical trials registry database that is available and accessible to the public via the internet. A failure by us to properly participate in the clinical trial database registry could subject us to significant civil monetary penalties.

Health care providers in the United States, including research institutions from which we or our partners obtain patient information, are subject to privacy rules under the Health Insurance Portability and Accountability Act of 1996 and state and local privacy laws. In the European Union, these entities are subject to the Directive 95/46-EC of the European Parliament on the protection of individuals with regard to the processing of personal data and individual European Union member states implementing additional legislation. Other countries have similar privacy legislation. We could face substantial penalties if we knowingly receive individually identifiable health information from a health care provider that has not satisfied the applicable privacy laws. In addition, certain privacy laws and genetic testing laws may apply directly to our operations and/or those of our partners and may impose restrictions on the use and dissemination of individuals’ health information and use of biological samples.

*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.

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In addition, the FDA may require that a proposed Risk Evaluation and Mitigation Strategy, also known as a REMS, be submitted as part of the NDA if the FDA determines that it is necessary to ensure that the benefits of the drug outweigh its risks. 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 often, but not always, follows the advisory committee's recommendations. The FDA may deny approval of an NDA by issuance of a complete response letter if the applicable regulatory criteria are not satisfied, or it may require additional clinical data, including data in a pediatric population, or an additional pivotal Phase III clinical trial or impose other conditions that must be met in order to secure final approval for an NDA. 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 the FDA may interpret data differently than we or our partners do. Once issued, the FDA may withdraw a 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 further testing, including Phase IV clinical trials, and surveillance or restrictive distribution programs to monitor the effect of approved drugs which have been commercialized. 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 a drug, including changes in indications, labeling or manufacturing processes or facilities, we may be required to submit and obtain prior 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.

Satisfaction of FDA regulations and requirements or similar requirements of state, local and foreign regulatory agencies typically takes several years. The actual time required may vary substantially based upon the type, complexity and novelty of the drug candidate or disease. Typically, if a drug candidate is intended to treat a chronic disease, as is the case with some of our drug candidates, 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 or restrictive distribution programs. 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 future U.S. or foreign governmental regulations may be implemented.

*Orphan Drug Designation.* Some jurisdictions, including the United States, may designate drugs for relatively small patient populations as orphan drugs. The FDA grants orphan drug designation to drugs intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States. For example, the FDA has granted CK-2017357 an orphan drug designation for the treatment of ALS. In addition, the European Medicines Agency has granted CK-2017357 orphan medicinal product status for the treatment of ALS.

An FDA orphan drug designation does not shorten the duration of the regulatory review and approval process. If a drug based on a drug candidate which has an orphan drug designation receives the first FDA marketing approval for the indication for which the designation was granted, then the approved drug is entitled to orphan drug exclusivity. This means that the FDA may not approve another company's application to market the same drug for the same indication for a period of seven years, except in certain circumstances, such as a showing of clinical superiority to the drug with orphan exclusivity or if the holder of the orphan drug designation cannot assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the designation was granted. Competitors may receive approval of different drugs or biologics for the indications for which the orphan drug has exclusivity.

*Other Regulatory Requirements.* Any drugs manufactured or distributed by us or our partners pursuant to FDA approvals or their foreign counterparts are subject to continuing regulation by the applicable regulatory

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authority, 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 other applicable regulatory authorities, and are subject to periodic unannounced inspections by these regulatory authorities 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 and other regulatory requirements. If our present or future third-party manufacturers or suppliers are not able to comply with these requirements, the FDA or its foreign counterparts may halt our clinical trials, require us to recall a drug from distribution, or withdraw approval of the NDA for that drug.

For further details on the risks relating to government regulation of our business, please see the risk factors under Item 1A of this report, including, but not limited to, the risk factor entitled “The regulatory approval process is expensive, time-consuming and uncertain and may prevent our partners or us from obtaining approvals to commercialize some or all of our drug candidates.”

## **Competition**

We compete in the segments of the pharmaceutical, biotechnology and other related markets that address cardiovascular diseases and other diseases relating to muscle dysfunction, each of which is highly competitive. We face significant competition from most pharmaceutical companies and biotechnology companies that are also researching and selling products designed to address cardiovascular diseases and diseases and medical conditions associated with skeletal muscle weakness and wasting. 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 research of cardiovascular diseases and diseases where there is muscle dysfunction, some in direct competition with us.

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

- our drug candidates’ efficacy, safety and tolerability;
- the speed and cost-effectiveness with which we develop our drug candidates;
- the selection of suitable indications for which to develop our drug candidates;
- the successful completion of clinical development and laboratory testing of our drug candidates;
- the timing and scope of any regulatory approvals we or our partners obtain for our drug candidates;
- our or our partners’ ability to manufacture and sell commercial quantities of our approved drugs to meet market demand;
- acceptance of our drugs by physicians and other health care providers;
- the willingness of third party payors to provide reimbursement for the use of our drugs;
- our ability to protect our intellectual property and avoid infringing the intellectual property of others;
- the quality and breadth of our technology;
- our employees’ skills and our ability to recruit and retain skilled employees;
- our cash flows under existing and potential future arrangements with licensees, partners and other parties; and
- the availability of substantial capital resources to fund development and commercialization activities.

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Our competitors may develop drug candidates and market drugs that are less expensive and more effective than our future drugs or that may render our drugs obsolete. Our current or future competitors may also commercialize competing drugs before we or our partners can launch any drugs developed from our drug candidates. These organizations also compete with us to attract qualified personnel and potential parties for acquisitions, joint ventures or other strategic alliances.

If omecamtiv mecarbil is approved for marketing by the FDA for heart failure, it would compete against other drugs used for the treatment of heart failure. These include generic drugs, such as milrinone, dobutamine or digoxin and newer marketed drugs such as nesiritide. Omecamtiv mecarbil could also potentially compete against other novel drug candidates in development, such as bucindolol, which is being developed by ARCA biopharma, Inc.; relaxin, which is being developed by Novartis; CD-NP, which is being developed by Nile Therapeutics, Inc., and glial growth factor (GGF-2) which is being developed by Acorda Therapeutics, Inc. In addition, there are a number of medical devices being developed for the potential treatment of heart failure.

With respect to our skeletal muscle sarcomere activators (such as CK-2017357), potential competitors include Ligand Pharmaceuticals, Inc., which is developing LGD-4033, a selective androgen receptor modulator, for muscle wasting; and GTx, Inc., which is developing ostarine, a selective androgen receptor modulator, for cancer cachexia. Acceleron Pharma, Inc. is conducting clinical development with ACE-031, a myostatin inhibitor, and related compounds to evaluate their ability to treat diseases involving the loss of muscle mass, strength and function. We are aware that other companies are developing potential new therapies for ALS, such as Biogen Idec, Inc., Mitsubishi Tanabe Pharma Corporation, Eisai Inc., Trophos SA, Neuraltus Pharmaceuticals, Inc., Isis Pharmaceuticals, Inc. and GlaxoSmithKline plc. If CK-2017357 or other of our skeletal muscle sarcomere activators are approved for the treatment of claudication associated with peripheral artery disease, they will compete with currently approved therapies for the treatment of peripheral artery disease. We are also aware that a number of companies are developing potential new treatments for peripheral artery disease or associated symptoms of claudication. If CK-2017357 or other of our skeletal muscle sarcomere activators are approved for the treatment of myasthenia gravis, they will compete with currently approved therapies for the treatment of myasthenia gravis, including but not limited to anticholinesterase agents, such as pyridostigmine bromide and neostigmine bromide, corticosteroids, such as prednisone, and immunomodulatory drugs, such as azathiaprine and cyclosporine. We are also aware that a number of companies are developing or commercializing in certain markets potential new treatments that could be used for the possible treatment of myasthenia gravis, such as Benesis Corp. (GB-0998), Alexion Pharmaceuticals, Inc. (eculizumab) and Astellas (tacrolimus).

For further details on the risks relating to our competitors, please see the risk factors under Item 1A of this report, including, but not limited to, the risk factor entitled "Our competitors may develop drugs that are less expensive, safer or more effective than ours, which may diminish or eliminate the commercial success of any drugs that we may commercialize."

## **Employees**

As of December 31, 2011, our workforce consisted of 79 full-time employees, 19 of whom hold Ph.D. or M.D. degrees, or both, and 18 of whom hold other advanced degrees. Of our total full-time employees, 58 are engaged in research and development and 21 are engaged in business development, finance and administration functions.

In October 2011, we announced a restructuring plan intended to align our workforce and operations in connection with our commitment to focus resources primarily on our later-stage development programs for CK-2017357 and omecamtiv mecarbil, and on our follow-on skeletal muscle troponin activator program and joint research with Amgen directed to next-generation compounds in our cardiac muscle contractility program. As a result, we reduced our workforce by approximately 18%, or 18 employees, to 83 employees. We provided severance, employee benefit continuation and career transition assistance to the employees directly affected by the restructuring.

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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.

**Available Information**

We file electronically with the Securities and Exchange Commission (“SEC”) our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. The public may read or copy any materials we file with the SEC at the SEC’s Public Reference Room at 100 F Street, NE, Washington, DC 20549. 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 an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is [www.sec.gov](http://www.sec.gov).

You may obtain a free copy of our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports on the day of filing with the SEC on our website at [www.cytokinetics.com](http://www.cytokinetics.com) or by contacting the Investor Relations Department at our corporate offices by calling 650-624-3000. The information found on our website is not part of this or any other report filed with or furnished to the SEC.

**Item 1A. Risk Factors**

*In evaluating our business, you should carefully consider the following risks in addition to the other information in this report. Any of the following risks could materially and adversely affect our business, results of operations, financial condition or your investment in our securities, and many are beyond our control. It is not possible to predict or identify all such factors and, therefore, you should not consider any of these risk factors to be a complete statement of all the potential risks or uncertainties that we face.*

**Risks Related To Our Business**

***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.***

We have generally 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 drug candidates are all in early and mid-stage clinical testing, and we and our partners must conduct significant additional clinical trials before we and our partners can seek the regulatory approvals necessary to begin commercial sales of our drugs. We expect to incur increasing losses for at least several more years, as we continue our research activities and conduct development of, and seek regulatory approvals for, our drug candidates, and commercialize any approved drugs. If our drug candidates fail 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 will need substantial additional capital in the future to sufficiently fund our operations.***

We have consumed substantial amounts of capital to date, and our operating expenditures will increase over the next several years if we expand our research and development activities. We have funded all of our operations and capital expenditures with proceeds from private and public sales of our equity securities, strategic alliances with Amgen, GlaxoSmithKline and others, equipment financings, interest on investments and government grants. We believe that our existing cash and cash equivalents, short-term investments and interest earned on investments should be sufficient to meet our projected operating requirements for at least the next 12 months. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties

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associated with the development of our drug candidates and other research and development activities, including risks and uncertainties that could impact the rate of progress of our development activities, we are unable to estimate with certainty the amounts of capital outlays and operating expenditures associated with these activities.

For the foreseeable future, our operations will require significant additional funding, in large part due to our research and development expenses and the absence of any revenues from product sales. For example, we will require significant additional funding to enable us to conduct the registration trials we believe may be required to obtain marketing approval for CK-2017357 for the potential treatment of ALS. Until we can generate a sufficient amount of product revenue, we expect to raise future capital through strategic alliance and licensing arrangements, public or private equity offerings and debt financings. We do not currently have any commitments for future funding other than grant funding for our myasthenia gravis preclinical and clinical activities, and reimbursements, milestone and royalty payments that we may receive under our collaboration agreement with Amgen. We may not receive any further funds under that agreement. Our ability to raise funds may be adversely impacted by current economic conditions, including the effects of the recent disruptions to the credit and financial markets in the United States and worldwide. In particular, the pool of third-party capital that in the past has been available to development-stage companies such as ours has decreased significantly in recent years, and such decreased availability may continue for a prolonged period. As a result of these and other factors, we do not know whether additional financing will be available when needed, or that, if available, such financing would be on terms favorable to our stockholders or us.

To the extent that we raise additional funds through strategic alliances or licensing and other arrangements with third parties, 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. To the extent that we raise additional funds by issuing equity securities, our stockholders will experience additional dilution. To the extent that we raise additional funds through debt financing, the financing may involve covenants that restrict our business activities. In addition, funding from any of these sources, if needed, may not be available to us on favorable terms, or at all, or in accordance with our planned timelines.

If we can not raise the funds we need to operate our business, we will need to discontinue certain research and development activities. For example, in October 2011, we announced a restructuring plan to focus resources primarily on the later-stage development programs for CK-2017357 and omecamtiv mecarbil and certain other research and development programs also directed to muscle biology. As a result, we reduced our workforce by approximately 18%. If we discontinue research and development activities, our stock price may be negatively affected.

***We depend on Amgen for the conduct, completion and funding of the clinical development and commercialization of omecamtiv mecarbil.***

In May 2009, Amgen exercised its option to acquire an exclusive license to our drug candidate omecamtiv mecarbil worldwide, except for Japan. As a result, Amgen is responsible for the clinical development and obtaining and maintaining regulatory approval of omecamtiv mecarbil for the potential treatment of heart failure worldwide, except Japan.

We do not control the clinical development activities being conducted or that may be conducted in the future by Amgen, including, but not limited to, the timing of initiation, termination or completion of clinical trials, the analysis of data arising out of those clinical trials or the timing of release of data concerning those clinical trials, which may impact our ability to report on Amgen's results. Amgen may conduct these activities more slowly or in a different manner than we would if we controlled the clinical development of omecamtiv mecarbil. Amgen is responsible for filing future applications with the FDA or other regulatory authorities for approval of omecamtiv mecarbil and will be the owner of any marketing approvals issued by the FDA or other regulatory authorities for omecamtiv mecarbil. If the FDA or other regulatory authorities approve omecamtiv mecarbil, Amgen will also be responsible for the marketing and sale of the resulting drug, subject to our right to co-promote omecamtiv mecarbil in North America if we exercise our option to co-fund Phase III development



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costs of omecamtiv mecarbil under the collaboration. However, we cannot control whether Amgen will devote sufficient attention and resources to the clinical development of omecamtiv mecarbil or will proceed in an expeditious manner, even if we do exercise our option to co-fund the development of omecamtiv mecarbil. Even if the FDA or other regulatory agencies approve omecamtiv mecarbil, Amgen may elect not to proceed with the commercialization of the resulting drug in one or more countries.

Amgen generally has discretion to elect whether to pursue or abandon the development of omecamtiv mecarbil and may terminate our strategic alliance for any reason upon six months prior notice. If the initial results of one or more clinical trials with omecamtiv mecarbil do not meet Amgen's expectations, Amgen may elect to terminate further development of omecamtiv mecarbil or certain of the potential clinical trials for omecamtiv mecarbil, even if the actual number of patients treated at that time is relatively small. If Amgen abandons omecamtiv mecarbil, it would result in a delay in or could prevent us from commercializing omecamtiv mecarbil, and would delay and could prevent us from obtaining revenues for this drug candidate. Disputes may arise between us and Amgen, which may delay or cause the termination of any omecamtiv mecarbil clinical trials, result in significant litigation or cause Amgen to act in a manner that is not in our best interest. If development of omecamtiv mecarbil does not progress for these or any other reasons, we would not receive further milestone payments or royalties on product sales from Amgen with respect to omecamtiv mecarbil. If Amgen abandons development of omecamtiv mecarbil prior to regulatory approval or if it elects not to proceed with commercialization of the resulting drug following regulatory approval, we would have to seek a new partner for clinical development or commercialization, curtail or abandon that clinical development or commercialization, or undertake and fund the clinical development of omecamtiv mecarbil or commercialization of the resulting drug ourselves. If we seek a new partner but are unable to do so on acceptable terms, or at all, or do not have sufficient funds to conduct the development or commercialization of omecamtiv mecarbil ourselves, we would have to curtail or abandon that development or commercialization, which could harm our business.

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

We currently have no drugs for sale and we cannot guarantee that we will ever develop or obtain approval to market any drugs. To receive marketing approval for any drug candidate, we must demonstrate that the drug candidate satisfies rigorous standards of safety and efficacy to the FDA in the United States and other regulatory authorities abroad. We and our partners will need to conduct significant additional research and preclinical and clinical testing before we or our partners can file applications with the FDA or other regulatory authorities for approval of any 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, compared to other therapies available for the treatment of the same conditions. We may not achieve any of these objectives. Currently, our only drug candidates in clinical development are omecamtiv mecarbil for the potential treatment of heart failure and CK-2017357 for the potential treatment of diseases associated with aging, muscle wasting and neuromuscular dysfunction. We cannot be certain that the clinical development of these or any future drug candidates will be successful, that they will receive the regulatory approvals required to commercialize them, or that any of our other research programs will yield a drug candidate suitable for clinical testing or commercialization. Our commercial revenues, if any, will be derived from sales of drugs that we do not expect to be commercially marketed for at least several years, if at all. The development of any one or all of these drug candidates may be discontinued at any stage of our clinical trials programs and we may not generate revenue from any of these drug candidates.

***Clinical trials may fail to demonstrate the desired 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 or our partners must adequately demonstrate to the FDA and foreign regulatory authorities that the drug candidate is sufficiently safe and effective with substantial evidence from well-controlled clinical trials. In clinical trials we or our partners will need to demonstrate efficacy for the treatment of specific indications and monitor safety throughout the clinical

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development process and following approval. None of our drug candidates have yet been demonstrated to be safe and effective in clinical trials and they may never be. In addition, for each of our current preclinical compounds, we or our partners must adequately demonstrate satisfactory chemistry, formulation, stability and toxicity in order to submit an IND to the FDA, or an equivalent application in foreign jurisdictions, that would allow us to advance that compound into clinical trials. Furthermore, we or our partners may need to submit separate INDs (or foreign equivalent) to different divisions within the FDA (or foreign regulatory authorities) in order to pursue clinical trials in different therapeutic areas. Each new IND (or foreign equivalent) must be reviewed by the new division before the clinical trial under its jurisdiction can proceed, entailing all the risks of delay inherent to regulatory review. If our or our partners' current or future preclinical studies or clinical trials are unsuccessful, our business will be significantly harmed and our stock price could be negatively affected.

All of our drug candidates are prone to the risks of failure inherent in drug development. Preclinical studies may not yield results that would adequately support the filing of an IND (or a foreign equivalent) with respect to our potential drug candidates. Even if the results of preclinical studies for a drug candidate are sufficient to support such a filing, the results of preclinical studies do not necessarily predict the results of clinical trials. As an example, because the physiology of animal species used in preclinical studies may vary substantially from other animal species and from humans, it may be difficult to assess with certainty whether a finding from a study in a particular animal species will result in similar findings in other animal species or in humans. For any of our drug candidates, the results from Phase I clinical trials in healthy volunteers and clinical results from Phase I and II trials in patients are not necessarily indicative of the results of larger Phase III clinical trials that are necessary to establish whether the drug candidate is safe and effective for the applicable indication. Likewise, interim results from a clinical trial may not be indicative of the final results from that trial.

In addition, while the clinical trials of our drug candidates are designed based on the available relevant information, in view of the uncertainties inherent in drug development, such clinical trials may not be designed with focus on indications, patient populations, dosing regimens, safety or efficacy parameters or other variables that will provide the necessary safety or efficacy data to support regulatory approval to commercialize the resulting drugs. In addition, individual patient responses to the dose administered of a drug may vary in a manner that is difficult to predict. Also, the methods we select to assess particular safety or efficacy parameters may not yield the same statistical precision in estimating our drug candidates' effects as may other alternative methodologies. Even if we believe the data collected from clinical trials of our drug candidates are promising, these data may not be sufficient to support approval by the FDA or foreign regulatory authorities. Preclinical and clinical data can be interpreted in different ways. Accordingly, the FDA or foreign regulatory authorities could interpret these data in different ways from us or our partners, which could delay, limit or prevent regulatory approval.

Administering any of our drug candidates or potential drug candidates may produce undesirable side effects, also known as adverse effects. Toxicities and adverse effects observed in preclinical studies for some compounds in a particular research and development program may also occur in preclinical studies or clinical trials of other compounds from the same program. Potential toxicity issues may arise from the effects of the active pharmaceutical ingredient itself or from impurities or degradants that are present in the active pharmaceutical ingredient or could form over time in the formulated drug candidate or the active pharmaceutical ingredient. These toxicities or adverse effects could delay or prevent the filing of an IND (or a foreign equivalent) with respect to our drug candidates or potential drug candidates or cause us or our partners to modify, suspend or terminate clinical trials with respect to any drug candidate at any time during the development program. Further, the administration of two or more drugs contemporaneously can lead to interactions between them, and our drug candidates may interact with other drugs that trial subjects are taking. For example, in a Phase I drug-drug interaction study of CK-2017357 administered orally to healthy volunteers, co-administration of CK-2017357 and riluzole approximately doubled the average maximum riluzole plasma level, although it also appeared to reduce the variability of the riluzole plasma levels of the study subjects. The FDA, other regulatory authorities, our partners or we may modify, suspend or terminate clinical trials with our drug candidates at any time. If these or other adverse effects are severe or frequent enough to outweigh the potential efficacy of a drug candidate, the

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FDA or other regulatory authorities could deny approval of that drug candidate for any or all targeted indications. Even if one or more of our drug candidates were approved for sale as drugs, the occurrence of even a limited number of toxicities or adverse effects when used in large populations may cause the FDA to impose restrictions on, or stop, the further marketing of those drugs. Indications of potential adverse effects or toxicities which do not seem significant during the course of clinical trials may later turn out to actually constitute serious adverse effects or toxicities when a drug is used in large populations or for extended periods of time.

We have observed certain adverse effects in the clinical trials conducted with our drug candidates. For example, in clinical trials of omecamtiv mecarbil, dose-limiting effects were associated with complaints of chest discomfort, palpitations, dizziness and feeling hot, increases in heart rate, declines in blood pressure, electrocardiographic changes consistent with acute myocardial ischemia and transient rises in the MB fraction of creatine kinase and cardiac troponins I and T, which are indicative of myocardial infarction. In Phase IIa clinical trials of CK-2017357, adverse events of dizziness, fatigue, headache, somnolence (sleepiness), euphoric mood, muscle spasms, gait disturbance, pain in extremity, feeling drunk, blurred vision, muscular weakness, nausea, balance disorder, asthenia (loss of strength and energy), abnormal coordination and dysarthria (difficulty speaking) occurred more frequently during treatment with CK-2017357 than with placebo, with a possible trend for their frequencies to increase with increasing doses of CK-2017357.

In addition, clinical trials of omecamtiv mecarbil and CK-2017357 enroll patients who typically suffer from serious diseases which put them at increased risk of death. These patients may die while receiving our drug candidates. In such circumstances, it may not be possible to exclude with certainty a causal relationship to our drug candidate, even though the responsible clinical investigator may view such an event as not study drug-related. For example, in a Phase IIa clinical trial designed to evaluate and compare the oral pharmacokinetics of both modified and immediate release formulations of omecamtiv mecarbil in patients with stable heart failure, a patient died suddenly after receiving the immediate release formulation of omecamtiv mecarbil, without having reported any preceding adverse events. The clinical investigator assessed the patient's death as not related to omecamtiv mecarbil. However, the event was reported to the appropriate regulatory authorities as possibly related to omecamtiv mecarbil because the immediate cause of the patient's death could not be determined, and therefore, a relationship to omecamtiv mecarbil could not be excluded definitively.

Any failure or significant delay in completing preclinical studies or clinical trials for our drug candidates, or in receiving and maintaining regulatory approval for the sale of any resulting drugs, may significantly harm our business and negatively affect our stock price.

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

Clinical trials are subject to rigorous regulatory requirements and are very expensive, difficult and time-consuming to design and implement. The length of time and number of trial sites and patients required for clinical trials vary substantially based on the type, complexity, novelty, intended use of the drug candidate and safety concerns. We estimate that the clinical trials of our current drug candidates will each continue for several more years. However, the clinical trials for all or any of these drug candidates may take significantly longer to complete. The commencement and completion of our clinical trials could be delayed or prevented by many factors, including, but not limited to:

- delays in obtaining, or inability to obtain, regulatory or other approvals to commence and conduct clinical trials in the manner we or our partners deem necessary for the appropriate and timely development of our drug candidates and commercialization of any resulting drugs;
- delays in identifying and reaching agreement, or inability to identify and reach agreement, on acceptable terms, with prospective clinical trial sites and other entities involved in the conduct of our clinical trials;
- delays or additional costs in developing, or inability to develop, appropriate formulations of our drug candidates for clinical trial use, including an appropriate modified release oral formulation for omecamtiv mecarbil;

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- slower than expected rates of patient recruitment and enrollment, including as a result of competition for patients with other clinical trials; limited numbers of patients that meet the enrollment criteria; patients', investigators' or trial sites' reluctance to agree to the requirements of a protocol; or the introduction of alternative therapies or drugs by others;
- for those drug candidates that are the subject of a strategic alliance, delays in reaching agreement with our partner as to appropriate development strategies;
- a regulatory authority may require changes to a protocol for a clinical trial that then may require approval from regulatory agencies in other jurisdictions where the trial is being conducted;
- an institutional review board ("IRB") or its foreign equivalent may require changes to a protocol that then require approval from regulatory agencies and other IRBs and their foreign equivalents, or regulatory authorities may require changes to a protocol that then require approval from the IRBs or their foreign equivalents;
- for clinical trials conducted in foreign countries, the time and resources required to identify, interpret and comply with foreign regulatory requirements or changes in those requirements, and political instability or natural disasters occurring in those countries;
- lack of effectiveness of our drug candidates during clinical trials;
- unforeseen safety issues;
- inadequate supply of clinical trial materials;
- uncertain dosing issues;
- failure by us, our partners, or clinical research organizations, investigators or site personnel engaged by us or our partners to comply with good clinical practices and other applicable laws and regulations, including those concerning informed consent;
- inability or unwillingness of investigators or their staffs to follow clinical protocols;
- inability to monitor patients adequately during or after treatment;
- introduction of new therapies or changes in standards of practice or regulatory guidance that render our drug candidates or their clinical trial endpoints obsolete; and
- results from non-clinical studies that may adversely impact the timing or further development of our drug candidates.

We do not know whether planned clinical trials will begin on time, or whether planned or currently ongoing clinical trials 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.

***If we fail to enter into and maintain successful strategic alliances for our drug candidates, potential drug candidates or research and development programs, we will have to reduce, delay or discontinue our advancement of those drug candidates, potential drug candidates and programs or expand our research and development capabilities and increase our expenditures.***

Drug development is complicated and expensive. We currently have limited financial and operational resources to carry out drug development. Our strategy for developing, manufacturing and commercializing our drug candidates and potential drug candidates 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. Accordingly, the success of our development activities depends in large part on our current and future strategic partners' performance, over which we have little or no control.

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We have retained all rights to develop and commercialize CK-2017357 and CK-2127107. We currently do not have a strategic partner for these compounds. We are seeking one or more strategic partners or other arrangements with third parties to advance and develop compounds from our skeletal muscle contractility program and our smooth muscle myosin inhibitors. However, we may not be able to negotiate and enter into such strategic alliances or arrangements on acceptable terms, if at all, or in accordance with our planned timelines.

We rely on Amgen to conduct non-clinical and clinical development for omecamtiv mecarbil for the potential treatment of heart failure. If Amgen elects to terminate its development activities with respect to omecamtiv mecarbil, we currently do not have an alternative strategic partner for this drug candidate.

Our ability to commercialize drugs that we develop with our partners and that 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. Our partners may not proceed with the development and commercialization of our drug candidates with the same degree of urgency as we would because of other priorities they face. In addition, new business combinations or changes in a partner's business strategy may adversely affect its willingness or ability to carry out its obligations under a strategic alliance.

If we are not able to successfully maintain our existing strategic alliances or establish and successfully maintain additional strategic alliances, we will have to limit the size or scope of, or delay or discontinue, one or more of our drug development programs or research programs, or undertake and fund these programs ourselves. Alternatively, if we elect to continue to conduct any of these drug development programs or research programs on our own, we will need to expand our capability to conduct clinical development by bringing additional skills, technical expertise and resources into our organization. This would require significant additional funding, which may not be available to us on acceptable terms, or at all.

***We depend on contract research organizations to conduct our clinical trials and have limited control over their performance.***

We have used and intend to continue to use contract research organizations ("CROs") within and outside of the United States to conduct clinical trials of our drug candidates, such as CK-2017357. We do not have control over many aspects of our CROs' activities, and cannot fully control the amount, timing or quality of resources that they devote to our programs. CROs may not assign as high a priority to our programs or pursue them as diligently as we would if we were undertaking these programs ourselves. The activities conducted by our CROs therefore may not be completed on schedule or in a satisfactory manner. CROs may also give higher priority to relationships with our competitors and potential competitors than to their relationships with us. Outside of the United States, we are particularly dependent on our CROs' expertise in communicating with clinical trial sites and regulatory authorities and ensuring that our clinical trials and related activities and regulatory filings comply with applicable laws. Our CROs' failure to carry out development activities on our behalf according to our and the FDA's or other regulatory agencies' requirements and in accordance with applicable U.S. and foreign laws, or our failure to properly coordinate and manage these activities, could increase the cost of our operations and delay or prevent the development, approval and commercialization of our drug candidates. In addition, if a CRO fails to perform as agreed, our ability to collect damages may be contractually limited. If we fail to effectively manage the CROs carrying out the development of our drug candidates or if our CROs fail to perform as agreed, the commercialization of our drug candidates will be delayed or prevented.

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***We have no manufacturing capacity and depend on our strategic partners and contract manufacturers to produce our clinical trial drug supplies for each of our drug candidates and potential drug candidates, and anticipate continued reliance on contract 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 or potential drug candidates. We have limited experience in drug formulation and manufacturing, and we lack the resources and the capabilities to manufacture any of our drug candidates or potential drug candidates on a clinical or commercial scale. Amgen has assumed responsibility to conduct these activities for the ongoing clinical development of omecamtiv mecarbil worldwide, except Japan. For CK-2017357 and CK-2127107, we rely (and for omecamtiv mecarbil, we have relied) on a limited number of contract manufacturers. In particular, we rely on single-source contract manufacturers for the active pharmaceutical ingredient and the drug product supply for our clinical trials. We expect to rely on contract manufacturers to supply all future drug candidates for which we conduct clinical development. If any of our existing or future contract manufacturers fail to perform satisfactorily, it 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. In addition, if a contract manufacturer fails to perform as agreed, our ability to collect damages may be contractually limited.

Our drug candidates and potential drug candidates require precise high-quality manufacturing. The failure to achieve and maintain high manufacturing standards, including failure to detect or control anticipated or unanticipated manufacturing errors or the frequent occurrence of such errors, could result in patient injury or death, discontinuance or delay of ongoing or planned clinical trials, delays or failures in product testing or delivery, cost overruns, product recalls or withdrawals and other problems that could seriously hurt our business. Contract drug manufacturers often encounter difficulties involving production yields, quality control and quality assurance and shortages of qualified personnel. These manufacturers are subject to stringent regulatory requirements, including the FDA's current good manufacturing practices regulations and similar foreign laws and standards. Each contract manufacturer must pass a pre-approval inspection before we can obtain marketing approval for any of our drug candidates and following approval will be subject to ongoing periodic unannounced inspections by the FDA, the U.S. Drug Enforcement Agency and other regulatory agencies, to ensure strict compliance with current good manufacturing practices and other applicable government regulations and corresponding foreign laws and standards. We seek to ensure that our contract manufacturers comply fully with all applicable regulations, laws and standards. However, we do not have control over our contract manufacturers' compliance with these regulations, laws and standards. If one of our contract manufacturers fails to pass its pre-approval inspection or maintain ongoing compliance at any time, the production of our drug candidates could be interrupted, resulting in delays or discontinuance of our clinical trials, additional costs and potentially lost revenues. In addition, failure of any third party manufacturers or us to comply with applicable regulations, including pre- or post-approval inspections and the current good manufacturing practice requirements of the FDA or other comparable regulatory agencies, could result in sanctions being imposed on us. These sanctions could include fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approval of our products, delay, suspension or withdrawal of approvals, license revocation, product seizures or recalls, operational restrictions and criminal prosecutions, any of which could significantly and adversely affect our business.

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. If a natural disaster, business failure, strike or other difficulty occurs, we may be unable to replace these contract manufacturers in a timely or cost-effective manner and the production of our drug candidates would be interrupted, resulting in delays and additional costs.

Switching manufacturers or manufacturing sites would be difficult and time-consuming because the number of potential manufacturers is limited. In addition, before a drug from any replacement manufacturer or manufacturing site can be commercialized, the FDA and, in some cases, foreign regulatory agencies, must

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approve that site. These approvals would require regulatory testing and compliance inspections. A new manufacturer or manufacturing site also would have to be educated in, or develop substantially equivalent processes for, production of our drugs and drug candidates. It may be difficult or impossible to transfer certain elements of a manufacturing process to a new manufacturer or for us to find a replacement manufacturer on acceptable terms quickly, or at all, either of which would delay or prevent our ability to develop drug candidates and commercialize any resulting drugs.

***We may not be able to successfully scale-up manufacturing of our drug candidates in sufficient quality and quantity, which would delay or prevent us from developing our drug candidates and commercializing resulting approved drugs, if any.***

To date, our drug candidates have been manufactured in small quantities for preclinical studies and early-stage clinical trials. In order to conduct larger scale or late-stage clinical trials for a drug candidate and for commercialization of the resulting drug if that drug candidate is approved for sale, we will need to manufacture it in larger quantities. We may not be able to successfully increase the manufacturing capacity for any of our drug candidates, whether in collaboration with third-party manufacturers or on our own, in a timely or cost-effective manner or at all. If a contract 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 those improvements. Significant scale-up of manufacturing may require additional validation studies, which are costly and which the FDA must review and approve. In addition, quality issues may arise during those scale-up activities because of the inherent properties of a drug candidate itself or of a drug candidate in combination with other components added during the manufacturing and packaging process, or during shipping and storage of the finished product or active pharmaceutical ingredients. If we are unable to successfully scale-up manufacture of any of our drug candidates in sufficient quality and quantity, the development of that drug candidate and regulatory approval or commercial launch for any resulting drugs may be delayed or there may be a shortage in supply, which could significantly harm our business.

***The mechanisms of action of our drug candidates and potential drug candidates are unproven, and we do not know whether we will be able to develop any drug of commercial value.***

We have discovered and are currently developing drug candidates and potential drug candidates that have what we believe are novel mechanisms of action directed against cytoskeletal targets, and intend to continue to do so. Because no currently approved drugs appear to operate via the same biochemical mechanisms as our compounds, we cannot be certain that our drug candidates and potential drug candidates will result in commercially viable drugs that safely and effectively treat the indications for which we intend to develop them. The results we have seen for our compounds in preclinical models may not translate into similar results in humans, and results of early clinical trials in humans may not be predictive of the results of larger clinical trials that may later be conducted with our drug candidates. Even if we are successful in developing and receiving regulatory approval for a drug candidate for the treatment of a particular disease, we cannot be certain that we will also be able to develop and receive regulatory approval for that or other drug candidates for the treatment of other diseases. If we or our partners are unable to successfully develop and commercialize our drug candidates, our business will be materially harmed.

***Our success depends substantially upon our ability to obtain and maintain intellectual property protection relating to our drug candidates, potential drug candidates and research technologies.***

We own, or hold exclusive licenses to, a number of U.S. and foreign patents and patent applications directed to our drug candidates, potential drug candidates and research technologies. Our success depends on our ability to obtain patent protection both in the United States and in other countries for our drug candidates and potential drug candidates, their methods of manufacture and use, and our technologies. Our ability to protect our drug candidates, potential drug candidates and technologies from unauthorized or infringing use by third parties depends substantially on our ability to obtain and enforce our patents. If our issued patents and patent applications, if granted, do not adequately describe, enable or otherwise provide coverage of our technologies

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and drug candidates and potential drug candidates, including omecamtiv mecarbil, CK-2017357 and CK-2127107, we or our licensees would not be able to exclude others from developing or commercializing these drug candidates. Furthermore, the degree of future protection of our proprietary rights is uncertain because legal means may not adequately protect our rights or permit us to gain or keep our competitive advantage.

Due to evolving legal standards relating to the patentability, validity and enforceability of patents covering pharmaceutical inventions and the claim scope of these patents, our ability to enforce our existing patents and to obtain and enforce patents that may issue from any pending or future patent applications is uncertain and involves complex legal, scientific and factual questions. The standards which the U.S. Patent and Trademark Office and its foreign counterparts use to grant patents are not always applied predictably or uniformly and are subject to change. To date, no consistent policy has emerged regarding the breadth of claims allowed in biotechnology and pharmaceutical patents. Thus, we cannot be sure that any patents will issue from any pending or future patent applications owned by or licensed to us. Even if patents do issue, we cannot be sure that the claims of these patents will be held valid or enforceable by a court of law, will provide us with any significant protection against competitive products, or will afford us a commercial advantage over competitive products. In particular:

- 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 the inventions covered by our pending patent applications and issued patents;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- some or all of our or our licensors' pending patent applications may not result in issued patents or the claims that issue may be narrow in scope and not provide us with competitive advantages;
- our and our licensors' issued patents may not provide a basis for commercially viable drugs or therapies or may be challenged and invalidated by third parties;
- our or our licensors' patent applications or patents may be subject to interference, opposition or similar administrative proceedings that may result in a reduction in their scope or their loss altogether;
- we may not develop additional proprietary technologies or drug candidates that are patentable; or
- the patents of others may prevent us or our partners from discovering, developing or commercializing our drug candidates.

Patent protection is afforded on a country-by-country basis. Some foreign jurisdictions do not protect intellectual property rights to the same extent as in the United States. Many companies have encountered significant difficulties in protecting and defending intellectual property rights in foreign jurisdictions. Some of our development efforts are performed in countries outside of the United States through third party contractors. We may not be able to effectively monitor and assess intellectual property developed by these contractors. We therefore may not be able to effectively protect this intellectual property and could lose potentially valuable intellectual property rights. In addition, the legal protection afforded to inventors and owners of intellectual property in countries outside of the United States may not be as protective of intellectual property rights as in the United States. Therefore, we may be unable to acquire and protect intellectual property developed by these contractors to the same extent as if these development activities were being conducted in the United States. If we encounter difficulties in protecting our intellectual property rights in foreign jurisdictions, our business prospects could be substantially harmed.

We rely on intellectual property assignment agreements with our corporate partners, employees, consultants, scientific advisors and other collaborators to grant us ownership of new intellectual property that is developed. These agreements may not result in the effective assignment to us of that intellectual property. As a result, our ownership of key intellectual property could be compromised.



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Changes in either the patent laws or their interpretation in the United States or other countries may diminish the value of our intellectual property or our ability to obtain patents. For example, the recently adopted America Invents Act of 2011 may affect the scope, strength and enforceability of our patent rights in the United States or the nature of proceedings which may be brought by us related to our patent rights in the United States.

If one or more products resulting from our drug candidates is approved for sale by the FDA and we do not have adequate intellectual property protection for those products, competitors could duplicate them for approval and sale in the United States without repeating the extensive testing required of us or our partners to obtain FDA approval. Regardless of any patent protection, under current law, an application for a generic version of a new chemical entity cannot be approved until at least five years after the FDA has approved the original product. When that period expires, or if that period is altered, the FDA could approve a generic version of our product regardless of our patent protection. An applicant for a generic version of our product may only be required to conduct a relatively inexpensive study to show that its product is bioequivalent to our product, and may not have to repeat the lengthy and expensive clinical trials that we or our partners conducted to demonstrate that the product is safe and effective. In the absence of adequate patent protection for our products in other countries, competitors may similarly be able to obtain regulatory approval in those countries of generic versions of our products.

We also rely on trade secrets to protect our technology, particularly where we believe patent protection is not appropriate or obtainable. However, trade secrets are often difficult to protect, especially outside of the United States. While we endeavor to use reasonable efforts to protect our trade secrets, our or our partners' employees, consultants, contractors or scientific and other advisors may unintentionally or willfully disclose our information to competitors. In addition, confidentiality agreements, if any, executed by those individuals may not be enforceable or provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure. Pursuing a claim that a third party had illegally obtained and was using our trade secrets would be expensive and time-consuming, and the outcome would be unpredictable. Even if we are able to maintain our trade secrets as confidential, if our competitors independently develop information equivalent or similar to our trade secrets, 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 or to achieve or maintain profitability.

***If we are sued for infringing third party intellectual property rights, it 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 use, manufacture and sell those drugs without infringing the patents or other proprietary rights of third parties. Numerous U.S. and foreign issued patents and pending patent applications owned by third parties exist in the therapeutic areas in which we are developing drug candidates and seeking new potential drug candidates. In addition, because patent applications can take several years to issue, there may be currently pending applications, unknown to us, which could later result in issued patents that our activities with our drug candidates could infringe. There may also be existing patents, unknown to us, that our activities with our drug candidates could infringe.

Other future products of ours may be impacted by patents of companies engaged in competitive programs with significantly greater resources (such as Merck & Co., Inc., Eli Lilly and Company, Bristol-Myers Squibb Company, Novartis, Biogen Idec, Inc., Mitsubishi Tanabe Pharma Corporation, Astellas, Eisai Inc. and AstraZeneca AB). Further development of these products could be impacted by these patents and result in significant legal fees.

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If a third party claims that our actions infringe its patents or other proprietary rights, we could face a number of issues that could seriously harm our competitive position, including, but not limited to:

- infringement and other intellectual property claims that, even if meritless, can be costly and time-consuming to litigate, delay the regulatory approval process and divert management's attention from our core business operations;
- substantial damages for past infringement which we may have to pay if a court determines that our drugs or technologies infringe a third party'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.

If any of these events occur, it could significantly harm our business and negatively affect our stock price.

***We may undertake infringement or other legal proceedings against third parties, causing us to spend substantial resources on litigation and exposing our own intellectual property portfolio to challenge.***

Third parties may infringe our patents. To prevent infringement or unauthorized use, we may need to file infringement suits, which are expensive and time-consuming. In an infringement proceeding, a court may decide that one or more of our patents is invalid, unenforceable, or both. In this case, third parties may be able to use our technology without paying licensing fees or royalties. Even if the validity of our patents is upheld, a court may refuse to stop the other party from using the technology at issue on the ground that the other party's activities are not covered by our patents. Policing unauthorized use of our intellectual property is difficult, and we may not be able to prevent misappropriation of our proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the United States. In addition, third parties may affirmatively challenge our rights to, or the scope or validity of, our patent rights.

***We may become involved in disputes with our strategic partners over intellectual property ownership, and publications by our research collaborators and clinical investigators could impair our ability to obtain patent protection or protect our proprietary information, either of which would have a significant impact on our business.***

Inventions discovered under our current or future strategic alliance agreements may become jointly owned by our strategic partners and us in some cases, and the exclusive property of one of us in other cases. Under some circumstances, it may be difficult to determine who owns a particular invention or whether it is jointly owned, and disputes could arise regarding ownership or use of those inventions. These disputes could be costly and time-consuming, and an unfavorable outcome could have a significant adverse effect on our business if we were not able to protect or license rights to these inventions. In addition, our research collaborators and clinical investigators generally have contractual rights to publish data arising from their work. Publications by our research collaborators and clinical investigators relating to our research and development programs, either with or without our consent, could benefit our current or potential competitors and may impair our ability to obtain patent protection or protect our proprietary information, which could significantly harm our business.

***We may be subject to claims that we or our employees have wrongfully used or disclosed 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 these claims, in addition to paying monetary damages, we

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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 develop and commercialize certain potential drugs, which could significantly harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and distract management.

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

We compete with companies that have developed drugs or are developing drug candidates for cardiovascular diseases, diseases and conditions associated with muscle weakness or wasting and other diseases for which our drug candidates may be useful treatments. For example, if omecamtiv mecarbil is approved for marketing by the FDA for heart failure, that drug candidate would compete against other drugs used for the treatment of heart failure. These include generic drugs, such as milrinone, dobutamine or digoxin and newer marketed drugs such as nesiritide. Omecamtiv mecarbil could also potentially compete against other novel drug candidates in development, such as bucindolol, which is being developed by ARCA biopharma, Inc.; relaxin, which is being developed by Novartis; CD-NP, which is being developed by Nile Therapeutics, Inc., and glial growth factor (GGF-2) which is being developed by Acorda Therapeutics, Inc. In addition, there are a number of medical devices being developed for the potential treatment of heart failure.

With respect to our skeletal muscle sarcomere activators (such as CK-2017357), potential competitors include Ligand Pharmaceuticals, Inc., which is developing LGD-4033, a selective androgen receptor modulator, for muscle wasting; and GTx, Inc., which is developing ostarine, a selective androgen receptor modulator, for cancer cachexia. Acceleron Pharma, Inc. is conducting clinical development with ACE-031, a myostatin inhibitor, and related compounds to evaluate their ability to treat diseases involving the loss of muscle mass, strength and function. We are aware that other companies are developing potential new therapies for ALS, such as Biogen Idec, Inc., Mitsubishi Tanabe Pharma Corporation, Eisai Inc., Trophos SA, Neuraltus Pharmaceuticals, Inc., Isis Pharmaceuticals, Inc. and GlaxoSmithKline plc. If CK-2017357 or other of our skeletal muscle sarcomere activators are approved for the treatment of claudication associated with peripheral artery disease, they will compete with currently approved therapies for the treatment of peripheral artery disease. We are also aware that a number of companies are developing potential new treatments for peripheral artery disease or associated symptoms of claudication. If CK-2017357 or other of our skeletal muscle sarcomere activators are approved for the treatment of myasthenia gravis, they will compete with currently approved therapies for the treatment of myasthenia gravis, including but not limited to anticholinesterase agents, such as pyridostigmine bromide and neostigmine bromide, corticosteroids, such as prednisone, and immunomodulatory drugs, such as azathiaprine and cyclosporine. We are also aware that a number of companies are developing or commercializing in certain markets potential new treatments that could be used for the possible treatment of myasthenia gravis, such as Benesis Corp. (GB-0998), Alexion Pharmaceuticals, Inc. (eculizumab) and Astellas (tacrolimus).

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;
- hold or obtain proprietary rights that could prevent us from commercializing our products;
- initiate or withstand substantial price competition more successfully than we can;
- more successfully recruit skilled scientific workers and management from the limited pool of available talent;
- more effectively negotiate third-party licenses and strategic alliances;
- take advantage of acquisition or other opportunities more readily than we can;

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- develop drug candidates and market drugs that increase the levels of safety or efficacy that our drug candidates will need to show in order to obtain regulatory approval; or
- introduce therapies or market drugs that render the market opportunity for our potential drugs obsolete.

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. 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 efficacious 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. 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 improving existing technological approaches or developing 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.

***Our failure to attract and retain skilled personnel could impair our drug development and commercialization activities.***

Our business depends on the performance of our senior management and key scientific and technical personnel. The loss of the services of any member of our senior management or key 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 identifying suitable replacements. 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, if and as our business grows, we will need to recruit additional executive management and scientific and technical personnel. There is intense competition for skilled executives and employees with relevant scientific and technical expertise, and this competition is likely to continue. Our inability to attract and retain sufficient scientific, technical and managerial personnel could limit or delay our product development activities, which would adversely affect the development of our drug candidates and commercialization of our potential drugs and growth of our business.

***Our workforce reductions in October 2011 and any future workforce and expense reductions may have an adverse impact on our internal programs and our ability to hire and retain skilled personnel.***

In October 2011, we reduced our workforce by approximately eighteen percent in order to reduce expenses and to focus resources primarily on our later-stage development programs for CK-2017357 and omecamtiv mecarbil and certain other research and development programs also directed to muscle biology. These headcount

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reductions and the cost control measures we have implemented may negatively affect our productivity and limit our research and development activities. Our future success will depend in large part upon our ability to attract and retain highly skilled personnel. We may have difficulty retaining and attracting such personnel as a result of a perceived risk of future workforce reductions. In light of our continued need for funding and cost control, we may be required to implement future workforce and expense reductions, which could further limit our research and development activities. In addition, the implementation of any additional workforce or expense reduction programs may divert the efforts of our management team and other key employees, which could adversely affect our business.

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

We may have growth in our expenditures, the number of our employees and the scope of our operations, in particular with respect to those drug candidates that we elect to develop or 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.

***We currently have no sales or marketing capabilities and, if we are unable to enter into or maintain strategic alliances with marketing partners or 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. We plan to commercialize drugs 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 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, cost-effectively or at all, which could make us unable to commercialize our drugs. If we determine not to market our drugs on our own, we will depend on strategic alliances with third parties, such as Amgen, which have established distribution systems and direct sales forces to commercialize them. If we are unable to enter into such arrangements on acceptable terms, we may not be able to successfully commercialize these drugs. To the extent that we are not successful in commercializing any drugs ourselves or through a strategic alliance, our product revenues and business will suffer and our stock price would decrease.

#### **Risks Related To Our Industry**

***The regulatory approval process is expensive, time-consuming and uncertain and may prevent our partners or us from obtaining approvals to commercialize some or all of our drug candidates.***

The research, testing, manufacturing, selling and marketing of drugs are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, and 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 new drug application (“NDA”) from the FDA. Neither we nor our partners have received marketing approval for any of Cytokinetics’ drug candidates.

Obtaining NDA approval is a lengthy, expensive and uncertain process. In addition, failure to comply with FDA and other applicable foreign and U.S. 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.

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Regulatory approval of an NDA or NDA supplement is never guaranteed, and the approval process typically takes several years and is extremely expensive. The FDA and foreign regulatory agencies also have substantial discretion in the drug approval process. Despite the time and efforts 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 and focus of preclinical studies and clinical trials that will be required for approval by the FDA and foreign regulatory agencies 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. In addition, the FDA may require that a proposed Risk Evaluation and Mitigation Strategy, also known as a REMS, be submitted as part of an NDA if the FDA determines that it is necessary to ensure that the benefits of the drug outweigh its risks. The FDA and foreign regulatory agencies can delay, limit or deny approval of a drug candidate for many reasons, including, but not limited to:

- they might determine that a drug candidate is not safe or effective;
- they might not find the data from preclinical testing and clinical trials sufficient and could request that additional trials be performed;
- they might not approve our, our partner's or the contract manufacturer's processes or facilities; or
- they might change their approval policies or adopt new regulations.

Even if we receive regulatory approval to manufacture and sell a drug in a particular regulatory jurisdiction, other jurisdictions' regulatory authorities may not approve that drug for manufacture and sale. If we or our partners fail to receive and maintain regulatory approval for the sale of any drugs resulting from our drug candidates, it would significantly harm our business and negatively affect our stock price.

***If we or our partners receive regulatory approval for our drug candidates, we or they will be subject to ongoing obligations to and continued regulatory review by the FDA and foreign regulatory agencies, and may be subject to additional post-marketing obligations, all of which may result in significant expense and limit commercialization of our potential drugs.***

Any regulatory approvals that we or our partners receive for our drug candidates may be subject to limitations on the indicated uses for which the drug may be marketed or require potentially costly post-marketing follow-up studies or compliance with a REMS. In addition, if the FDA or foreign regulatory agencies 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, or the discovery that adverse effects or toxicities observed in preclinical research or clinical trials that were believed to be minor actually constitute much more serious problems, may result in restrictions on the marketing of the drug or withdrawal of the drug from the market.

The FDA and foreign regulatory agencies may change their policies 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 would 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, the 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 for purposes of approval, physicians may elect not to recommend these drugs for a variety of reasons including, but not limited to:

- introduction of competitive drugs to the market;
- clinical safety and efficacy of alternative drugs or treatments;

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- cost-effectiveness;
- availability of coverage and reimbursement from health maintenance organizations and other third-party payors;
- convenience and ease of administration;
- prevalence and severity of adverse side effects;
- other potential disadvantages relative to alternative treatment methods; or
- insufficient 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.***

Even if one or more of our drug candidates is approved for sale, the commercial success of our drugs in both domestic and international markets will be substantially dependent on whether third-party coverage and reimbursement is available for our drugs by the medical profession for use by their patients, which is highly uncertain. 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. As a result, they may not cover or provide adequate payment for our drugs. They may not view our drugs as cost-effective and reimbursement may not be available to consumers or may be insufficient to allow our drugs to be marketed on a competitive basis. If we are unable to obtain adequate coverage and reimbursement for our drugs, our ability to generate revenue will be adversely affected. Likewise, current and future legislative or regulatory efforts to control or reduce healthcare costs or reform government healthcare programs, such as the Patient Protection Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, could result in lower prices or rejection of coverage and reimbursement for our potential drugs. Changes in coverage and reimbursement policies or healthcare cost containment initiatives that limit or restrict reimbursement for any of our drug candidates that are approved could cause our potential future revenues to decline.

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

The use of our drug candidates in clinical trials may result in adverse effects. We cannot predict all the possible harms or adverse effects that may result from our clinical trials. We currently maintain limited product liability insurance. We may not have sufficient resources to pay for any liabilities resulting from a personal injury or other claim excluded from, or beyond the limit of, our insurance coverage. Our insurance does not cover third parties' negligence or malpractice, and our clinical investigators and sites may have inadequate insurance or none at all. In addition, in order to conduct clinical trials or otherwise carry out our business, we may have to contractually assume liabilities for which we may not be insured. If we are unable to look to our own or a third party's insurance to pay claims against us, we may have to pay any arising costs and damages ourselves, which may be substantial.

In addition, if we commercially launch drugs based on our drug candidates, we will face even greater exposure to product liability claims. This risk exists even with respect to those drugs that are approved for commercial sale by the FDA and foreign regulatory agencies and manufactured in licensed and regulated facilities. We intend to secure additional limited product liability insurance coverage for drugs that we commercialize, but may not be able to obtain such insurance on acceptable terms with adequate coverage, or at reasonable costs. Even if we are 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 affected product and our other potential drugs. Moreover,

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product recalls may be issued at our discretion or at the direction of the FDA and foreign regulatory agencies, other governmental agencies or other companies having regulatory control for drug sales. Product recalls are generally expensive and often have an adverse effect on the reputation of the drugs being recalled and of the drug's developer or manufacturer.

We may be required to indemnify third parties against damages and other liabilities arising out of our development, commercialization and other business activities, which could be costly and time-consuming and distract management. If third parties that have agreed to indemnify us against damages and other liabilities arising from their activities do not fulfill their obligations, then we may be held responsible for those damages and other liabilities.

***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 new drugs is costly. As a result, to the extent we elect to fund the development of a drug candidate or the commercialization of a drug, we will need to raise additional capital to:

- expand our research and development capabilities;
- 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 and support additional management and scientific personnel.

Our future funding requirements will depend on many factors, including, but not limited to:

- the rate of progress and costs of our clinical trials and other research and development activities;
- the costs and timing of seeking and obtaining regulatory approvals;
- 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 of acquiring or investing in businesses, products and technologies;
- the effect of competing technological and market developments; and
- the status of, payment and other terms, and timing of any strategic alliance, licensing or other arrangements that we have entered into or 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 continue to finance our future cash needs primarily through strategic alliances, public or private equity offerings and debt financings. 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.

***Responding to any claims relating to improper handling, storage or disposal of the hazardous chemicals and radioactive and biological materials we use in our business could be time-consuming and costly.***

Our research and development processes involve the controlled use of hazardous materials, including chemicals and radioactive and biological materials. Our operations produce hazardous waste products. We cannot



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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 or third parties' use of these materials. Compliance with environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production activities.

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

All of our facilities and our important documents and records, such as hard copies of our laboratory books and records for our drug candidates and compounds and our electronic business records, are located in our corporate headquarters at a single location in South San Francisco, California near active earthquake zones. If a natural disaster, such as an earthquake or flood, a catastrophic event such as a disease pandemic or terrorist attack, or a localized extended outage of critical utilities or transportation systems occurs, we could experience a significant business interruption. Our partners and other third parties on which we rely may also be subject to business interruptions from such events. 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 an Investment in Our Securities**

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

The stock market, particularly in recent years, has experienced significant volatility, particularly with respect to pharmaceutical, biotechnology and other life sciences company stocks, which often does not relate to the operating performance of the companies represented by the stock. Factors that could cause volatility in the market price of our common stock include, but are not limited to:

- announcements concerning any of the clinical trials for our compounds, such as omecamtiv mecarbil for heart failure and CK-2017357 for the potential treatment of diseases associated with aging, muscle wasting and neuromuscular dysfunction (including, but not limited to, the timing of initiation or completion of such trials and the results of such trials, and delays or discontinuations of such trials, including delays resulting from slower than expected or suspended patient enrollment or discontinuations resulting from a failure to meet pre-defined clinical end points);
- announcements concerning our strategic alliance with Amgen or future strategic alliances;
- failure or delays in entering additional drug candidates into clinical trials;
- failure or discontinuation of any of our research programs;
- issuance of new or changed securities analysts' reports or recommendations;
- failure or delay in establishing new strategic alliances, or the terms of those alliances;
- market conditions in the pharmaceutical, biotechnology and other healthcare-related sectors;
- actual or 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 products by us or our competitors;
- issues in manufacturing our drug candidates or drugs;
- market acceptance of our drugs;
- third-party healthcare coverage and reimbursement policies;

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- FDA or other U.S. or foreign regulatory actions affecting us or our industry;
- litigation or public concern about the safety of our drug candidates or drugs;
- additions or departures of key personnel;
- substantial sales of our common stock by our existing stockholders, whether or not related to our performance;
- automated trading activity by algorithmic and high-frequency trading programs; and
- volatility in the stock prices of other companies in our industry or in the stock market generally.

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, 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 our management's time and attention.

***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.***

As of February 29, 2012, our executive officers, directors and their affiliates beneficially owned or controlled approximately 11.2 % of the outstanding shares of our common stock (after giving effect to the exercise of all outstanding vested and unvested options and warrants). 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.

***Volatility in the stock prices of other companies may contribute to volatility in our stock price.***

The stock market in general, and the NASDAQ Global Market ("NASDAQ") and the market for technology companies in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Further, there has been particular volatility in the market prices of securities of early stage and development stage life sciences companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted. A securities class action suit against us could result in substantial costs, potential liabilities and the diversion of management's attention and resources, and could harm our reputation and business.

***Our common stock is thinly traded and there may not be an active, liquid trading market for our common stock.***

There is no guarantee that an active trading market for our common stock will be maintained on NASDAQ, or that the volume of trading will be sufficient to allow for timely trades. Investors may not be able to sell their shares quickly or at the latest market price if trading in our stock is not active or if trading volume is limited. In addition, if trading volume in our common stock is limited, trades of relatively small numbers of shares may have a disproportionate effect on the market price of our common stock.

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

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and new Securities and Exchange Commission (“SEC”) regulations and NASDAQ Stock Market LLC 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 these costs. For example, compliance with the internal control requirements of Section 404 of the Sarbanes-Oxley Act has to date required the commitment of significant resources to document and test the adequacy of our internal control over financial reporting. We can provide no assurance as to conclusions of management or by our independent registered public accounting firm with respect to the effectiveness of our internal control over financial reporting in the future. In addition, the SEC has adopted regulations that require us to file corporate financial statement information in an interactive data format known as XBRL. We may incur significant costs and need to invest considerable resources to remain in compliance with these regulations.

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 intend to maintain high standards of corporate governance and public disclosure. As a result, we intend to invest the resources necessary 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 or otherwise, regulatory authorities may initiate legal proceedings against us, which could be costly and time-consuming, and our reputation and business 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.

***Our common stock may be at risk for delisting from NASDAQ in the future. Delisting could adversely affect the liquidity of our common stock and the market price of our common stock could decrease.***

Our common stock is currently listed on NASDAQ. The NASDAQ Stock Market LLC has minimum requirements that a company must meet in order to remain listed on NASDAQ. These requirements include maintaining a minimum closing bid price of \$1.00 per share. Although the trading price of our common stock is currently above \$1.00 per share, there can be no assurance that we will continue to meet this, or any other, requirement in the future, and, if we do not, it is possible that The NASDAQ Stock Market LLC may notify us that we have failed to meet the minimum listing requirements and initiate the delisting process. If our common stock were to be delisted, the liquidity of our common stock would be adversely affected and the market price of our common stock could decrease.

In addition, if delisted we would no longer be subject to NASDAQ rules, including rules requiring us to have a certain number of independent directors and to meet other corporate governance standards. Our failure to be listed on NASDAQ or another established securities market would have a material adverse effect on the value of your investment in us.

If our common stock is not listed on NASDAQ or another national exchange, the trading price of our common stock is below \$5.00 per share and we have net tangible assets of \$6,000,000 or less, the open-market

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trading of our common stock will be subject to the “penny stock” rules promulgated under the Securities Exchange Act of 1934, as amended. If our shares become subject to the “penny stock” rules, broker-dealers may find it difficult to effectuate customer transactions and trading activity in our securities may be adversely affected. Under these rules, broker-dealers who recommend such securities to persons other than institutional accredited investors must:

- make a special written suitability determination for the purchaser;
- receive the purchaser’s written agreement to the transaction prior to sale;
- provide the purchaser with risk disclosure documents which identify certain risks associated with investing in “penny stocks” and which describe the market for these “penny stocks” as well as a purchaser’s legal remedies; and
- Obtain a signed and dated acknowledgment from the purchaser demonstrating that the purchaser has actually received the required risk disclosure document before a transaction in a “penny stock” can be completed.

As a result of these requirements, the market price of our securities may be adversely impacted, and current stockholders may find it more difficult to sell our securities.

***Our stockholders will experience substantial additional dilution if shares of our preferred stock are converted into common stock.***

As of the date of this report, there are 8,070 shares of our Series A Convertible Preferred Stock outstanding, which is convertible, without payment of additional consideration, into 8,070,000 shares of our common stock. The conversion of the outstanding shares of our Series A Convertible Preferred Stock into common stock would be substantially dilutive to the outstanding shares of common stock. Any dilution or potential dilution may cause our stockholders to sell their shares, which would contribute to a downward movement in the stock price of our common stock.

***Raising additional capital by issuing securities will cause dilution to existing stockholders and may cause our share price to decline.***

We intend to raise additional funds through the issuance and sale of additional shares of our common stock or other securities convertible into or exchangeable for our common stock. In June 2011, we entered into an At-the-Market Issuance Sales Agreement (the “ATM Agreement”) with McNicoll, Lewis & Vlax LLC (“MLV”), pursuant to which we may issue and sell shares of our common stock having an aggregate offering price up to \$20.0 million, from time to time, through MLV as our sales agent. It is anticipated that these additional shares may be sold through MLV over a period of up to 36 months from June 2011. The number of shares ultimately offered for sale by MLV is dependent upon the number of shares that we elect to sell to MLV under the ATM Agreement. Depending upon market liquidity at the time, sales of shares of our common stock through MLV under the ATM Agreement may cause the trading price of our common stock to decline.

In November 2011, we filed a shelf registration statement on Form S-3 to offer and sell, from time to time, equity securities in one or more offerings up to a total dollar amount of \$100.0 million.

To the extent that we raise additional capital by issuing equity securities under the ATM Agreement, our current shelf registration statement on Form S-3 or otherwise, our stockholders will experience dilution. Any dilution or potential dilution may cause our stockholders to sell their shares, which would contribute to a downward movement in the trading price of our common stock.

**Item 1B. *Unresolved Staff Comments***

None.

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**Item 2. *Properties***

Our facilities consist of approximately 81,587 square feet of research and office space. We lease 50,195 square feet located at 280 East Grand Avenue, and 31,392 square feet at 256 East Grand Avenue, in South San Francisco, California until 2018 with an option to renew the lease for an additional three years. We believe that these facilities are suitable and adequate for our current needs.

**Item 3. *Legal Proceedings***

We are not a party to any material legal proceedings.

**Item 4. *Mine Safety Disclosures***

Not applicable.

**PART II**

**Item 5. *Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***

Our common stock is quoted on the NASDAQ Global Market under the symbol “CYTK,” and has been quoted on this market since our initial public offering on April 29, 2004. Prior to such date, there was no public market for our common stock. The following table sets forth the high and low closing sales price per share of our common stock as reported on the NASDAQ Global Market for the periods indicated.

	Closing Sale Price	
	High	Low
<b>Fiscal 2010:</b>		
First Quarter	\$ 3.54	\$2.91
Second Quarter	\$ 3.56	\$ 2.37
Third Quarter	\$ 2.80	\$ 2.08
Fourth Quarter	\$ 2.93	\$ 2.05
<b>Fiscal 2011:</b>		
First Quarter	\$ 2.16	\$ 1.25
Second Quarter	\$ 1.55	\$ 1.14
Third Quarter	\$ 1.38	\$ 0.98
Fourth Quarter	\$ 1.23	\$ 0.96

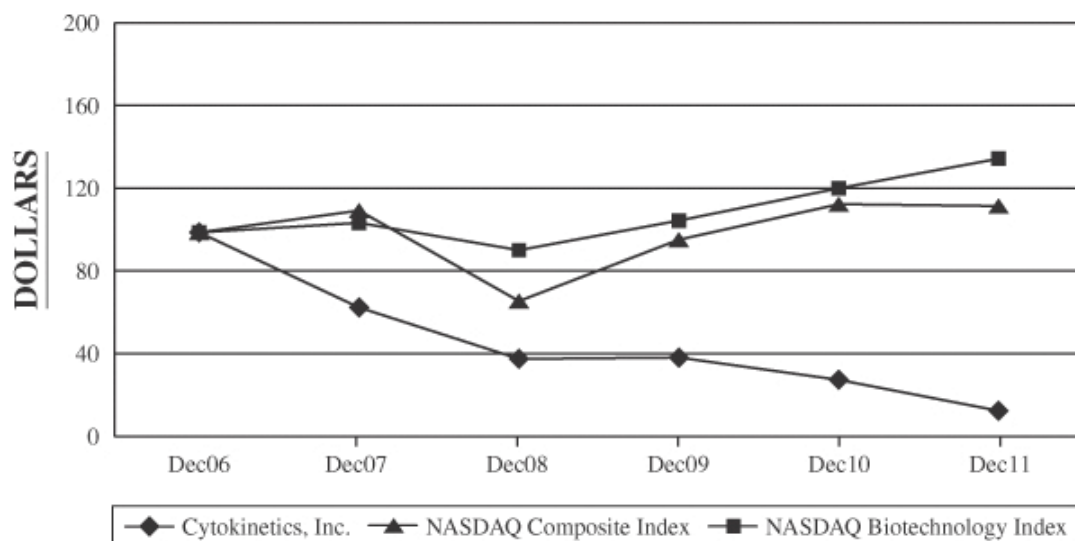
On February 29, 2012, the last reported sale price for our common stock on the NASDAQ Global Market was \$1.03 per share. We currently expect to retain future earnings, if any, for use in the operation and expansion of our business and have not paid and do not in the foreseeable future anticipate paying any cash dividends. As of February 29, 2012, there were 101 holders of record of our common stock.

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**Equity Compensation Information**

Information regarding our equity compensation plans and the securities authorized for issuance thereunder is set forth in Part III, Item 12.

**Comparison of Historical Cumulative Total Return Among Cytokinetics, Incorporated, the NASDAQ Stock Market (U.S.) Index and the NASDAQ Biotechnology Index(\*)**



(\*) The above graph shows the cumulative total stockholder return of an investment of \$100 in cash from December 31, 2006 through December 31, 2011 for: (i) our common stock; (ii) the NASDAQ Stock Market (U.S.) Index; and (iii) the NASDAQ Biotechnology Index. All values assume reinvestment of the full amount of all dividends. Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.

	<u>12/31/06</u>	<u>12/31/07</u>	<u>12/31/08</u>	<u>12/31/09</u>	<u>12/31/10</u>	<u>12/31/11</u>
Cytokinetics, Incorporated	\$ 100.00	\$ 63.24	\$ 38.10	\$ 38.90	\$ 27.94	\$ 12.83
NASDAQ Stock Market (U.S.) Index	\$ 100.00	\$ 110.55	\$ 66.30	\$ 96.34	\$ 113.70	\$ 112.76
NASDAQ Biotechnology Index	\$ 100.00	\$ 104.58	\$ 91.38	\$ 105.66	\$ 121.52	\$ 135.86

The information contained under this caption “Comparison of Historical Cumulative Total Return Among Cytokinetics, Incorporated, the NASDAQ Stock Market (U.S.) Index and the NASDAQ Biotechnology Index” shall not be deemed to be soliciting material or to be filed with the Securities and Exchange Commission (“SEC”), nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that we specifically incorporate it by reference into such filing.

**Sales of Unregistered Securities**

None.

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**Item 6. Selected Financial Data**

The following selected financial data should be read in conjunction with Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and Item 8, “Financial Statements and Supplemental Data” of this report on Form 10-K.

	Year Ended December 31,				
	2011	2010	2009	2008	2007
(In thousands, except per share amounts)					
<b>Statement of Operations Data:</b>					
Revenues:					
Research and development revenues from related parties(1)	\$ 2,054	\$ 1,487	\$ 7,171	\$ 186	\$ 1,388
Research and development, grant and other revenues	1,946	1,090	—	—	—
License revenues from related parties(1)	—	—	74,367	12,234	12,234
Total revenues	<u>4,000</u>	<u>2,577</u>	<u>81,538</u>	<u>12,420</u>	<u>13,622</u>
Operating expenses:					
Research and development	37,182	38,013	39,840	53,950	53,388
General and administrative	13,590	14,199	15,626	15,076	16,721
Restructuring charges (reversals)	1,192	—	(23)	2,473	—
Total operating expenses	<u>51,964</u>	<u>52,212</u>	<u>55,443</u>	<u>71,499</u>	<u>70,109</u>
Operating income (loss)	(47,964)	(49,635)	26,095	(59,079)	(56,487)
Interest and other, net(2)	104	172	(1,401)	2,705	7,593
Income (loss) before income taxes	(47,860)	(49,463)	24,694	(56,374)	(48,894)
Income tax provision (benefit)	—	(176)	150	—	—
Net income (loss)	(47,860)	(49,287)	24,544	(56,374)	(48,894)
Deemed dividend related to beneficial conversion feature of convertible preferred stock	(2,857)	—	—	—	—
Net income (loss) allocable to common stockholders:	<u>\$ (50,717)</u>	<u>\$ (49,287)</u>	<u>\$ 24,544</u>	<u>\$ (56,374)</u>	<u>\$ (48,894)</u>
Net income (loss) per share allocable to common stockholders:					
Basic	\$ (0.72)	\$ (0.77)	\$ 0.43	\$ (1.14)	\$ (1.03)
Diluted	<u>\$ (0.72)</u>	<u>\$ (0.77)</u>	<u>\$ 0.42</u>	<u>\$ (1.14)</u>	<u>\$ (1.03)</u>
Weighted average shares used in computing net income (loss) per share allocable to common stockholders:(3)					
Basic	<u>70,800</u>	<u>64,165</u>	<u>57,390</u>	<u>49,392</u>	<u>47,590</u>
Diluted	<u>70,800</u>	<u>64,165</u>	<u>57,961</u>	<u>49,392</u>	<u>47,590</u>



	As of December 31,				
	2011	2010	2009	2008	2007
	(In thousands)				
<b>Balance Sheet Data:</b>					
Cash and cash equivalents, investments, ARS and investment put option related to ARS	\$ 49,023	\$ 72,845	\$ 114,727	\$ 76,892	\$ 139,764
Restricted cash	196	788	1,674	2,750	5,167
Working capital	46,548	66,174	96,735	36,033	95,568
Total assets	52,773	77,992	122,599	87,454	155,370
Long-term portion of equipment financing lines	—	152	985	2,615	4,639
Deficit accumulated during the development stage	(408,510)	(360,650)	(311,363)	(335,907)	(279,533)
Total stockholders' equity(3)	48,178	70,516	101,428	49,766	99,916

- (1) Revenues from related parties consisted of revenues recognized under our research and development arrangements with related parties, including Amgen and GSK. See Note 6 in the Notes to Financial Statements for further details.
- (2) Interest and Other, net consisted of interest income/expense and other income/expense. For the years ended December 31, 2010, 2009 and 2008, it also included unrealized gains (losses) on our auction rate securities ("ARS") and investment put option related to the Series C-2 ARS Rights issued to us by UBS AG. For the year ended December 31, 2009, it also included warrant expense. See Note 14 in the Notes to Financial Statements for further details.
- (3) In 2007, we sold 2,075,177 shares of common stock to Kingsbridge pursuant to the 2005 committed equity financing facility for net proceeds of \$9.5 million. In January 2007, we issued 3,484,806 shares of common stock to Amgen for net proceeds of \$32.9 million in connection with a common stock purchase agreement with Amgen. In 2009, we sold 3,596,728 shares of common stock to Kingsbridge pursuant to the 2007 committed equity financing facility for net proceeds of \$6.9 million. In May 2009, we sold 7,106,600 shares of common stock in a registered direct offering for net proceeds of approximately \$12.9 million. In 2010, we sold 5,339,819 shares of common stock to Kingsbridge pursuant to the 2007 committed equity financing facility for net proceeds of \$14.0 million. In April 2011, we sold 5,300,000 shares of common stock, 8,070 shares of Series A Convertible Preferred Stock and warrants to purchase 6,685,000 shares of common stock to Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., Deerfield Special Situations Fund, L.P., and Deerfield Special Situations Fund International Limited ("Deerfield") for net proceeds of approximately \$19.9 million. In the fourth quarter of 2011, we sold 2,579,208 shares of common stock through McNicoll, Lewis & Vlask LLC ("MLV") for net proceeds of \$2.4 million. See Note 12 in the Notes to Financial Statements for further details.

**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

This discussion and analysis should be read in conjunction with our financial statements and accompanying notes included elsewhere in this report. Operating results are not necessarily indicative of results that may occur in future periods.

**Overview**

We are a clinical-stage biopharmaceutical company focused on the discovery and development of novel small molecule therapeutics that modulate muscle function for the potential treatment of serious diseases and medical conditions. Our research and development activities relating to the biology of muscle function have evolved from our knowledge and expertise regarding the cytoskeleton, a complex biological infrastructure that plays a fundamental role within every human cell. Our current research and development programs relating to the biology of muscle function are directed to small molecule modulators of the contractility of cardiac, skeletal and

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smooth muscle. We have, and intend to continue, to leverage our experience in muscle contractility in order to expand our current pipeline into new therapeutic areas, and expect to continue to be able to identify additional potential drug candidates that may be suitable for clinical development.

Our cardiac muscle contractility program is focused on the cardiac sarcomere, the basic unit of muscle contraction in the heart. Our lead drug candidate from this program, omecamtiv mecarbil (formerly known as CK-1827452), is a novel cardiac muscle myosin activator. Amgen holds an exclusive license to develop and commercialize omecamtiv mecarbil worldwide, except Japan, subject to our development and commercialization participation rights. An intravenous formulation of omecamtiv mecarbil is currently the subject of a Phase IIb clinical trial designed to evaluate its safety and efficacy in patients with left ventricular systolic dysfunction who are hospitalized with acute heart failure, known as ATOMIC-AHF (Acute Treatment with Omecamtiv Mecarbil to Increase Contractility in Acute Heart Failure). Oral formulations of omecamtiv mecarbil are being studied in healthy volunteers, and we anticipate that one or more of these oral formulations will also be studied in stable heart failure patients. We also are conducting joint research with Amgen directed to next-generation compounds in our cardiac muscle contractility program.

CK-2017357 is the lead drug candidate from our skeletal sarcomere activator program. The skeletal muscle sarcomere is the basic unit of skeletal muscle contraction. We believe CK-2017357 may be useful in treating diseases or medical conditions associated with skeletal muscle weakness or wasting. We are currently conducting a Phase II clinical trials program for CK-2017357, including two ongoing Phase II clinical trials in patients with amyotrophic lateral sclerosis (also known as ALS or Lou Gehrig's disease) and an ongoing Phase IIa clinical trial in patients with myasthenia gravis. We have also conducted a Phase IIa clinical trial of CK-2017357 in patients with claudication, which is pain or cramping in the leg muscles due to inadequate blood flow during exercise, associated with peripheral artery disease. CK-2017357 has received orphan drug designations from the FDA and the European Medicines Agency for the treatment of ALS. We are also advancing a structurally distinct, fast skeletal muscle sarcomere activator, CK-2127107, in non-clinical studies intended to enable the filing of an IND with the FDA. Our skeletal sarcomere activators selectively activate the fast skeletal muscle troponin complex, which is a set of regulatory proteins that modulates the contractility of the fast skeletal muscle sarcomere.

In our smooth muscle contractility program, we are conducting preclinical research on compounds that directly inhibit smooth muscle myosin, the motor protein central to the contraction of smooth muscle. These compounds cause the relaxation of contracted smooth muscle, and so may be useful as potential treatments for diseases and conditions complicated by bronchoconstriction, such as asthma and chronic obstructive pulmonary disease.

Two of our drug candidates directed to muscle contractility have now demonstrated pharmacodynamic activity in patients: omecamtiv mecarbil in patients with heart failure and CK-2017357 in patients with ALS and in patients with claudication associated with peripheral artery disease. In 2012, we expect to continue to focus on translating the observed pharmacodynamic activity of these compounds into potentially meaningful clinical benefits for patients. Our potential drug candidate CK-2127107 has demonstrated pharmacological activity in preclinical models.

## **Muscle Contractility Programs**

### ***Cardiac Muscle Contractility***

Our lead drug candidate from this program is omecamtiv mecarbil, a novel cardiac muscle myosin activator. In December 2006, we entered into a collaboration and option agreement with Amgen to discover, develop and commercialize novel small molecule therapeutics that activate cardiac muscle contractility for potential applications in the treatment of heart failure, including omecamtiv mecarbil. The agreement provided Amgen with a non-exclusive license and access to certain technology. The agreement also granted Amgen an option to obtain an exclusive license worldwide, except Japan, to develop and commercialize omecamtiv mecarbil and other drug candidates arising from the collaboration.

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In May 2009, Amgen exercised its option. In connection with the exercise of its option, Amgen paid us an exercise fee of \$50.0 million. As a result, Amgen is now responsible for the development and commercialization of omecamtiv mecarbil and related compounds at its expense worldwide (excluding Japan), subject to our development and commercialization participation rights. Under the agreement, Amgen will reimburse us for agreed research and development activities we perform. The agreement provides for potential pre-commercialization and commercialization milestone payments of up to \$600.0 million in the aggregate on omecamtiv mecarbil and other potential products arising from research under the collaboration, and royalties that escalate based on increasing levels of annual net sales of products commercialized under the agreement. The agreement also provides for us to receive increased royalties by co-funding Phase III development costs of drug candidates under the collaboration. If we elect to co-fund such costs, we would be entitled to co-promote omecamtiv mecarbil in North America and participate in agreed commercialization activities in institutional care settings, at Amgen's expense.

We conducted a clinical trials program for omecamtiv mecarbil comprised of multiple Phase I and Phase IIa clinical trials designed to evaluate the safety, tolerability, pharmacodynamics and pharmacokinetic profiles of both intravenous and oral formulations in a diversity of patients, including patients with stable heart failure and patients with ischemic cardiomyopathy. In these trials, omecamtiv mecarbil exhibited generally linear, dose-proportional pharmacokinetics across the dose ranges studied. The adverse effects observed at intolerable doses in humans appeared similar to the adverse findings which occurred in preclinical safety studies at similar plasma concentrations. These effects are believed to be related to the mechanism of action of this drug candidate which, at intolerable doses, resulted in an excessive prolongation of the systolic ejection time (i.e., the time in which the heart is contracting). However, these effects resolved promptly with discontinuation of the infusions of omecamtiv mecarbil. We expect omecamtiv mecarbil to be developed as a potential treatment across the continuum of care in heart failure both as an intravenous formulation for use in the hospital setting and as an oral formulation for use in the outpatient setting.

*ATOMIC-AHF.* In April 2011, Amgen initiated an international, randomized, double-blind, placebo-controlled, Phase IIb clinical trial of an intravenous formulation of omecamtiv mecarbil, now known as ATOMIC-AHF (Acute Treatment with Omecamtiv Mecarbil to Increase Contractility in Acute Heart Failure), in patients with left ventricular systolic dysfunction hospitalized with acutely decompensated heart failure. This clinical trial is expected to enroll approximately 600 patients in three sequential, ascending-dose cohorts. The primary objective of this trial is to evaluate the effect of 48 hours of intravenous omecamtiv mecarbil compared to placebo on dyspnea (shortness of breath) in patients with left ventricular systolic dysfunction hospitalized for acute heart failure. The secondary objectives are to assess the safety and tolerability of three dose levels of intravenous omecamtiv mecarbil compared with placebo and to evaluate the effects of 48 hours of treatment with intravenous omecamtiv mecarbil on additional measures of dyspnea, patients' global assessments, change in N-terminal pro brain-type natriuretic peptide (a biomarker associated with the severity of heart failure) and short-term clinical outcomes in these patients. In addition, the trial will evaluate the relationship between omecamtiv mecarbil plasma concentrations and echocardiographic parameters in patients with acute heart failure. Patient dosing in the first cohort of this trial is continuing. A review of data from the first cohort of this trial will be conducted by an independent data monitoring committee. A decision regarding the potential progression to the second cohort of the trial is anticipated in the first half of 2012.

*Oral Formulation Development.* In February 2012, Amgen initiated a Phase I study designed to assess the safety, tolerability and pharmacokinetics of multiple oral formulations of omecamtiv mecarbil in healthy volunteers. This clinical trial will be used to guide selection of an oral formulation of omecamtiv mecarbil for later-stage clinical trials. We and Amgen are discussing plans for the initiation of an additional clinical trial designed to assess the safety, tolerability and pharmacokinetics of oral omecamtiv mecarbil in stable heart failure patients.

*Next-Generation Research.* In the fourth quarter of 2011, we agreed with Amgen to additional research activities intended to be conducted through 2012 under the research plan directed to next-generation compounds in our cardiac muscle contractility program. Under our collaboration agreement, Amgen will reimburse us for the agreed research activities we perform.

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The clinical trials program for omecamtiv mecarbil may proceed for several years, and we will not be in a position to generate any revenues or material net cash flows from sales of this drug candidate until the program is successfully completed, regulatory approval is achieved, and the drug is commercialized. Omecamtiv mecarbil is at too early a stage of development for us to predict if or when this may occur. We funded all research and development costs associated with this program prior to Amgen's option exercise in May 2009. We recorded research and development expenses for activities relating to our cardiac muscle contractility program of approximately \$2.8 million, \$1.6 million and \$9.9 million in the years ended December 31, 2011, 2010 and 2009, respectively. We recognized research and development revenue from Amgen of \$2.1 million in 2011 and \$1.5 million in 2010, consisting of reimbursements of full-time employee equivalent ("FTE") and other expenses. We recognized research and development revenue from Amgen of \$7.1 million in the 2009, consisting of \$4.0 million for the transfer of our existing inventories of omecamtiv mecarbil and related reference materials to Amgen and \$3.1 million for reimbursements of FTEs and other costs.

We anticipate that our expenditures relating to the research and development of compounds in our cardiac muscle contractility program will increase if we participate in the future advancement of omecamtiv mecarbil through clinical development. Our expenditures will also increase if Amgen terminates development of omecamtiv mecarbil or related compounds and we elect to develop them independently, or if we elect to co-fund later-stage development of omecamtiv mecarbil or other compounds in our cardiac muscle contractility program under our collaboration and option agreement with Amgen.

### ***Skeletal Muscle Contractility***

CK-2017357 is the lead drug candidate from this program. We are also advancing a potential drug candidate from this program, CK-2127107, in non-clinical studies intended to enable the filing of an IND. CK-2017357 and CK-2127107 are structurally distinct and selective small molecule activators of the fast skeletal sarcomere. These compounds activate the fast skeletal muscle troponin complex by increasing its sensitivity to calcium, leading to an increase in skeletal muscle contractility. We are evaluating the potential indications for which CK-2017357 and CK-2127107 may be useful.

Each of CK-2017357 and CK-2127107 has demonstrated encouraging pharmacological activity in preclinical models. In addition, with respect to CK-2017357, evidence of potentially clinically relevant pharmacodynamic effects has been observed in healthy volunteers, in patients with ALS, and in patients with peripheral artery disease and claudication. In July 2010, we were awarded a grant in the amount of approximately \$2.8 million by the NINDS, which is intended to support for three years our research and development of CK-2017357 for the potential treatment of myasthenia gravis. The grant was awarded under the American Recovery and Reinvestment Act of 2009. We recognized revenue of \$1.7 million and \$0.4 million under this grant arrangement in 2011 and 2010, respectively, which we recorded as research and development, grant and other revenues.

In 2010, we initiated three "evidence of effect" Phase IIa clinical trials of CK-2017357. Two of these trials have been completed, one in patients with ALS and one in patients with symptoms of claudication associated with peripheral artery disease. A trial in patients with generalized myasthenia gravis is ongoing. These studies are intended to translate the mechanism of action of CK-2017357 into potentially clinically relevant pharmacodynamic effects (as we did in healthy volunteers), which may then form the basis for larger clinical trials designed to demonstrate proof of concept and possibly even to support registration.

In March 2010, CK-2017357 received an orphan drug designation from the FDA for the treatment of ALS. In March 2012, CK-2017357 received an orphan medicinal product designation from the European Medicines Agency.

### ***CK-2017357: Clinical Development***

*Phase I (Healthy Volunteers).* A Phase I clinical trial of single doss of CK-2017357 in healthy volunteers demonstrated the maximum-tolerated single oral dose to be 2000 mg. In addition, single doses of

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CK-2017357 from 250 to 1000 mg were shown to produce concentration-dependent, statistically significant increases versus placebo in the force developed by the tibialis anterior muscles of healthy volunteers in response to transcutaneous neuronal stimulation. In a multiple dose Phase I clinical trial, CK-2017357 displayed generally dose-proportional pharmacokinetics and only modest accumulation during dosing to steady state. CK-2017357 was well-tolerated and no serious adverse events were reported in these Phase I trials.

### ALS

*Phase I Drug-Drug Interaction (CY 4013).* In 2011, we conducted a Phase I drug-drug interaction study of CK-2017357 administered orally to healthy volunteers. The co-administration of CK-2017357 and riluzole, the current standard of care for ALS, approximately doubled the average maximum plasma levels of riluzole; it also reduced the variability of plasma levels of riluzole in the study subjects. Accordingly, we believe that in future CK-2017357 clinical trials, a standard dose adjustment to the riluzole dose could be made for all patients receiving CK-2017357, regardless of the dose level of CK-2017357. Data from the part of this study investigating the effect of food on the pharmacokinetics of CK-2017357 administered orally indicated that CK-2017357 may be best administered to patients in a fasting state.

*Phase IIa Evidence of Effect (CY 4021).* In April 2011, data from our Phase IIa Evidence of Effect clinical trial in ALS patients were presented at the Clinical Trials Session at the 63<sup>rd</sup> Annual Meeting of the American Academy of Neurology. In that trial, the single doses of CK-2017357 evaluated appeared generally well-tolerated. In addition, both patients and investigators perceived a positive change in the patients' overall status, in a dose-dependent fashion, at 6 hours after dosing with CK-2017357, based on a global assessment in which the patient and the investigator each independently assessed patients' status compared to prior to dosing. There was a clear relationship between improvements in global assessments and the CK-2017357 plasma concentration. Also at this 6-hour time point, there was a trend towards decreased muscle fatigability, as evidenced by data from a test of sub-maximal hand-grip endurance. Data from that clinical trial also demonstrated a statistically significant increase in the maximum volume of air patients could inhale and exhale in twelve seconds (Maximum Voluntary Ventilation) at both 6 and 24 hours after 500 mg of CK-2017357, and small but statistically significant increases in maximum strength of certain muscle groups tested.

*Phase II Multiple Dose (CY 4024).* In 2011, we initiated a two-part, Phase II safety, tolerability, pharmacokinetic and pharmacodynamic clinical trial of multiple doses of CK-2017357 in ALS patients. Part A of this trial, which was completed in 2011, enrolled 24 patients who were not taking riluzole. Part B of this trial, which is ongoing, is designed to evaluate 24 patients who are concurrently taking riluzole. In December 2011, at the 22<sup>nd</sup> International Symposium on ALS and Motor Neurone Disease in Sydney, Australia, we presented data from Part A. CK-2017357 appeared well-tolerated at all dose levels evaluated which ranged from 125 mg to 375 mg, once daily, for two weeks. Plasma concentrations of CK-2017357 increased in proportion with dose. The incidence and persistence of dizziness appeared dose-related but was mild in severity in all patients who completed study drug treatment. Most reports of dizziness began early after initiating treatment and resolved spontaneously within the first week of treatment in all but one patient who nevertheless completed the trial. No serious adverse events were reported. Due to the small sample size, the large inter-patient variability and the short, two-week duration, Part A of this trial lacked the statistical power to detect significant differences in clinical outcome measures. However, trends to improved clinical outcome measures were observed, especially at the highest CK-2017357 dose of 375 mg daily. We anticipate that data from Part B of this Phase II trial will be available in the first half of 2012.

*Phase II Dose Titration (CY 4025).* In November 2011, we initiated a Phase II, double-blind, randomized, placebo-controlled, ascending dose titration clinical study designed to evaluate the safety, tolerability, pharmacokinetics and pharmacodynamic effects of multiple ascending doses of CK-2017357. An estimated 24 patients with ALS who are also receiving riluzole are planned to be enrolled. Patients will be randomized to one of two dosing groups and receive twice daily oral ascending doses of CK-2017357 or placebo. The primary objective of this trial is to assess the safety and tolerability of this alternative dosing regimen of CK-2017357 in patients with ALS. The secondary objectives of this clinical trial are to evaluate the ALSFRS-R, other measures

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of pulmonary function, muscle strength and fatigue, relationships between dose, plasma concentrations and functional effects and physician and patient global assessments in these patients while receiving two weeks of treatment with CK-2017357 at the indicated doses or placebo. We anticipate that data from this trial will be available in first half of 2012.

*Claudication*

*Phase IIa Evidence of Effect (CY 4022).* In June 2011, at the 22<sup>nd</sup> Annual Scientific Sessions of the Society of Vascular Medicine, we presented final data from our Phase IIa evidence of effect clinical trial of CK-2017357 in patients with symptoms of claudication associated with peripheral artery disease. The primary objective was to demonstrate an effect of single doses of CK-2017357 on measures of skeletal muscle function and fatigability in these patients. The secondary objectives were to evaluate and characterize the relationship, if any, between the doses and plasma concentrations of CK-2017357 and its pharmacodynamic effects, and to evaluate the safety and tolerability of CK-2017357 administered as single doses to these patients. Accordingly, in this hypothesis-generating trial, multiple pharmacodynamic assessments were made without specifying a single primary pharmacodynamic endpoint. 61 patients were enrolled in this trial. Patients were administered single oral doses of placebo and of 2 different dose levels of CK-2017357 in a double-blind fashion and in random order, at least 6 days apart. As evidenced by heel raise testing, CK-2017357 increased calf muscle performance in these patients. The increases in calf muscle performance and the occurrence of adverse events both appeared related to increasing dose and plasma concentrations of CK-2017357. Conversely, performance on a 6-minute walk test was inversely related to increases in both the dose and plasma concentration of CK-2017357. Dose-related adverse events, particularly dizziness and others related to walking, may explain this negative effect on 6-minute walk performance. The authors concluded that CK-2017357 merits further study and that potential next steps could include studies to explore whether the adverse events observed, such as dizziness, might abate with repeated dosing, alternate dosing regimens and/or gradual dose titration.

*Myasthenia Gravis*

*Phase IIa Evidence of Effect (CY 4023).* In January 2011, we initiated our Phase IIa evidence of effect clinical trial of CK-2017357 in patients with generalized myasthenia gravis. At least 36 and up to 78 patients may be enrolled in this trial. The primary objective of this trial is to assess the effects of CK-2017357 on measures of muscle strength, muscle fatigue and pulmonary function. The secondary objectives of this clinical trial are to evaluate and characterize the relationship, if any, between the doses and plasma concentrations of CK-2017357 and its pharmacodynamic effects; to evaluate the safety and tolerability of CK-2017357 administered as single doses to patients with myasthenia gravis; and to evaluate the effect of CK-2017357 on investigator- and patient-determined global functional assessment and the Modified MG Symptom Score, an assessment combining patient reports and physician evaluations to assess the severity of symptoms due to myasthenia gravis. We are continuing to conduct this trial, and anticipate that data will be available from this trial in the first half of 2012.

*CK-2017357 Planned Clinical Development.* We have met with the FDA Center for Drug Evaluation and Research's Division of Neurology Products and with the European Medicines Agency to discuss the progress in the development of CK-2017357 as a potential treatment for patients with ALS and our strategy for its further development, including potential registration strategies. Based on this discussion, we are assessing options that may enable the initiation of a registration program for CK-2017357. We anticipate additional interactions in 2012 with U.S. and European regulatory authorities to discuss the development of CK-2017357 as a potential treatment for patients with ALS, including potential registration strategies.

*CK-2127107 Planned Development.* Throughout 2011, we progressed CK-2127107 in studies intended to support an IND or foreign equivalent. We expect to continue to conduct these studies and anticipate filing an IND for CK-2127107 by the end of 2012.

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*Ongoing Research in Skeletal Muscle Activators.* Our research on the direct activation of skeletal muscle continues in two areas. We are conducting translational research in animal models of disease and muscle function with fast skeletal troponin activators to explore the potential clinical applications of this novel approach in preclinical studies. We also intend to conduct preclinical research on other chemically and pharmacologically distinct mechanisms to activate the skeletal sarcomere.

CK-2017357 and CK-2027107 are at too early a stage of development for us to predict if or when we will be in a position to generate any revenues or material net cash flows from their commercialization. We currently fund all research and development costs associated with this program. We recorded research and development expenses for activities relating to our skeletal muscle contractility program of approximately \$24.0 million, \$29.1 million and \$17.5 million in the years ended December 31, 2011, 2010 and 2009, respectively. We anticipate that our expenditures relating to the research and development of compounds in our skeletal muscle contractility program will increase significantly if and as we advance CK-2017357, CK-2027107 or other compounds from this program into and through development.

### ***Smooth Muscle Contractility***

*Overview.* Smooth muscle is a non-striated form of muscle that is found in the circulatory, respiratory, digestive and genitourinary organ systems and is responsible for the contractile properties of these tissues. The contractile elements in non-striated muscle are not arranged into sarcomeres and the regulation of smooth muscle differs from that in cardiac and skeletal muscles. Smooth muscle contractility is driven by smooth muscle myosin, a cytoskeletal motor protein that is directly responsible for converting chemical energy into mechanical force. Our smooth muscle contractility program is focused on the discovery and development of small molecule smooth muscle myosin inhibitors, and leverages our expertise in muscle function and its application to drug discovery. Our inhaled smooth muscle myosin inhibitors have demonstrated pharmacological activity in preclinical models of bronchoconstrictive diseases and may have applications for indications such as asthma or chronic obstructive pulmonary disease. Our smooth muscle myosin inhibitors, administered orally or intravenously, have also demonstrated pharmacological activity in preclinical models of vascular constriction. We intend to continue to conduct research of compounds from this program.

*Ongoing research in smooth muscle myosin inhibitors.* We are continuing to conduct early research activities to develop direct smooth muscle myosin inhibitor compounds for potential use in acute or chronic settings. Our research focus is to differentiate our compounds from existing drugs that are bronchodilators or vasodilators that act by indirectly causing smooth muscle relaxation, such as commonly used beta-agonists and calcium channel blockers. We are particularly interested in potential applications for our compounds where the benefits of currently available treatments are constrained by adverse side effects or limited effectiveness.

Our smooth muscle myosin inhibitors are at too early a stage of development for us to predict if or when we will be in a position to generate any revenues or material net cash flows from their commercialization. We currently fund all research and development costs associated with this program. We recorded research and development expenses for activities relating to our smooth muscle contractility program of approximately \$5.6 million, \$1.9 million and \$5.0 million in the years ended December 31, 2011, 2010 and 2009, respectively. We anticipate that our expenditures relating to the research and development of compounds in our smooth muscle contractility program will increase significantly if and as we advance compounds from this program into and through development.

### **Development Risks**

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

- decisions made by Amgen with respect to the development of omeamtiv mecarbil;

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- the uncertainty of the timing of the initiation and completion of patient enrollment and treatment in our clinical trials;
- the possibility of delays in the collection of clinical trial data and the uncertainty of the timing of the analyses of our clinical trial data after these trials have been initiated and completed;
- our potential inability to obtain additional funding and resources for our development activities on acceptable terms, if at all, including, but not limited to, our potential inability to obtain or retain partners to assist in the design, management, conduct and funding of clinical trials;
- delays or additional costs in manufacturing of our drug candidates for clinical trial use, including developing appropriate formulations of our drug candidates;
- the uncertainty of clinical trial results, including variability in patient response;
- the uncertainty of obtaining FDA or other foreign regulatory agency approval required for the clinical investigation of our drug candidates;
- the uncertainty related to the development of commercial scale manufacturing processes and qualification of a commercial scale manufacturing facility; and
- possible delays in the characterization, formulation and manufacture of potential drug candidates.

If we fail to complete the development of any 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 or our partners to obtain, or any delay in obtaining, regulatory approvals for our drug candidates could have a material adverse effect on our results of operations. A further discussion of the risks and uncertainties associated with completing our programs on schedule, or at all, and certain consequences of failing to do so are discussed further 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 at least several years, if ever,” “Clinical trials may fail to demonstrate the desired safety and efficacy 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,” and other risk factors.

### **Revenues**

Our current revenue sources are limited, and we do not expect to generate any revenue from product sales for several years, if at all. We have recognized revenues from our strategic alliances with Amgen and GlaxoSmithKline (GSK) for license fees and agreed research activities.

In December 2006, we entered into our collaboration and option agreement with Amgen, under which we received an upfront, non-refundable, non-exclusive license and technology access fee of \$42.0 million. In connection with entering into the agreement, we also entered into a common stock purchase agreement with Amgen. In January 2007, we issued 3,484,806 shares of our common stock to Amgen for net proceeds of \$32.9 million, of which the \$6.9 million purchase premium was recorded as deferred revenue. Through May 2009, we amortized the upfront non-exclusive license and technology access fee and stock purchase premium to license revenue ratably over the maximum term of the non-exclusive license, which was four years. In June 2009, we recognized as revenue the remaining balance of \$21.4 million of the related deferred revenue when Amgen exercised its option, triggering the end of the non-exclusive license period. In June 2009, we received a non-refundable option exercise fee from Amgen of \$50.0 million, which we recognized in revenue as license fees from a related party. We may receive additional payments from Amgen upon achieving certain pre-commercialization and commercialization milestones. None of the future contingent milestone payments pursuant to this arrangement as of January 1, 2011 are considered substantive as they are the results of Amgen’s performance. Therefore, they are not considered milestones under Accounting Standard Codification Topic 605-28, *Revenue Recognition — Milestone Method* (“ASC 605-28”)



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We have received reimbursements from Amgen for agreed research and development activities, which we recorded as revenue as the related expenses were incurred. We may be eligible to receive further reimbursements from Amgen for agreed research and development activities, which we will record as revenue if and when the related expenses are incurred. We record amounts received in advance of performance as deferred revenue. Revenues related to the reimbursement of FTEs were based on negotiated rates intended to approximate the costs for our FTEs.

Revenues from GSK in 2006 were received pursuant to our strategic alliance entered into in 2001, which was directed to the research and development of mitotic kinesin inhibitors, which was an earlier focus for us prior to our 2008 refocusing of our research and development activities on the modulation of muscle function. These revenues were based on negotiated rates intended to approximate the costs for our FTEs performing research under the strategic alliance and our out-of-pocket expenses, which we recorded as the related expenses were incurred. In 2001, GSK paid us an upfront licensing fee, which we recognized ratably over the strategic alliance's initial five-year research term, which ended in June 2006. In 2007, we received a \$1.0 million milestone payment from GSK relating to its initiation of a Phase I clinical trial of GSK-923295. We record amounts received in advance of performance as deferred revenue. The revenues recognized in connection with this strategic alliance were non-refundable, even if the relevant research effort was not successful. We agreed with GSK to terminate this strategic alliance effective February 28, 2010. We have retained all rights to develop and commercialize mitotic kinesin inhibitors from the strategic alliance (including ispinesib, SB-743921 and GSK-923295), subject to certain royalty obligations to GSK.

Because a substantial portion of our revenues for the foreseeable future will depend on achieving development and other pre-commercialization milestones under our strategic alliance with Amgen, our results of operations may vary substantially from year to year.

If one or more of our drug candidates is approved for sale as a drug, we expect that our future revenues will most likely be derived from royalties on sales from drugs licensed to Amgen under our strategic alliance and from those licensed to future partners, and from direct sales of our drugs. We retain a product-by-product option to co-fund certain Phase III development activities under our strategic alliance with Amgen, thereby potentially increasing our royalties and affording us co-promotion rights in North America. If we exercise our co-promotion rights under this strategic alliance, we are entitled to receive reimbursement for certain sales force costs we incur in support of our commercial activities.

### **Research and Development**

We incur research and development expenses associated with both partnered and unpartnered research activities. We expect to incur research and development expenses for omecamtiv mecarbil for the potential treatment of heart failure in accordance with agreed upon research and development plans with Amgen. We expect to incur research and development expenses for the continued conduct of preclinical studies and non-clinical and clinical development for CK-2017357, CK-2127107 and potentially other skeletal sarcomere activators for the potential treatment of diseases and medical conditions associated with muscle weakness or wasting, preclinical studies and non-clinical development of our smooth muscle myosin inhibitor compounds for the potential treatment of diseases and medical conditions associated with bronchoconstriction, vascular constriction, or both, and our research programs in other disease areas.

Research and development expenses related to our strategic alliance with GSK consisted 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. Prior to June 2006, certain of these costs were reimbursed by GSK on an FTE basis. From 2001 through November 2006, GSK funded the majority of the costs related to the clinical development of ispinesib and SB-743921. In November 2006, under an amendment to our strategic alliance, we assumed responsibility for the continued research, development and commercialization of ispinesib and SB-743921, at our sole expense.

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Research and development expenses related to any development and commercialization activities we elect to fund consist primarily of employee compensation, supplies and materials, costs for consultants and contract research and manufacturing, facilities costs and depreciation of equipment. From our inception through December 31, 2011, we incurred costs of approximately \$139.2 million for research and development activities relating to our cardiac muscle contractility program, \$89.0 million for our skeletal muscle contractility program, \$33.9 million for our smooth muscle contractility program, \$71.9 million for our mitotic kinesin inhibitors program, \$53.7 million for our proprietary technologies and \$64.8 million for other research programs.

### General and Administrative Expenses

General and administrative expenses consist primarily of compensation for employees in executive and administrative functions, including, but not limited to, finance, human resources, legal, business and commercial development and strategic planning. Other significant costs include facilities costs and professional fees for accounting and legal services, including legal services associated with obtaining and maintaining patents and regulatory compliance.

### Restructuring

In October 2011, we announced a restructuring plan to realign our workforce and operations in line with our continued commitment to focus primarily on the development of our key later-stage development programs for CK-2017357 and omecantiv mecarbil and on our follow-on skeletal muscle troponin activator program and joint research with Amgen directed to next-generation compounds in our cardiac muscle contractility program. We plan to focus our resources on the partnering and advancement of CK-2017357, including the planning and initiation of a clinical trial in ALS patients that may potentially support registration. We intend to retain a research and development organization focused to these programs and certain other research and development programs, also directed to muscle biology.

As a result of the restructuring plan, in 2011, we recorded total restructuring charges of \$1.2 million for employee severance and benefit related costs. We have completed substantially all restructuring activities and recognized all anticipated restructuring charges. We expect to record only immaterial charges to the accrued restructuring costs during 2012, primarily related to employee benefits and outplacement services.

In September 2008, we announced a restructuring plan to realign our workforce and operations in line with a strategic reassessment of our research and development activities and corporate objectives. We completed all restructuring activities and recognized all anticipated restructuring charges by December 31, 2009.

### Stock Compensation

The following table summarizes stock-based compensation related to stock options, restricted stock awards, restricted stock units, and employee stock purchases for 2011, 2010 and 2009 (in thousands):

	Years Ended December 31,		
	2011	2010	2009
Research and development	\$ 1,331	\$ 1,871	\$ 2,345
General and administrative	1,738	2,146	2,561
Stock-based compensation included in operating expenses	<u>\$3,069</u>	<u>\$ 4,017</u>	<u>\$ 4,906</u>

As of December 31, 2011, there was \$3.7 million of unrecognized compensation cost related to non-vested stock options, which we expect to recognize over a weighted-average period of 2.4 years. As of December 31, 2011, there was \$2.9 million of unrecognized compensation cost related to non-vested restricted stock units, which we expect to recognize over a weighted-average period of 1.7 years.

## Income Taxes

We account 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 basis 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 the deferred tax assets to the amounts expected to be realized. We recorded an income tax provision of \$150,000 in 2009 due to alternative minimum tax ("AMT"). However, due to the Department of the Treasury's further guidance clarifying that utilization of the AMT net operating loss ("NOL") was not limited to 90% as part of the 5-year NOL carryback provision brought about by the Worker, Homeownership, and Business Assistance Act of 2009, the 2009 AMT liability was reversed in 2010. In addition to the \$150,000 benefit related to the AMT liability, we also recognized a \$26,000 benefit related to the monetization of the federal research tax credit for a total benefit of approximately \$176,000 in 2010. We did not record an income tax provision in the year ended December 31, 2011 because we had a net taxable loss in the period.

Based upon the weight of available evidence, which includes our historical operating performance, reported cumulative net losses since inception and difficulty in accurately forecasting our future results, we maintained a full valuation allowance on the net deferred tax assets as of December 31, 2011, 2010 and 2009. The valuation allowance was determined pursuant to the accounting guidance for income taxes, which requires an assessment of both positive and negative evidence when determining whether it is more likely than not that deferred tax assets are recoverable. We intend to maintain a full valuation allowance on the U.S. deferred tax assets until sufficient positive evidence exists to support reversal of the valuation allowance. The valuation allowance increased by \$18.5 million in 2011, increased by \$15.6 million in 2010, and decreased by \$9.6 million in 2009.

We also follow the accounting guidance that defines the threshold for recognizing the benefits of tax return positions in the financial statements as "more-likely-than-not" to be sustained by the taxing authorities based solely on the technical merits of the position. If the recognition threshold is met, the tax benefit is measured and recognized as the largest amount of tax benefit that, in our judgment, is greater than 50% likely to be realized. We are currently under examination by the Internal Revenue Service ("IRS") for the tax year 2009 and have made adjustments to our deferred balances for NOL carryforwards, research credits, and charitable contribution carryovers as a result of information obtained from the IRS examination. As we maintained a full valuation allowance against our deferred tax assets, the adjustments resulted in no additional tax expense in the current period. We have also adjusted our unrealized tax benefits accordingly. However, in general, the statute of limitations for tax liabilities for these years remains open for the purpose of adjusting the amounts of the losses and credits carried forward from those years.

We had federal NOL carryforwards of approximately \$374.6 million and state NOL carryforwards of approximately \$249.8 million before federal benefit at December 31, 2011. If not utilized, the federal and state NOL carryforwards will begin to expire in various amounts beginning 2020 and 2012, respectively. The NOL carryforwards include deductions for stock options. When utilized, the portion related to stock option deductions will be accounted for as a credit to stockholders' equity rather than as a reduction of the income tax provision.

We had research credit carryforwards of approximately \$10.1 million and \$9.7 million for federal and California state income tax purposes, respectively, at December 31, 2011. If not utilized, the federal carryforwards will expire in various amounts beginning in 2021. The California state credit can be carried forward indefinitely.

In general, under Section 382 of the Internal Revenue Code, a corporation that undergoes an ownership change is subject to limitations on its ability to utilize its pre-change NOL and tax credits to offset future taxable income. Our existing NOLs and tax credits are subject to limitations arising from previous ownership changes. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Internal Revenue Code and result in additional limitations. During the year ended December 31, 2007, we conducted a study and determined that we would not be able to utilize a portion of

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our federal research credit as a result of such a restriction. Accordingly, we reduced our deferred tax assets and the corresponding valuation allowance by \$0.8 million. As a result, the research credit amount as of December 31, 2007 reflects the restriction on our ability to use the credit.

Accounting guidance for income taxes provides that a tax benefit from an uncertain tax position may be recognized when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, based on the technical merits. It also provides guidance on measurement, derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

The unrecognized tax benefits on our research credits are based on our evaluation of the underlying research expenditures. We have reduced the respective deferred tax assets and valuation allowance to reflect the unrecognized tax benefits. These adjustments did not have an impact on the income tax expense as we maintained a full valuation allowance on our deferred tax assets.

Interest accrued related to unrecognized tax benefits and penalties were zero for 2011 and 2010. We account for interest related to unrecognized tax benefits and penalties by classifying both as income tax expense in the financial statements in accordance with the accounting guidance for uncertainty in income taxes. We do not expect our unrecognized tax benefits to change materially over the next twelve months.

## Results of Operations

### *Years ended December 31, 2011, 2010 and 2009*

#### *Revenues*

	Years Ended December 31,			Increase (Decrease)	
	2011	2010	2009	2011	2010
	(In millions)				
Research and development revenues from related parties	\$ 2.1	\$ 1.5	\$ 7.1	\$0.6	\$ (5.6)
Research and development, grant and other revenues	1.9	1.1	—	0.8	1.1
License revenues from related parties	—	—	74.4	—	(74.4)
Total revenues	<u>\$ 4.0</u>	<u>\$ 2.6</u>	<u>\$81.5</u>	<u>\$ 1.4</u>	<u>\$ (78.9)</u>

We recorded total revenues of \$4.0 million, \$2.6 million, and \$81.5 million for the years ended December 31, 2011, 2010, and 2009, respectively.

Research and development revenues from related parties refers to research and development revenues from our strategic alliances with Amgen and, through 2009, GSK. Research and development revenues from Amgen were \$2.1 million in 2011, \$1.5 million in 2010, and \$7.1 million in 2009. Research and development revenues of \$2.1 million from Amgen in 2011 consisted of \$2.0 million for reimbursement of FTE expenses and \$0.1 million for other research and development expenses. Research and development revenues of \$1.5 million from Amgen in 2010 consisted of \$0.9 million for FTE expenses and \$0.6 million for other research and development expenses. Research and development revenues of \$7.1 million from Amgen in 2009 consisted of \$4.0 million for the transfer of the majority of our existing inventories of omecamtiv mecarbil and related reference materials, and \$3.1 million for FTE and out of pocket expense reimbursements.

Research and development revenues from GSK were zero in 2011 and 2010, and \$45,000 in 2009. Research and development revenues from GSK in 2009 consisted of patent expense reimbursements. We and GSK agreed to terminate our strategic alliance effective February 28, 2010. We have retained all rights to develop and commercialize mitotic kinesin inhibitors from the strategic alliance (including ispinesib, SB-743921 and GSK-923295), subject to certain royalty obligations to GSK.

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Research and development, grant and other revenues in 2011, 2010 and 2009 included grant revenue from the NINDS, grant revenue from the U.S. Department of the Treasury (“DOT”) and research and development revenue from Global Blood Targeting, Inc. In July 2010, the NINDS awarded us a grant to support research and development of CK-2017357 directed to the potential treatment for myasthenia gravis for a period of up to three years. We recognized grant revenue of \$1.7 million and \$0.4 million under this grant arrangement in 2011 and 2010, respectively.

In November 2010, we were notified by the DOT that we would receive total cash grants of \$0.7 million based on our applications for certain investments in qualified therapeutic discovery projects under Section 48D of the Internal Revenue Code. The grants relate to certain research and development costs we incurred in 2009 in connection with our cardiac, skeletal and smooth muscle contractility programs. We received and recognized as grant revenue \$0.7 million under this grant in 2010.

In October 2011, as part of an initiative to seek certain smaller collaborations intended to allow us to offset our research costs, we entered into an agreement with Global Blood Targeting, Inc., an early-stage biopharmaceutical company. Under an agreed research plan, scientists from Global Blood Targeting and our FTEs conduct research focused on small molecule therapeutics that target the blood. We provide to Global Blood Targeting access to certain research facilities, FTEs and other resources at agreed reimbursement rates that approximate our costs. We are the primary obligor in the collaboration arrangement, and accordingly, we record expense reimbursements from Global Blood Targeting as research and development revenue. We recognized revenue of \$0.3 million from Global Blood Targeting in 2011.

License revenues from related parties in 2009 refers to license revenues from our strategic alliance with Amgen. License revenues were zero in 2011 and 2010, and \$74.4 million in 2009. License revenues for 2009 consisted of the May 2009 \$50.0 million option exercise fee from Amgen and the recognition of deferred revenue of the remaining \$24.4 million related to the 2006 upfront non-exclusive license and technology access fee and stock purchase premium from Amgen.

*Research and development expenses*

	Years Ended December 31,			Increase (Decrease)	
	2011	2010	2009	2011	2010
Research and development expenses	\$37.2	\$38.0	\$39.8	\$(0.8)	\$(1.8)

Research and development expenses decreased \$0.8 million in 2011 compared to 2010, and decreased \$1.8 million in 2010 compared to 2009. The decrease in 2011 was primarily due to decreases of \$1.3 million in personnel expenses and \$0.6 million in facility costs, partially offset by an increase of \$1.2 million in outsourced clinical and preclinical costs. The decrease in 2010 was primarily due to a decrease of \$2.3 million in personnel expenses, partially offset by increases of \$0.3 million in outsourced costs related to our muscle contractility clinical trial programs and \$0.3 million in laboratory expenses.

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From a program perspective, the decline in research and development spending in 2011 compared to 2010 was due to decreases of \$5.1 million for our skeletal muscle contractility program and \$1.0 million for our mitotic kinesin inhibitors program, partially offset by increases of \$3.7 million for our smooth muscle contractility program, \$1.2 million for our cardiac muscle contractility program and \$0.4 million for our other research and preclinical programs. The decline in research and development spending in 2010 compared to 2009 was due to decreases of \$8.3 million for our cardiac muscle contractility program, \$3.1 million for our smooth muscle contractility program and \$2.6 million for our mitotic kinesin inhibitors program, partially offset by increases of \$11.6 million for our skeletal muscle contractility program and \$0.6 million in all other research and preclinical programs

	Years Ended December 31,			Increase (Decrease)	
	2011	2010	2009	2011	2010
	(In millions)				
Cardiac muscle contractility	\$ 2.8	\$ 1.6	\$ 9.9	\$ 1.2	\$ (8.3)
Skeletal muscle contractility	24.0	29.1	17.5	(5.1)	11.6
Smooth muscle contractility	5.6	1.9	5.0	3.7	(3.1)
Mitotic kinesin inhibitors	—	1.0	3.6	(1.0)	(2.6)
All other research programs	4.8	4.4	3.8	0.4	0.6
Total research and development expenses	\$37.2	\$ 38.0	\$39.8	\$ (0.8)	\$ (1.8)

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 determine on an ongoing basis which research and development programs to pursue and how much funding to direct to each program, taking into account the scientific and clinical success of each drug candidate. The lengthy process of seeking regulatory approvals and subsequent compliance with applicable regulations requires the expenditure of substantial resources. Any failure by us to obtain and maintain, or any delay in obtaining, regulatory approvals could cause our research and development expenditures to increase and, in turn, could have a material adverse effect on our results of operations.

We expect our research and development expenditures to decrease in 2012 compared to 2011. As part of our strategic alliance with Amgen, we expect to continue development of our drug candidate omecamtiv mecarbil for the potential treatment of heart failure. We expect to continue development of our drug candidate CK-2017357 and our potential drug candidate CK-2127107 for the potential treatment of diseases and medical conditions associated with muscle weakness or wasting. We expect to continue preclinical research on our smooth muscle myosin inhibitor compounds, which may be useful for the potential treatment of diseases and medical conditions associated with bronchoconstriction or vasoconstriction. We anticipate that research and development expenses in 2012 will decrease from 2011 and will be in the range of \$32 million to \$35 million. Non-cash expenses such as stock-based compensation and depreciation of approximately \$2.4 million are included in our estimate of 2012 research and development expenses.

*General and administrative expenses*

	Years Ended December 31,			Increase (Decrease)	
	2011	2010	2009	2011	2010
	(In millions)				
General and administrative expenses	\$13.6	\$14.2	\$15.6	\$ (0.6)	\$ (1.4)

General and administrative expenses declined \$0.6 million in 2011 compared with 2010, and declined \$1.4 million in 2010 compared with 2009. The decrease in 2011 compared to 2010 was primarily due to decreases in personnel expenses of \$1.2 million, legal expenses of \$0.1 million and facilities costs of \$0.1 million, partially offset by an increase in financial services costs of \$0.8 million. The decrease in 2010 compared to 2009 was primarily due to lower personnel expenses of \$1.3 million.

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We expect that general and administrative expenses in 2012 will remain at approximately the same level as in 2011. We anticipate that general and administrative expenses will be in the range of \$13 million to \$14 million. Non-cash expenses such as stock-based compensation and depreciation of approximately \$2.3 million are included in our estimate of 2012 general and administrative expenses.

### *Interest and Other, net*

Components of Interest and Other, net are as follows:

	Years Ended December 31,			Increase (Decrease) in Interest and Other Income, Net	
	2011	2010	2009	2011	2010
	(In millions)				
Unrealized gain (loss) on auction rate securities (“ARS”) (Note 3 and Note 4)	\$ —	\$ 2.4	\$ 1.0	\$(2.4)	\$ 1.4
Unrealized gain (loss) on investment put option related to ARS Rights (Note 3 and Note 4)	—	(2.4)	(1.0)	2.4	(1.4)
Warrant expense	—	—	(1.6)	—	1.6
Interest income and other income	0.2	0.4	0.6	(0.2)	(0.2)
Interest expense and other expense	(0.1)	(0.2)	(0.4)	0.1	0.2
Interest and Other, net	<u>\$ 0.1</u>	<u>\$ 0.2</u>	<u>\$ (1.4)</u>	<u>\$(0.1)</u>	<u>\$ 1.6</u>

Investments that we designate as trading securities are reported at fair value, with gains or losses resulting from changes in fair value recognized in earnings and included in Interest and Other, net. We classified our investments in ARS as trading securities as of December 31, 2009.

Warrant expense of \$1.6 million for 2009 is related to the change in the fair value of the warrant liability in connection with our registered direct equity offering in May 2009.

Interest income and other income consisted primarily of interest income generated from our cash, cash equivalents and investments. Interest and other income decreased in 2011 compared to 2010 primarily due to lower average invested balances and lower average effective interest rates. Interest income and other income decreased in 2010 compared to 2009 primarily due to lower average effective interest rates earned on our investments.

Interest expense and other expense primarily consists of interest expense on borrowings under our equipment financing lines and, for 2010 and 2009, interest expense on our loan with UBS Bank USA that originated in January 2009. The decreases in interest and other expense in 2011 compared to 2010, and in 2010 compared to 2009, were primarily due to lower outstanding balances on our equipment financing lines and decreases in the interest on our loan with UBS.

### **Liquidity and Capital Resources**

From August 5, 1997, our date of inception, through December 31, 2011, we funded our operations through the sale of equity securities, equipment financings, non-equity payments from collaborators, government grants and interest income.

Our cash, cash equivalents and investments, excluding restricted cash, totaled \$49.0 million at December 31, 2011, down from \$72.8 million at December 31, 2010. The decrease of \$23.8 million primarily resulted from our net loss of \$47.9 million, partially offset by \$22.4 million net proceeds from equity issuances in 2011.

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We have received net proceeds from the sale of equity securities of \$372.8 million from August 5, 1997, the date of our inception, through December 31, 2011, excluding sales of equity to GSK and Amgen. Included in these proceeds are \$94.0 million received upon closing of the initial public offering of our common stock in May 2004. In connection with execution of our collaboration and license agreement in 2001, GSK made a \$14.0 million equity investment in Cytokinetics. GSK made additional equity investments in Cytokinetics in 2003 and 2004 of \$3.0 million and \$7.0 million, respectively.

In 2005, we entered into our first committed equity financing facility with Kingsbridge pursuant to which Kingsbridge committed to finance up to \$75.0 million of capital for a three-year period. Subject to certain conditions and limitations, from time to time under this committed equity financing facility, at our election, Kingsbridge purchased newly-issued shares of our common stock at a price between 90% and 94% of the volume weighted average price on each trading day during an eight-day, forward-looking pricing period. We received gross proceeds from draw downs and sales of our common stock to Kingsbridge under this facility as follows: 2005 — gross proceeds of \$5.7 million from the sale of 887,576 shares, before offering costs of \$178,000; 2006 — gross proceeds of \$17.0 million from the sale of 2,740,735 shares; and 2007 — gross proceeds of \$9.5 million from the sale of 2,075,177 shares. No further draw downs are available to us under the 2005 Kingsbridge committed equity financing facility.

In October 2007, we entered into a new committed equity financing facility with Kingsbridge, pursuant to which Kingsbridge committed to finance up to \$75.0 million of capital for a three-year period. Subject to certain conditions and limitations, from time to time under this facility, at our election, Kingsbridge was committed to purchase newly-issued shares of our common stock at a price between 90% and 94% of the volume-weighted average price on each trading day during an eight-day, forward-looking pricing period. As part of this arrangement, we issued a warrant to Kingsbridge to purchase 230,000 shares of our common stock at a price of \$7.99 per share, which represented a premium over the closing price of our common stock on the date we entered into this facility. The warrant expired unexercised in April 2011. In October 2010, the 2007 committed equity financing facility was amended to extend its expiration date until the first to occur of March 31, 2011 or the purchase by Kingsbridge of the maximum number of shares under the committed equity financing facility. In 2009, we received gross proceeds of \$6.9 million by selling 3,596,728 shares of our common stock to Kingsbridge under the 2007 committed equity financing facility, before offering costs of \$0.1 million. In 2010, we received gross proceeds of \$14.0 million by selling 5,339,819 shares of our common stock to Kingsbridge under the facility. The 2007 committed equity financing facility expired on March 31, 2011 and no further shares are available to be sold under the facility.

In January 2007, we received a \$42.0 million upfront license fee from Amgen in connection with our entry into our collaboration and option agreement in December 2006. Contemporaneously with entering into this agreement, we entered into a common stock purchase agreement with Amgen under which Amgen purchased 3,484,806 shares of our common stock at a price per share of \$9.47, including a premium of \$1.99 per share, and an aggregate purchase price of approximately \$33.0 million. After deducting the offering costs, we received net proceeds of approximately \$32.9 million. These shares were issued, and the related proceeds received, in January 2007. In June 2009, we received a \$50.0 million option exercise fee from Amgen.

In May 2009, pursuant to a registered direct equity offering, we entered into subscription agreements with selected institutional investors to sell an aggregate of 7,106,600 units for a price of \$1.97 per unit. Each unit consisted of one share of our common stock and one warrant to purchase 0.50 shares of our common stock. Accordingly, a total of 7,106,600 shares of common stock and warrants to purchase 3,553,300 shares of common stock were issued and sold in this offering. The gross proceeds of the offering were \$14.0 million. In connection with the offering, we paid placement agent fees to two registered broker-dealers totaling \$0.8 million. After deducting the placement agent fees and the offering costs, we received net proceeds of approximately \$12.9 million from the offering.

In April 2011, we entered into a securities purchase agreement with Deerfield. In April 2011, pursuant to the agreement, we issued to Deerfield (i) 5,300,000 shares of common stock for a purchase price of \$1.50 per share,



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(ii) 8,070 shares of Series A convertible preferred stock (the “Series A Preferred Stock”) for a purchase price of \$1,500.00 per share, and (iii) warrants to purchase 6,685,000 shares of our common stock at an initial exercise price of \$1.65 per share, for aggregate gross proceeds of approximately \$20.1 million. After issuance costs of approximately \$0.2 million, the net proceeds were approximately \$19.9 million. The offering was made pursuant to a shelf registration statement that we filed with the SEC on November 10, 2008, which became effective on November 19, 2008 (File No. 333-155259).

In June 2011, we entered into an At-The-Market Issuance Sales Agreement (the “MLV Agreement”) with McNicoll, Lewis & Vlak LLC (“MLV”), pursuant to which we may issue and sell shares of common stock having an aggregate offering price of up to \$20.0 million or 14,383,670 shares, whichever occurs first, from time to time through MLV as the sales agent. The issuance and sale of these shares by us under the MLV Agreement, if any, are subject to the continued effectiveness of its registration statement on Form S-3, which was declared effective by the SEC on June 23, 2011 (File No. 333-174869).

Sales of our common stock through MLV are made on The NASDAQ Global Market by means of ordinary brokers’ transactions at market prices or as otherwise agreed to by us and MLV. Subject to the terms and conditions of the MLV Agreement, MLV uses commercially reasonable efforts to sell our common stock from time to time, based upon our instructions (including any price, time or size limits or other customary parameters or conditions the Company may impose). We are not obligated to make any sales of common stock under the MLV Agreement. The offering of shares of common stock pursuant to the MLV Agreement will terminate upon the earlier of (1) the sale of all common stock subject to the MLV Agreement or (2) termination of the MLV Agreement. We or MLV may terminate the agreement at any time upon ten days notice to the other party, or MLV may terminate it at any time in certain circumstances, including the occurrence of a material adverse change in our business. We pay MLV a commission rate equal to 3.0% of the gross sales price per share of any common stock sold through MLV under the MLV Agreement. We have provided MLV with customary indemnification and contribution rights. In 2011, we issued 2,579,208 shares through MLV for net proceeds of \$2.4 million after commissions and other offering costs of \$160,000, which includes \$82,000 associated with establishing the MLV Agreement. As of March 12, 2012, we have issued 5,175,549 shares of common stock to MLV for net proceeds of approximately \$5.3 million, and 9,208,121 shares remain available to us for sale through MLV.

On a cumulative basis through December 31, 2011, we have received \$102.7 million in non-equity payments from Amgen and \$54.5 million in non-equity payments from GSK.

Under equipment financing arrangements, we received \$23.7 million from August 5, 1997, the date of our inception, through December 31, 2011. Interest earned on investments, excluding non-cash amortization/accretion of purchase premiums/discounts, was \$1.1 million, \$1.4 million and \$1.6 million in 2011, 2010 and 2009, respectively, and \$30.4 million from August 5, 1997, the date of our inception, through December 31, 2011.

Net cash used in operating activities in 2011 was \$45.6 million and primarily resulted from our net loss of \$47.9 million. Net cash used in operating activities in 2010 was \$44.8 million and primarily resulted from our net loss of \$49.3 million less \$4.0 million of non-cash stock-based compensation expense. Net cash provided by operations was \$8.4 million in 2009 and primarily resulted from net income of \$24.5 million, partially offset by a \$23.7 million decrease in deferred revenue. Our net income in 2009 primarily resulted from the recognition of \$74.4 million of license revenue and \$7.1 million of research and development revenue from Amgen, partially offset by cash operating expenses.

Net cash provided by investing activities in 2011 was \$25.3 million and primarily consisted of proceeds from maturities of investments, net of cash used to purchase investments, of \$25.1 million. Net cash provided by investing activities in 2010 was \$34.2 million and primarily consisted of proceeds from sales and maturities of investments (including ARS), net of cash used to purchase investments, of \$33.8 million. Net cash used in investing activities was \$53.5 million in 2009 and primarily represented cash used to purchase investments, net

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of proceeds from the maturity of investments (including ARS), of \$54.1 million. Restricted cash totaled \$0.2 million at December 31, 2011, down from \$0.8 million at December 31, 2010, with the decrease due to the contractual semi-annual reductions in the amount of security deposit required by General Electric Capital Corporation (“GE Capital”) in connection with our equipment financing credit lines.

Net cash provided by financing activities was \$21.6 million in 2011 and primarily consisted of net proceeds of \$19.9 million from our financing with Deerfield and \$2.4 million from sales of our common stock through MLV. Net cash provided by financing activities in 2010 was \$2.5 million and primarily consisted of proceeds from drawdowns under our 2007 committed equity financing facility with Kingsbridge of \$14.0 million, net of issuance costs, partially offset by repayments of our loan with UBS of \$10.2 million. Net cash provided by financing activities in 2009 was \$28.8 million and primarily consisted of net proceeds from our May 2009 registered direct equity offering of \$12.9 million, proceeds from our loan from UBS Bank USA of \$12.4 million, and drawdowns under our 2007 committed equity financing facility with Kingsbridge of \$6.8 million, net of issuance costs.

*Auction Rate Securities (“ARS”).* Our short-term investments at December 31, 2009 included (at par value) \$17.9 million of ARS. These ARS were intended to provide liquidity via an auction process that reset the applicable interest rate at predetermined calendar intervals, allowing investors to either roll over their holdings or gain immediate liquidity by selling such interests. With the liquidity issues experienced in global credit and capital markets, these ARS experienced multiple failed auctions beginning in February 2008, as the amount of securities submitted for sale exceeded the amount of purchase orders. As a result, the ARS ceased to be liquid.

The fair values of the ARS as of December 31, 2009 were estimated utilizing a discounted cash flow analysis. The fair value of our investments in ARS as of December 31, 2009 was determined to be \$15.5 million. Changes in the fair value of the ARS, excluding the sale of ARS, were recognized in current period earnings in Interest and Other, net. Accordingly, in the year ended December 31, 2010, we recognized unrealized gains of \$2.4 million on our ARS to reflect the change in fair value, and the sale of \$17.9 million of our ARS at par value. In the year ended December 31, 2009, we recognized unrealized gains of \$1.0 million on our ARS to reflect the change in fair value and the sale of \$2.1 million of ARS at par value.

In connection with the failed auctions of our ARS, which were marketed and sold by UBS AG and its affiliates, in October 2008, we accepted a settlement with UBS AG pursuant to which UBS AG issued to us the Series C-2 Auction Rate Securities Rights (the “ARS Rights”). The ARS Rights provided us the right to receive the par value of our ARS, i.e., the liquidation preference of the ARS plus accrued but unpaid interest at any time between June 30, 2010 and July 2, 2012.

The enforceability of the ARS Rights resulted in a put option, which we recognized as a separate freestanding instrument that was accounted for separately from the ARS. As of December 31, 2009, we recorded \$2.4 million as the fair value of the investment put option related to the ARS Rights, classified in short-term assets on the balance sheet. On June 30, 2010, we exercised the ARS Rights, requiring that UBS AG purchase our remaining outstanding ARS at par value of \$7.5 million. Accordingly, on the settlement date of July 1, 2010, UBS AG deposited the proceeds of \$7.5 million into our money market account. The investment put option related to the ARS Rights was extinguished at that time.

In connection with the settlement with UBS AG relating to our ARS, we entered into a loan agreement with UBS Bank USA and UBS Financial Services Inc. On January 5, 2009, we borrowed approximately \$12.4 million under the loan agreement, with our ARS held in accounts with UBS Financial Services, Inc. as collateral. In June 2010, the remaining balance of the loan with UBS was fully repaid.

See Note 3, “Cash Equivalents and Investments” and Note 4, “Fair Value Measurements” in the Notes to Financial Statements for further discussion of Investments in Auction Rate Securities and Investment Put Option Related to Auction Rate Securities Rights.

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*Shelf Registration Statement.* In November 2011, we filed a shelf registration statement with the SEC, which was declared effective in December 2011. The shelf registration statement allows us to issue shares of our common stock from time to time for an aggregate initial offering price of up to \$100.0 million. As of March 12, 2012, \$100.0 million remains available to us under this shelf registration statement. The specific terms of offerings, if any, under the shelf registration statement would be established at the time of such offerings.

As of December 31, 2011, future minimum payments under our loan and lease obligations were as follows (in thousands):

	<u>Within One Year</u>	<u>One to Three Years</u>	<u>Three to Five Years</u>	<u>After Five Years</u>	<u>Total</u>
Operating lease(1)	\$ 3,027	\$ 6,467	\$7,056	\$5,619	\$22,169
Equipment financing line	152	—	—	—	152
Total	<u>\$3,179</u>	<u>\$ 6,467</u>	<u>\$7,056</u>	<u>\$5,619</u>	<u>\$ 22,321</u>

- (1) Our long-term commitment under operating lease relates to payments under our facility lease in South San Francisco, California, which expires in 2018.

In future periods, we expect to incur substantial costs as we continue to expand our research programs and related research and development activities. We plan to continue to support the clinical development of our cardiac muscle myosin activator omecamtiv mecarbil for the potential treatment of heart failure and research of potential next-generation compounds as part of our strategic alliance with Amgen. We plan to continue clinical development of our fast skeletal troponin activator CK-2017357 for the potential treatment of diseases and conditions related to skeletal muscle weakness or wasting. We plan to continue to conduct non-clinical development of our fast skeletal troponin activator CK-2127107 and, following clearance of an IND, clinical development. We plan to progress one or more of our smooth muscle myosin inhibitor compounds through non-clinical and clinical development. We expect to incur significant research and development expenses as we advance the research and development of our other compounds from our muscle contractility programs through research to candidate selection.

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

- the initiation, progress, timing, scope and completion of preclinical research, non-clinical 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 requirements of regulatory agencies;
- Amgen's decisions with regard to funding of development and commercialization of omecamtiv mecarbil or other compounds for the potential treatment of heart failure under our collaboration;
- our level of funding for the development of current or future drug candidates;
- the number of drug candidates we pursue;
- the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims;
- our ability to establish and maintain selected strategic alliances required for the development of drug candidates and commercialization of our potential drugs;
- our plans or ability to expand our drug development capabilities, including our capabilities to conduct clinical trials for our drug candidates;
- our plans or ability to establish sales, marketing or manufacturing capabilities and to achieve market acceptance for potential drugs;

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- the expansion and advancement of our research programs;
- the hiring of additional employees and consultants;
- the expansion of our facilities;
- 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 have incurred an accumulated deficit of \$408.5 million since inception and there can be no assurance that we will attain profitability. We are subject to risks common to development stage companies including, but not limited to, development of new drug candidates, dependence on key personnel, and the ability to obtain additional capital as needed to fund our future plans. Our liquidity will be impaired if sufficient additional capital is not available on terms acceptable to us, if at all. To date, we have funded our operations primarily through sales of our common stock and convertible preferred stock, contract payments under our collaboration agreements, debt financing arrangements, government grants and interest income. Until we achieve profitable operations, we intend to continue to fund operations through payments from strategic collaborations, additional sales of equity securities, government grants and debt financings. We have never generated revenues from commercial sales of our drugs and may not have drugs to market for at least several years, if ever. Our success is dependent on our ability to obtain additional capital by entering into new strategic collaborations and/or through equity or debt financings, and ultimately on our and our collaborators' ability to successfully develop and market one or more of our drug candidates. We cannot be certain that sufficient funds will be available from such collaborators or financings when needed or on satisfactory terms. Additionally, there can be no assurance that any of drugs based on our drug candidates will be accepted in the marketplace or that any future products can be developed or manufactured at an acceptable cost. These factors could have a material adverse effect on our future financial results, financial position and cash flows.

Based on the current status of our development plans, we believe that our existing cash and cash equivalents, investments and interest earned on investments will be sufficient to meet our projected operating requirements for at least the next 12 months. If, at any time, our prospects for internally financing our research and development programs decline, we may decide to reduce research and development expenses by delaying, discontinuing or reducing our funding of development of one or more of our drug candidates or potential drug candidates or of other research and development programs. Alternatively, we might raise funds through strategic relationships, public or private financings or other arrangements. There can be no assurance that funding, if needed, will be available on attractive terms, or at all, or in accordance with our planned timelines. Furthermore, financing obtained through future strategic relationships may require us to forego certain commercialization and other rights to our drug candidates. Similarly, any additional equity financing may be dilutive to stockholders and debt financing, if available, may involve restrictive covenants. 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.

### **Off-balance Sheet Arrangements**

As of December 31, 2011, 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 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.

## **Critical Accounting Policies and Estimates**

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 Form 10-K, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our financial statements.

### ***Investments***

*Available-for-sale and trading investments.* Our investments have consisted of ARS, municipal and government agency bonds, commercial paper, U.S. Treasury securities, and money market funds. We designated all investments, except for our ARS held by UBS, as available-for-sale. Therefore, they are reported at fair value, with unrealized gains and losses recorded in accumulated other comprehensive income. During the fourth quarter of fiscal year 2008, we reclassified our ARS held by UBS from available-for-sale to trading securities. Investments that we designate as trading assets are reported at fair value, with gains or losses resulting from changes in fair value recognized in earnings. See “Notes to Financial Statements — Note 3 — Cash Equivalents and Investments” for further detailed discussion. Investments with original maturities greater than three months and remaining maturities less than one year are classified as short-term investments. Investments with remaining maturities greater than one year are classified as long-term investments.

*Other-than-temporary impairment.* All of our available-for-sale investments are subject to a periodic impairment review. We recognize an impairment charge when a decline in the fair value of our investments below the cost basis is judged to be other-than-temporary. Factors considered by management in assessing whether an other-than-temporary impairment has occurred include: the nature of the investment; whether the decline in fair value is attributable to specific adverse conditions affecting the investment; the financial condition of the investee; the severity and the duration of the impairment; and whether we have the intent and ability to hold the investment to maturity. When we determine that an other-than-temporary impairment has occurred, the investment is written down to its market value at the end of the period in which we determine that an other-than-temporary decline occurred. The amortized cost of debt securities in this category is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization is included in interest income. Realized gains and losses and declines in value judged to be other-than-temporary, if any, on available-for-sale securities are included in other income or expense. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in Interest and Other, net.

### ***Revenue Recognition***

We recognize revenue when the following criteria have been met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the fee is fixed or determinable; and collectability 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 collectability 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.

Revenue under our license and collaboration arrangements is recognized based on the performance requirements of the contract. Research and development revenues, which are earned under agreements with third

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parties for agreed research and development activities, may include non-refundable license fees, research and development funding, cost reimbursements and contingent milestones and royalties. Our collaborations prior to January 1, 2011 with multiple elements were evaluated and divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer and whether there was vendor-specific objective and reliable evidence (“VSOE”) of the fair value of the undelivered items. The consideration we received was allocated among the separate units based on their respective fair values, and the applicable revenue recognition criteria were applied to each of the separate units. The consideration we received was combined and recognized as a single unit of accounting when criteria for separation were not met. On January 1, 2011, Accounting Standard Codification (“ASC”) Topic 605-25, *Revenue Recognition — Multiple-Element Arrangements* (“ASC 605-25”) on the recognition of revenues for agreements with multiple deliverables became effective and applies to any agreements we may enter into on or after January 1, 2011. Under this updated guidance, revenue will be allocated to each element using a selling price hierarchy, where the selling price for an element is based on VSOE if available; third-party evidence (“TPE”), if available and VSOE is not available; or the best estimate of selling price, if neither VSOE nor TPE is available.

Non-refundable license fees are recognized as revenue as we perform under the applicable agreement. Where the level of effort is relatively consistent over the performance period, we recognize total fixed or determined revenue on a straight-line basis over the estimated period of expected performance.

ASC 605-28 established the milestone method as an acceptable method of revenue recognition for certain contingent event-based payments under research and development arrangements. Under the milestone method, a payment that is contingent upon the achievement of a substantive milestone is recognized in its entirety in the period in which the milestone is achieved. A milestone is an event (i) that can be achieved based in whole or in part on either our performance or on the occurrence of a specific outcome resulting from our performance, (ii) for which there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved, and (iii) that would result in additional payments being due to us. The determination that a milestone is substantive is based on management’s judgment and is made at the inception of the arrangement. Milestones are considered substantive when the consideration earned from the achievement of the milestone is (i) commensurate with either our performance to achieve the milestone or the enhancement of value of the item delivered as a result of a specific outcome resulting from our performance to achieve the milestone, (ii) relates solely to past performance and (iii) is reasonable relative to all deliverables and payment terms in the arrangement.

Other contingent event-based payments received for which payment is either contingent solely upon the passage of time or the results of a collaborative partner’s performance are not considered milestones under ASC 605-28. In accordance with ASC 605-25, such payments will be recognized as revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; price is fixed or determinable; and collectability is reasonably assured.

Prior to January 1, 2011, we recognized milestone payments as revenue upon achievement of the milestone, provided the milestone payment is non-refundable, substantive effort and risk is involved in achieving the milestone and the amount of the milestone is reasonable in relation to the effort expended or risk associated with the achievement of the milestone. If these conditions were not met, we deferred the milestone payment and recognized it as revenue over the estimated period of performance under the contract as we completed our performance obligations. We have concluded that all of the future contingent milestone payments pursuant to our research and development arrangements entered into as of January 1, 2011 are not considered substantive as they are the results of a collaborative partner’s performance. Therefore, they are not considered milestones under ASC 605-28.

Research and development revenues and cost reimbursements are based upon negotiated rates for our FTEs and actual out-of-pocket costs. FTE rates are negotiated rates that are based upon our costs, and which we believe approximate fair value. 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. In revenue

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arrangements in which both parties make payments to each other, we evaluate the payments to determine whether payments made by us will be recognized as a reduction of revenue or as expense. Revenue we recognize may be reduced by payments made to the other party under the arrangement unless we receive a separate and identifiable benefit in exchange for the payments and we can reasonably estimate the fair value of the benefit received.

Funds received from third parties under grant arrangements are recorded as revenue if we are deemed to be the principal participant in the grant arrangement as the activities under the grant are part of our development programs. If we are not the principal participant, the grant funds are recorded as a reduction to research and development expense. Grant funds received are not refundable and are recognized when the related qualified research and development costs are incurred and when there is reasonable assurance that the funds will be received. Funds received in advance are recorded as deferred revenue.

***Preclinical Study and Clinical Trial Accruals***

A substantial portion of our preclinical studies and all of our clinical trials have been performed utilizing third-party contract research organizations (“CROs”) and other vendors. For preclinical studies, the significant factors used in estimating accruals include the percentage of work completed to date and contract milestones achieved. For clinical trial expenses, the significant factors used in estimating accruals include the number of patients enrolled, duration of enrollment and percentage of work completed to date. We monitor patient enrollment levels and related activities to the extent possible through internal reviews, correspondence and status meetings with CROs and review of contractual terms. Our estimates are dependent on the timeliness and accuracy of data provided by our CROs and other vendors. If we have incomplete or inaccurate data, we may under- or overestimate activity levels associated with various studies or clinical trials at a given point in time. In this event, we could record adjustments to research and development expenses in future periods when the actual activity levels become known. No material adjustments to preclinical study and clinical trial expenses have been recognized to date.

***Stock-Based Compensation***

We apply the accounting guidance for stock compensation, which establishes the accounting for share-based payment awards made to employees and directors, including employee stock options and employee stock purchases. Under this guidance, stock-based compensation cost is measured at the grant date based on the calculated fair value of the award, and is recognized as an expense on a straight-line basis over the employee’s requisite service period, generally the vesting period of the award.

Under the guidance for stock compensation for non-employees, we measure the fair value of the award each period until the award is fully vested.

As required under the accounting rules, we review our valuation assumptions at each grant date and, as a result, from time to time we will likely change the valuation assumptions we use to value stock based awards granted in future periods. The assumptions used in calculating the fair value of share-based payment awards represent management’s best estimates at the time, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if conditions change and we use different assumptions, our stock-based compensation expense could be materially different in the future. In addition, we are required to estimate the expected forfeiture rate and recognize expense only for those shares expected to vest. If our actual forfeiture rate is materially different from our estimate, the stock-based compensation expense could be significantly different from what we have recorded in the current period.

***Income taxes***

We account 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 basis of assets and

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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 the deferred tax assets to the amounts expected to be realized. We recorded an income tax provision of \$150,000 in 2009 due to AMT. However, due to the Department of the Treasury's further guidance clarifying that utilization of the AMT NOL was not limited to 90% as part of the 5-year NOL carryback provision brought about by the Worker, Homeownership, and Business Assistance Act of 2009, the 2009 AMT liability was reversed in 2010. In addition to the \$150,000 benefit related to the AMT liability, we also recognized a \$26,000 benefit related to the monetization of the federal research tax credit for a total benefit of approximately \$176,000 in 2010. We did not record an income tax provision in the year ended December 31, 2011 because we had a net taxable loss in the period.

Based upon the weight of available evidence, which includes our historical operating performance, reported cumulative net losses since inception and difficulty in accurately forecasting our future results, we maintained a full valuation allowance on the net deferred tax assets as of December 31, 2011, 2010 and 2009. The valuation allowance was determined pursuant to the accounting guidance for income taxes, which requires an assessment of both positive and negative evidence when determining whether it is more likely than not that deferred tax assets are recoverable. We intend to maintain a full valuation allowance on the U.S. deferred tax assets until sufficient positive evidence exists to support reversal of the valuation allowance. The valuation allowance increased by \$18.5 million in 2011, increased by \$15.6 million in 2010, and decreased by \$9.6 million in 2009.

We also follow the accounting guidance that defines the threshold for recognizing the benefits of tax return positions in the financial statements as "more-likely-than-not" to be sustained by the taxing authorities based solely on the technical merits of the position. If the recognition threshold is met, the tax benefit is measured and recognized as the largest amount of tax benefit that, in our judgment, is greater than 50% likely to be realized. We are currently under examination by the IRS for the tax year 2009 and have made adjustments to our deferred balances for NOL carryforwards, research credits, and charitable contribution carryovers as a result of information obtained from the IRS examination. As we maintained a full valuation allowance against our deferred tax assets, the adjustments resulted in no additional tax expense in the current period. We have also adjusted our unrealized tax benefits accordingly. However, in general, the statute of limitations for tax liabilities for these years remains open for the purpose of adjusting the amounts of the losses and credits carried forward from those years.

Interest accrued related to unrecognized tax benefits and penalties were zero for 2011 and 2010. We account for interest related to unrecognized tax benefits and penalties by classifying both as income tax expense in the financial statements in accordance with the accounting guidance for uncertainty in income taxes. We do not expect our unrecognized tax benefits to change materially over the next twelve months.

#### **Recent Accounting Pronouncements**

See "Recent Accounting Pronouncements" in Note 1, "Organization and Significant Accounting Policies" in the Notes to Financial Statements for a discussion of recently adopted accounting pronouncements and accounting pronouncements not yet adopted, and their expected impact on our financial position and results of operations.

#### **Item 7A. *Quantitative and Qualitative Disclosures About Market Risk***

##### **Interest Rate and Market Risk**

Our exposure to market risk is limited to interest rate sensitivity, which is affected by changes in the general level of U.S. 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. We are exposed to the impact of interest rate changes and changes in the market values of our investments. Our interest income is sensitive to changes in the general level of U.S. interest rates. Our exposure to market rate risk for changes in interest rates relates primarily to our



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investment portfolio. We have not used derivative financial instruments in our investment portfolio. We invest the majority of our excess cash in U.S. Treasuries and, by policy, limit the amount of credit exposure in any one issuer and investment class, with the exception of obligations of the U.S. Treasury and federal agencies, for which there are no such limits. We protect and preserve our invested funds by attempting to limit default, market and reinvestment risk. Investments in both fixed-rate and floating-rate interest-earning instruments carry a degree of interest rate risk. Fixed-rate securities may have their fair market value adversely impacted due to a rise in interest rates, while floating-rate securities may produce less income than expected if interest rates fall. Due in part to these factors, our future investment income may fall short of expectations due to changes in interest rates.

To minimize risk, we maintain our portfolio of cash and cash equivalents and short- and long-term investments in a variety of interest-bearing instruments, including U.S. government and agency securities, high grade municipal and U.S. bonds and money market funds. Our investment portfolio of short- and long-term investments is subject to interest rate risk, and will fall in value if market interest rates increase.

Our cash and cash equivalents are invested in highly liquid securities with maturities of three months or less at the time of purchase. Consequently, we do not consider our cash and cash equivalents to be subject to significant interest rate risk and have therefore excluded them from the table below. On the liability side, our equipment financing lines carry fixed interest rates and therefore also may be subject to changes in fair value if market interest rates fluctuate. We do not have any foreign currency or derivative financial instruments.

The table below presents the principal amounts and weighted average interest rates by year of maturity for our equipment financing lines and investment portfolio (dollars in thousands):

	<u>2012</u>	<u>Beyond 2012</u>	<u>Total</u>	<u>Fair Value at December 31, 2011</u>
<b>Assets:</b>				
Investments	\$ 30,190	—	\$ 30,190	\$ 30,190
Average interest rate	0.16%	—	0.16%	
<b>Liabilities:</b>				
Equipment financing lines	\$ 152	—	\$ 152	\$ 138
Average interest rate	7.25%	—	7.25%	

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**Item 8. *Financial Statements and Supplementary Data***

**CYTOKINETICS, INCORPORATED  
(A Development Stage Enterprise)  
INDEX TO FINANCIAL STATEMENTS**

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders of Cytokinetics, Incorporated:

In our opinion, the accompanying balance sheets and the related statement of operations, stockholders' equity (deficit) and cash flows present fairly, in all material respects, the financial position of Cytokinetics, Incorporated at December 31, 2011 and December 31, 2010, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2011 and cumulatively, for the period from August 5, 1997 (date of inception) to December 31, 2011 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included 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. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As described in Note 1 to the financial statements, the Company is in the development stage and is dependent on its ability to raise additional capital.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PRICEWATERHOUSECOOPERS LLP  
San Jose, CA  
March 13, 2012

**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**BALANCE SHEETS**

	<u>December 31,</u>	
	<u>2011</u>	<u>2010</u>
	<small>(In thousands, except share and per share data)</small>	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 18,833	\$ 17,514
Short-term investments	30,190	54,125
Related party accounts receivable	14	46
Prepaid and other current assets	2,103	1,813
Total current assets	51,140	73,498
Long-term investments	—	1,206
Property and equipment, net	1,310	2,321
Restricted cash	196	788
Other assets	127	179
Total assets	<u>\$ 52,773</u>	<u>\$ 77,992</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 1,196	\$ 1,119
Accrued liabilities	3,232	5,372
Related party payables and accrued liabilities	12	—
Short-term portion of equipment financing lines	152	833
Total current liabilities	4,592	7,324
Long-term portion of equipment financing lines	—	152
Long-term portion of deferred rent	3	—
Total liabilities	<u>4,595</u>	<u>7,476</u>
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Preferred stock, \$0.001 par value:		
Authorized: 10,000,000 shares in 2011 and 2010		
Issued and outstanding: Series A Convertible Preferred Stock — 8,070 shares in 2011 and zero shares in 2010	—	—
Common stock, \$0.001 par value:		
Authorized: 245,000,000 shares in 2011 and 170,000,000 in 2010		
Issued and outstanding: 74,915,739 shares in 2011 and 66,907,600 shares in 2010	75	67
Additional paid-in capital	456,610	431,103
Accumulated other comprehensive income (loss)	3	(4)
Deficit accumulated during the development stage	(408,510)	(360,650)
Total stockholders' equity	48,178	70,516
Total liabilities and stockholders' equity	<u>\$ 52,773</u>	<u>\$ 77,992</u>

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

**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**STATEMENTS OF OPERATIONS**

	<u>Years Ended December 31,</u>			Period from
	2011	2010	2009	August 5, 1997 (Date of Inception) to December 31, 2011
	(In thousands, except per share data)			
Revenues:				
Research and development revenues from related parties	\$ 2,054	\$ 1,487	\$ 7,171	\$ 51,151
Research and development, grant and other revenues	1,946	1,090	—	5,990
License revenues from related parties	—	—	74,367	112,935
Total revenues	<u>4,000</u>	<u>2,577</u>	<u>81,538</u>	<u>170,076</u>
Operating expenses:				
Research and development	37,182	38,013	39,840	452,472
General and administrative	13,590	14,199	15,626	143,952
Restructuring charges (reversals)	1,192	—	(23)	3,642
Total operating expenses	<u>51,964</u>	<u>52,212</u>	<u>55,443</u>	<u>600,066</u>
Operating income (loss)	(47,964)	(49,635)	26,095	(429,990)
Interest and other, net	104	172	(1,401)	21,454
Income (loss) before income taxes	(47,860)	(49,463)	24,694	(408,536)
Income tax provision (benefit)	—	(176)	150	(26)
Net income (loss)	(47,860)	(49,287)	24,544	(408,510)
Deemed dividend related to beneficial conversion feature of convertible preferred stock	(2,857)	—	—	(2,857)
Net income (loss) allocable to common stockholders	<u>\$(50,717)</u>	<u>\$(49,287)</u>	<u>\$ 24,544</u>	<u>\$(411,367)</u>
Net income (loss) per share allocable to common stockholders:				
Basic	\$ (0.72)	\$ (0.77)	\$ 0.43	
Diluted	\$ (0.72)	\$ (0.77)	\$ 0.42	
Weighted-average number of shares used in computing net income (loss) per share allocable to common stockholders:				
Basic	<u>70,800</u>	<u>64,165</u>	<u>57,390</u>	
Diluted	<u>70,800</u>	<u>64,165</u>	<u>57,961</u>	

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

**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)**

	<u>Common Stock</u>		<u>Preferred Stock</u>		Additional Paid-In Capital	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount					
(In thousands, except share and per share data)									
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)
Balance, 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:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	(8)	—	(8)
Net loss	—	—	—	—	—	—	—	(7,341)	(7,341)
Total comprehensive loss	—	—	—	—	—	—	—	—	(7,349)
Balance, 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:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	86	—	86
Net loss	—	—	—	—	—	—	—	(13,079)	(13,079)
Total comprehensive loss	—	—	—	—	—	—	—	—	(12,993)
Balance, 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:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	190	—	190
Net loss	—	—	—	—	—	—	—	(15,874)	(15,874)
Total comprehensive loss	—	—	—	—	—	—	—	—	(15,684)

**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT) — (Continued)**

	Common Stock		Preferred Stock		Additional Paid-In Capital	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount					
	(In thousands, except share and per share data)								
Balance, 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:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	(228)	—	(228)
Net loss	—	—	—	—	—	—	—	(23,080)	(23,080)
Total comprehensive loss	—	—	—	—	—	—	—	—	(23,308)
Balance, 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:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	6	—	6
Net loss	—	—	—	—	—	—	—	(32,685)	(32,685)
Total comprehensive loss	—	—	—	—	—	—	—	—	(32,679)
Balance, December 31, 2003	2,307,258	2	—	—	5,646	(3,651)	46	(94,074)	(92,031)
Issuance of common stock upon initial public offering at \$13.00 per share, net of issuance costs of \$9,151	7,935,000	8	—	—	93,996	—	—	—	94,004
Issuance of common stock to related party for \$13.00 per share	538,461	1	—	—	6,999	—	—	—	7,000
Issuance of common stock to related party	37,482	—	—	—	—	—	—	—	—
Conversion of preferred stock to common stock upon initial public offering	17,062,145	17	—	—	133,155	—	—	—	133,172
Issuance of common stock upon cashless exercise of warrants	115,358	—	—	—	—	—	—	—	—
Issuance of common stock upon exercise of stock options for cash at \$0.20-\$6.50 per share	404,618	—	—	—	430	—	—	—	430
Issuance of common stock pursuant to ESPP at \$8.03 per share	69,399	—	—	—	557	—	—	—	557
Stock-based compensation	—	—	—	—	278	—	—	—	278
Deferred stock-based compensation	—	—	—	—	2,198	(2,198)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	—	—	1,598	—	—	1,598
Repurchase of unvested stock	(16,548)	—	—	—	(20)	—	—	—	(20)
Components of comprehensive loss:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	(234)	—	(234)
Net loss	—	—	—	—	—	—	—	(37,198)	(37,198)
Total comprehensive loss	—	—	—	—	—	—	—	—	(37,432)

**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT) — (Continued)**

	<u>Common Stock</u>		<u>Preferred Stock</u>		Additional Paid-In Capital	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount					
	(In thousands, except share and per share data)								
Balance, December 31, 2004	28,453,173	\$ 28	—	—	\$ 243,239	\$ (4,251)	\$ (188)	\$ (131,272)	\$ 107,556
Issuance of common stock upon exercise of stock options for cash at \$0.58-\$7.10 per share	196,703	1	—	—	370	—	—	—	371
Issuance of common stock pursuant to ESPP at \$4.43 per share	179,520	—	—	—	763	—	—	—	763
Issuance of common stock upon cashless exercise of warrants	14,532	—	—	—	—	—	—	—	—
Issuance of common stock upon drawdown of committed equity financing facility at \$6.13-\$7.35 per share, net of issuance costs of \$178	887,576	1	—	—	5,546	—	—	—	5,547
Stock-based compensation	—	—	—	—	67	—	—	—	67
Amortization of deferred stock-based compensation, net of cancellations	—	—	—	—	(439)	1,799	—	—	1,360
Repurchase of unvested stock	(20,609)	—	—	—	(25)	—	—	—	(25)
Components of comprehensive loss:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	174	—	174
Net loss	—	—	—	—	—	—	—	(42,252)	(42,252)
Total comprehensive loss	—	—	—	—	—	—	—	—	(42,078)
Balance, December 31, 2005	29,710,895	30	—	—	249,521	(2,452)	(14)	(173,524)	73,561
Issuance of common stock upon exercise of stock options for cash at \$0.20-\$7.10 per share	354,502	—	—	—	559	—	—	—	559
Issuance of common stock pursuant to ESPP at a weighted price of \$4.43 per share	193,248	—	—	—	856	—	—	—	856
Issuance of common stock pursuant to registered direct offerings at \$6.60 and \$7.00 per share, net of issuance costs of \$3,083	10,285,715	10	—	—	66,907	—	—	—	66,917
Issuance of common stock upon drawdown of committed equity financing facility at \$5.53-\$7.02 per share	2,740,735	3	—	—	16,954	—	—	—	16,957
Stock-based compensation	—	—	—	—	3,421	—	—	—	3,421
Amortization of deferred stock-based compensation, net of cancellations	—	—	—	—	(138)	1,358	—	—	1,220
Repurchase of unvested stock	(1,537)	—	—	—	(2)	—	—	—	(2)
Components of comprehensive loss:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	(61)	—	(61)
Net loss	—	—	—	—	—	—	—	(57,115)	(57,115)
Total comprehensive loss	—	—	—	—	—	—	—	—	(57,176)
Balance, December 31, 2006	43,283,558	43	—	—	338,078	(1,094)	(75)	(230,639)	106,313
Issuance of common stock upon exercise of stock options for cash at \$0.58-\$7.10 per share	259,054	1	—	—	511	—	—	—	512
Issuance of common stock pursuant to ESPP at a weighted price of \$4.49 per share	179,835	—	—	—	807	—	—	—	807
Issuance of common stock upon drawdown of committed equity financing facility at \$4.43-\$4.81 per share	2,075,177	2	—	—	9,540	—	—	—	9,542
Issuance of common stock to related party for \$9.47 per share, net of issuance costs of \$57	3,484,806	3	—	—	26,006	—	—	—	26,009



**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT) — (Continued)**

	Common Stock		Preferred Stock		Additional Paid-In Capital	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount					
	(In thousands, except share and per share data)								
Stock-based compensation	—	\$ —	—	\$ —	\$ 4,833	\$ —	\$ —	\$ —	\$ 4,833
Amortization of deferred stock-based compensation, net of cancellations	—	—	—	—	(45)	765	—	—	720
Repurchase of unvested stock	(68)	—	—	—	—	—	—	—	—
Components of comprehensive loss:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	74	—	74
Net loss	—	—	—	—	—	—	—	(48,894)	(48,894)
Total comprehensive loss	—	—	—	—	—	—	—	—	(48,820)
Balance, December 31, 2007	49,282,362	49	—	—	379,730	(329)	(1)	(279,533)	99,916
Issuance of common stock upon exercise of stock options for cash at \$0.58-\$3.37 per share	95,796	—	—	—	131	—	—	—	131
Issuance of common stock pursuant to ESPP at a weighted price of \$2.85 per share	164,451	—	—	—	468	—	—	—	468
Issuance of restricted stock at a price of \$0.001 per share	397,960	1	—	—	(1)	—	—	—	—
Cancellation of restricted stock	(1,500)	—	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	5,277	—	—	—	5,277
Amortization of deferred stock-based compensation, net of cancellations	—	—	—	—	—	329	—	—	329
Components of comprehensive loss:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	19	—	19
Net loss	—	—	—	—	—	—	—	(56,374)	(56,374)
Total comprehensive loss	—	—	—	—	—	—	—	—	(56,355)
Balance, December 31, 2008	49,939,069	50	—	—	385,605	—	18	(335,907)	49,766
Issuance of common stock upon exercise of stock options for cash at \$0.20-\$4.95 per share	492,003	—	—	—	588	—	—	—	588
Issuance of common stock pursuant to ESPP at a weighted price of \$1.66 per share	149,996	—	—	—	249	—	—	—	249
Issuance of common stock and warrants pursuant to registered direct offering at \$1.97 per share, net of issuance costs of \$1,062	7,106,600	7	—	—	14,515	—	—	—	14,522
Issuance of common stock upon drawdown of committed equity financing facility at \$1.80-\$2.29 per share, net of issuance costs of \$98	3,596,728	4	—	—	6,846	—	—	—	6,850
Cancellation of restricted stock	(9,360)	—	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	4,906	—	—	—	4,906
Tax benefit from stock based compensation	—	—	—	—	20	—	—	—	20
Components of comprehensive loss:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	(17)	—	(17)
Net income	—	—	—	—	—	—	—	24,544	24,544
Total comprehensive income	—	—	—	—	—	—	—	—	24,527

**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT) — (Continued)**

	Common Stock		Preferred Stock		Additional Paid-In Capital	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount					
(In thousands, except share and per share data)									
Balance, December 31, 2009	61,275,036	\$ 61	—	\$ —	\$ 412,729	\$ —	\$ 1	\$ (311,363)	\$ 101,428
Issuance of common stock upon exercise of stock options for cash at \$0.58-\$2.00 per share	176,433	1	—	—	197	—	—	—	198
Issuance of common stock pursuant to ESPP at a weighted price of \$1.70 per share	134,237	—	—	—	228	—	—	—	228
Issuance of common stock upon drawdown of committed equity financing facility at \$2.05-\$3.15 per share, net of issuance costs of \$1)	5,339,819	5	—	—	13,952	—	—	—	13,957
Cancellation of restricted stock	(17,925)	—	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	4,017	—	—	—	4,017
Reversal of tax benefit from stock based compensation	—	—	—	—	(20)	—	—	—	(20)
Components of comprehensive loss:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	(5)	—	(5)
Net loss	—	—	—	—	—	—	—	(49,287)	(49,287)
Total comprehensive loss	—	—	—	—	—	—	—	—	(49,292)
Balance, December 31, 2010	66,907,600	67	—	—	431,103	—	(4)	(360,650)	70,516
Issuance of common stock upon exercise of stock options for cash at \$1.00-\$1.20 per share	16,000	—	—	—	17	—	—	—	17
Issuance of common stock pursuant to ESPP at a weighted price of \$1.11 per share	112,931	—	—	—	125	—	—	—	125
Issuance of common stock to Deerfield at \$1.50 per share, net of issuance costs of \$53	5,300,000	5	—	—	6,122	—	—	—	6,127
Issuance of Series A convertible preferred stock to Deerfield at \$1,500 per share, net of issuance costs of \$81	—	—	8,070	—	9,329	—	—	—	9,329
Beneficial conversion feature of Series A convertible preferred stock	—	—	—	—	—	—	—	—	0
Deemed dividend to holders of Series A convertible preferred stock	—	—	—	—	—	—	—	—	0
Issuance of warrants to Deerfield, net of issuance costs of \$38	—	—	—	—	4,427	—	—	—	4,427
Issuance of common stock to MLV at \$1.00-\$1.02 per share, net of commission and issuance costs of \$160	2,579,208	3	—	—	2,418	—	—	—	2,421
Stock-based compensation	—	—	—	—	3,069	—	—	—	3,069
Components of comprehensive loss:									
Change in unrealized gain (loss) on investments	—	—	—	—	—	—	7	—	7
Net loss	—	—	—	—	—	—	—	(47,860)	(47,860)
Total comprehensive loss	—	—	—	—	—	—	—	—	(47,853)
Balance, December 31, 2011	<u>74,915,739</u>	<u>\$ 75</u>	<u>8,070</u>	<u>\$ —</u>	<u>\$ 456,610</u>	<u>\$ —</u>	<u>\$ 3</u>	<u>\$ (408,510)</u>	<u>\$ 48,178</u>

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

**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**STATEMENTS OF CASH FLOWS**

	<u>Years Ended December 31,</u>			Period from August 5, 1997
	<u>2011</u>	<u>2010</u>	<u>2009</u>	(Date of Inception) to December 31, 2011
	(In thousands)			
<b>Cash flows from operating activities:</b>				
Net income (loss)	\$ (47,860)	\$ (49,287)	\$ 24,544	\$ (408,510)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:				
Depreciation and amortization of property and equipment	1,297	1,900	2,021	28,663
(Gain) loss on disposal of equipment	3	(13)	(40)	301
Non-cash impairment charges	—	—	103	103
Non-cash restructuring expenses, net of reversals	194	—	22	692
Non-cash interest expense	—	—	—	504
Non-cash forgiveness of loan to officers	—	9	10	434
Stock-based compensation	3,069	4,017	4,906	32,345
Tax benefit from stock-based compensation	—	20	(20)	—
Non-cash warrant expense	—	—	1,585	1,626
Other non-cash expenses	—	—	—	141
Changes in operating assets and liabilities:				
Related party accounts receivable	32	134	41	(365)
Prepaid and other assets	(238)	304	(166)	(2,258)
Accounts payable	162	(536)	334	1,348
Accrued and other liabilities	(2,266)	(627)	(1,183)	2,906
Related party payables and accrued liabilities	12	—	—	12
Deferred revenue	—	(751)	(23,741)	—
Net cash provided by (used in) operating activities	<u>(45,595)</u>	<u>(44,830)</u>	<u>8,416</u>	<u>(342,058)</u>
<b>Cash flows from investing activities:</b>				
Purchases of investments	(48,025)	(109,860)	(132,205)	(959,455)
Proceeds from sales and maturities of investments	73,174	125,790	75,970	909,327
Proceeds from sales of auction rate securities	—	17,900	2,125	20,025
Purchases of property and equipment	(443)	(493)	(550)	(31,036)
Proceeds from sales of property and equipment	3	14	74	141
(Increase) decrease in restricted cash	592	886	1,076	(196)
Issuance of related party notes receivable	—	—	—	(1,146)
Proceeds from repayments of notes receivable	—	—	30	859
Net cash provided by (used in) investing activities	<u>25,301</u>	<u>34,237</u>	<u>(53,480)</u>	<u>(61,481)</u>
<b>Cash flows from financing activities:</b>				
Proceeds from initial public offering, sale of common stock to related party, and public offerings, net of issuance costs	—	—	12,937	206,871
Proceeds from draw down of committed equity financing facilities and at-the-market facility, net of commission and issuance costs	2,421	13,958	6,850	55,275
Proceeds from other issuances of common stock and warrants, net of issuance costs	10,696	425	837	18,115
Proceeds from issuance of preferred stock, net of issuance costs	9,329	—	—	142,501
Repurchase of common stock	—	—	—	(68)
Proceeds from loan with UBS	—	—	12,441	12,441
Repayment of loan with UBS	—	(10,201)	(2,240)	(12,441)
Proceeds from equipment financing lines	—	—	—	23,696
Repayment of equipment financing lines	(833)	(1,616)	(2,039)	(24,018)
Tax (expense) benefit from stock-based compensation	—	(20)	20	—
Net cash provided by financing activities	<u>21,613</u>	<u>2,546</u>	<u>28,806</u>	<u>422,372</u>
Net increase (decrease) in cash and cash equivalents	1,319	(8,047)	(16,258)	18,833
Cash and cash equivalents, beginning of period	<u>17,514</u>	<u>25,561</u>	<u>41,819</u>	<u>—</u>
Cash and cash equivalents, end of period	<u>\$ 18,833</u>	<u>\$ 17,514</u>	<u>\$ 25,561</u>	<u>\$ 18,833</u>

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

**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**NOTES TO FINANCIAL STATEMENTS**

**Note 1 — Organization and Significant Accounting Policies**

***Organization***

Cytokinetics, Incorporated (the “Company”, “we” or “our”) was incorporated under the laws of the state of Delaware on August 5, 1997. The Company is a clinical-stage biopharmaceutical company focused on the discovery and development of novel small molecule therapeutics that modulate muscle function for the potential treatment of serious diseases and medical conditions. The Company is a development stage enterprise and has been primarily engaged in conducting research, developing drug candidates and technologies, and raising capital.

The Company’s registration statement for its initial public offering (“IPO”) was declared effective by the Securities and Exchange Commission (“SEC”) on April 29, 2004. The Company’s common stock commenced trading on the NASDAQ National Market, now the NASDAQ Global Market, on April 29, 2004 under the trading symbol “CYTK”.

The Company’s consolidated financial statements contemplate the conduct of the Company’s operations in the normal course of business. The Company has incurred an accumulated deficit of \$408.5 million since inception and there can be no assurance that the Company will attain profitability. The Company had a net loss of \$47.9 million and net cash used in operations of \$45.6 million for the year ended December 31, 2011. Cash, cash equivalents and investments decreased to \$49.0 million at December 31, 2011 from \$72.8 million at December 31, 2010. The Company anticipates that it will continue to have operating losses and net cash outflows in future periods.

The Company is subject to risks common to development stage companies including, but not limited to, development of new drug candidates, dependence on key personnel, and the ability to obtain additional capital as needed to fund its future plans. The Company’s liquidity will be impaired if sufficient additional capital is not available on terms acceptable to the Company. To date, the Company has funded its operations primarily through sales of its common stock and convertible preferred stock, contract payments under its collaboration agreements, debt financing arrangements, government grants and interest income. Until it achieves profitable operations, the Company intends to continue to fund operations through payments from strategic collaborations, additional sales of equity securities, government grants and debt financings. The Company has never generated revenues from commercial sales of its drugs and may not have drugs to market for at least several years, if ever. The Company’s success is dependent on its ability to enter into new strategic collaborations and/or raise additional capital and to successfully develop and market one or more of its drug candidates. As a result, the Company may choose to raise additional capital through equity or debt financings to continue to fund its operations in the future. The Company cannot be certain that sufficient funds will be available from such a financing or through a collaborator when required or on satisfactory terms. Additionally, there can be no assurance that the Company’s drug candidates will be accepted in the marketplace or that any future products can be developed or manufactured at an acceptable cost. These factors could have a material adverse effect on the Company’s future financial results, financial position and cash flows.

Based on the current status of its development plans, the Company believes that its existing cash, cash equivalents and investments at December 31, 2011 will be sufficient to fund its cash requirements for at least the next 12 months. If, at any time, the Company’s prospects for financing its research and development programs decline, the Company may decide to reduce research and development expenses by delaying, discontinuing or reducing its funding of one or more of its research or development programs. Alternatively, the Company might raise funds through strategic collaborations, public or private financings or other arrangements. Such funding, if needed, may not be available on favorable terms, or at all.

**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**NOTES TO FINANCIAL STATEMENTS — (Continued)**

The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

***Use of Estimates***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States 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.

***Basis of Presentation***

The financial statements include all adjustments (consisting only of normal recurring adjustments) that management believes are necessary for the fair statement of the balances and results for the periods presented.

***Concentration of Credit Risk and Other Risks and Uncertainties***

Financial instruments that potentially subject the Company to concentrations of risk consist principally of cash and cash equivalents, investments and accounts receivable. The Company's cash, cash equivalents and investments are invested in deposits with three major financial institutions in the U.S. Deposits in these banks may exceed the amount of insurance provided on such deposits. The Company has not experienced any realized losses on its deposits of cash, cash equivalents or investments.

The economic turmoil in the United States in recent years, the extraordinary volatility in the stock markets and other current negative macroeconomic indicators could negatively impact the Company's ability to raise the funds necessary to support its business and may materially adversely affect its business, operating results and financial condition.

The Company performs an ongoing credit evaluation of its strategic partners' financial conditions and generally does not require collateral to secure accounts receivable from its strategic partners. The Company's exposure to credit risk associated with non-payment will be affected principally by conditions or occurrences within Amgen Inc. ("Amgen"), its strategic partner. Approximately 51%, 58% and 100% of total revenues for the years ended December 31, 2011, 2010 and 2009, respectively, were derived from Amgen. Accounts receivable due from Amgen were \$14,000 and \$41,000 at December 31, 2011 and 2010, respectively and were included in related party accounts receivable. See also Note 6, "Related Party Transactions," below regarding collaboration agreements with Amgen and GlaxoSmithKline ("GSK").

Drug candidates developed by the Company may require approvals or clearances from the U.S. Food and Drug Administration ("FDA") or 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 were to be denied approval or clearance or any such approval or clearance were to be delayed, it would have a material adverse impact on the Company.

The Company's operations and employees are located in the United States. In the years ended December 31, 2011, 2010 and 2009, all of the Company's revenues were received from entities located in the United States or from United States affiliates of foreign corporations.

**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**NOTES TO FINANCIAL STATEMENTS — (Continued)**

**Restricted Cash**

In accordance with the terms of the Company's line of credit agreement with General Electric Capital Corporation ("GE Capital"), the Company is obligated to maintain a certificate of deposit with the lender.

The balance of the certificate of deposit, which the Company classifies as restricted cash, was as follows (in thousands):

	December 30, 2011	December 31, 2010
Certificate of deposit classified as restricted cash	\$ 196	\$ 788

**Cash and Cash Equivalents**

The Company considers all highly liquid investments with a maturity of three months or less at the time of purchase to be cash equivalents.

**Investments**

*Available-for-sale and trading investments.* The Company's investments have consisted of U.S. Treasury securities, money market funds, U.S. municipal and government agency bonds, commercial paper, and auction rate securities ("ARS"). The Company designates all investments, except for its ARS that were held by UBS AG ("UBS"), as available-for-sale and therefore reports them at fair value, with unrealized gains and losses recorded in accumulated other comprehensive income. The Company reclassified its ARS held by UBS from available-for-sale to trading securities. Investments that the Company designates as trading assets are reported at fair value, with gains or losses resulting from changes in fair value recognized in net income (loss). As of July 1, 2010, the Company no longer invests in ARS. See Note 3 for further detailed discussion. Investments with original maturities greater than three months and remaining maturities of one year or less are classified as short-term investments. Investments with remaining maturities greater than one year are classified as long-term investments.

*Other-than-temporary impairment.* All of the Company's available-for-sale investments are subject to a periodic impairment review. The Company recognizes an impairment charge when a decline in the fair value of its investments below the cost basis is judged to be other-than-temporary. Factors considered by management in assessing whether an other-than-temporary impairment has occurred include: the nature of the investment; whether the decline in fair value is attributable to specific adverse conditions affecting the investment; the financial condition of the investee; the severity and the duration of the impairment; and whether the Company has the intent and ability to hold the investment to maturity. When the Company determines that an other-than-temporary impairment has occurred, the investment is written down to its market value at the end of the period in which it is determined that an other-than-temporary decline has occurred. The amortized cost of debt securities in this category is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization is included in interest income. Recognized gains and losses and declines in value judged to be other-than-temporary, if any, on available-for-sale securities are included in other income or expense. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in Interest and Other, net.

**Property and Equipment**

Property and equipment are stated at cost less accumulated depreciation and are depreciated on a straight-line basis over the estimated useful lives of the related assets, which are generally three years for computer

**CYTOKINETICS, INCORPORATED**  
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**NOTES TO FINANCIAL STATEMENTS — (Continued)**

equipment and software, five years for laboratory equipment and office equipment, and seven years for furniture and fixtures. 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 ranging from three to seven 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 accounting guidance 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 the accounting guidance, 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 are 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.

***Revenue Recognition***

The accounting guidance for revenue recognition requires that certain 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 or determinable; and collectability 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 collectability 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.

Revenue under our license and collaboration arrangements is recognized based on the performance requirements of the contract. Research and development revenues, which are earned under agreements with third parties for agreed research and development activities, may include non-refundable license fees, research and development funding, cost reimbursements and contingent milestones and royalties. The Company's collaborations prior to January 1, 2011 with multiple elements were evaluated and divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer and whether there was vendor-specific objective and reliable evidence ("VSOE") of the fair value of the undelivered items. The consideration the Company receives was allocated among the separate units based on their respective fair values, and the applicable revenue recognition criteria were applied to each of the separate units. The consideration the Company received was combined and recognized as a single unit of accounting when criteria for separation were not met. On January 1, 2011, Accounting Standard Codification ("ASC") Topic 605-25, *Revenue Recognition — Multiple-Element Arrangements* ("ASC 605-25") on the recognition of revenues for agreements with multiple deliverables became effective and applies to any agreements the Company may enter into on or after January 1, 2011. Under this updated guidance, revenue will be allocated to each element using a selling price hierarchy, where the selling price for an element is based on VSOE if available; third-party evidence ("TPE"), if available and VSOE is not available; or the best estimate of selling price, if neither VSOE nor TPE is available.

Non-refundable license fees are recognized as revenue as the Company performs under the applicable agreement. Where the level of effort is relatively consistent over the performance period, the Company recognizes total fixed or determined revenue on a straight-line basis over the estimated period of expected performance.

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ASC Topic 605-28, *Revenue Recognition — Milestone Method* (“ASC 605-28”), established the milestone method as an acceptable method of revenue recognition for certain contingent event-based payments under research and development arrangements. Under the milestone method, a payment that is contingent upon the achievement of a substantive milestone is recognized in its entirety in the period in which the milestone is achieved. A milestone is an event (i) that can be achieved based in whole or in part on either the Company’s performance or on the occurrence of a specific outcome resulting from the Company’s performance, (ii) for which there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved, and (iii) that would result in additional payments being due to the Company. The determination that a milestone is substantive is judgmental and is made at the inception of the arrangement. Milestones are considered substantive when the consideration earned from the achievement of the milestone is (i) commensurate with either the Company’s performance to achieve the milestone or the enhancement of value of the item delivered as a result of a specific outcome resulting from the Company’s performance to achieve the milestone, (ii) relates solely to past performance and (iii) is reasonable relative to all deliverables and payment terms in the arrangement.

Other contingent event-based payments received for which payment is either contingent solely upon the passage of time or the results of a collaborative partner’s performance are not considered milestones under ASC 605-28. In accordance with ASC 605-25, such payments will be recognized as revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; price is fixed or determinable; and collectability is reasonably assured.

Prior to January 1, 2011, the Company recognized milestone payments as revenue upon achievement of the milestone, provided the milestone payment is non-refundable, substantive effort and risk is involved in achieving the milestone and the amount of the milestone is reasonable in relation to the effort expended or risk associated with the achievement of the milestone. If these conditions were not met, the Company deferred the milestone payment and recognized it as revenue over the estimated period of performance under the contract as the Company completed its performance obligations. The Company has concluded that all of the future contingent milestone payments pursuant to its research and development arrangements entered into as of January 1, 2011 are not considered substantive as they are the results of a collaborative partner’s performance. Therefore, they are not considered milestones under ASC 605-28.

Research and development revenues and cost reimbursements are based upon negotiated rates for the Company’s full-time employee equivalents (“FTE”) and actual out-of-pocket costs. FTE rates are negotiated rates that are based upon the Company’s costs, and which the Company believes approximate fair value. 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. In revenue arrangements in which both parties make payments to each other, the Company evaluates the payments in accordance with the accounting guidance for arrangements under which consideration is given by a vendor to a customer, including a reseller of the vendor’s products, to determine whether payments made by us will be recognized as a reduction of revenue or as expense. In accordance with this guidance, revenue recognized by the Company may be reduced by payments made to the other party under the arrangement unless the Company receives a separate and identifiable benefit in exchange for the payments and the Company can reasonably estimate the fair value of the benefit received. The application of the accounting guidance for consideration given to a customer has had no material impact to the Company.

Funds received from third parties under grant arrangements are recorded as revenue if the Company is deemed to be the principal participant in the grant arrangement as the activities under the grant are part of the Company’s development program. If the Company is not the principal participant, the grant funds are recorded as



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a reduction to research and development expense. Grant funds received are not refundable and are recognized when the related qualified research and development costs are incurred and when there is reasonable assurance that the funds will be received. Funds received in advance are recorded as deferred revenue.

***Preclinical Studies and Clinical Trial Accruals***

A substantial portion of the Company's preclinical studies and all of the Company's clinical trials have been performed by third-party contract research organizations ("CROs") and other vendors. For preclinical studies, the significant factors used in estimating accruals include the percentage of work completed to date and contract milestones achieved. For clinical trial expenses, the significant factors used in estimating accruals include the number of patients enrolled, duration of enrollment and percentage of work completed to date. The Company monitors patient enrollment levels and related activities to the extent practicable through internal reviews, correspondence and status meetings with CROs, and review of contractual terms. The Company's estimates are dependent on the timeliness and accuracy of data provided by its CROs and other vendors. If the Company has incomplete or inaccurate data, it may under- or overestimate activity levels associated with various studies or trials at a given point in time. In this event, it could record adjustments to research and development expenses in future periods when the actual activity level becomes known. No material adjustments to preclinical study and clinical trial expenses have been recognized to date.

***Research and Development Expenditures***

Research and development costs are charged to operations as incurred.

***Retirement Plan***

The Company sponsors a 401(k) defined contribution plan covering all employees. There have been no employer contributions to the plan since inception.

***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 basis 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.

The Company also follows the accounting guidance that defines the threshold for recognizing the benefits of tax return positions in the financial statements as "more-likely-than-not" to be sustained by the taxing authorities based solely on the technical merits of the position. If the recognition threshold is met, the tax benefit is measured and recognized as the largest amount of tax benefit that, in the Company's judgment, is greater than 50% likely to be realized.

***Comprehensive Income/(Loss)***

The Company follows the accounting standards for the reporting and presentation of comprehensive income (loss) and its components. Comprehensive income (loss) includes all changes in stockholders' equity during a period from non-owner sources. Comprehensive income (loss) for each of the years ended December 31, 2011, 2010, and 2009 was equal to net income (loss) adjusted for unrealized gains and losses on investments.

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**Segment Reporting**

The Company has determined that it operates in only one segment.

**Net Income (Loss) Per Common Share**

Basic net income (loss) per share allocable to common stockholders is computed by dividing net income (loss) allocable to common stockholders by the weighted average number of vested common shares outstanding during the period. Diluted net income (loss) per share allocable to common stockholders is computed by giving effect to all potentially dilutive common shares, including outstanding stock options, unvested restricted stock, warrants, convertible preferred stock and shares issuable under the Company's Employee Stock Purchase Plan ("ESPP"), by applying the treasury stock method. The following is the calculation of basic and diluted net income (loss) per share allocable to common stockholders (in thousands except per share data):

	Years Ended December 31,		
	2011	2010	2009
Net income (loss)	\$ (47,860)	\$ (49,287)	\$ 24,544
Deemed dividend related to beneficial conversion feature of convertible preferred stock	(2,857)	—	—
Net income (loss) allocable to common stockholders	<u>\$ (50,717)</u>	<u>\$ (49,287)</u>	<u>\$ 24,544</u>
Weighted-average common shares outstanding	70,800	64,286	57,717
Unvested restricted stock	—	(121)	(327)
Weighted-average shares used in computing net income (loss) per share allocable to common stockholders — basic	70,800	64,165	57,390
Dilutive effect of stock options, unvested restricted stock and warrants	—	—	571
Weighted-average shares used in computing net income (loss) per share allocable to common stockholders — diluted	<u>70,800</u>	<u>64,165</u>	<u>57,961</u>
Net income (loss) per share allocable to common stockholders:			
Basic	\$ (0.72)	\$ (0.77)	\$ 0.43
Diluted	\$ (0.72)	\$ (0.77)	\$ 0.42

The following instruments were excluded from the computation of diluted net income (loss) per common share allocable to common stockholders for the periods presented because their effect would have been antidilutive (in thousands):

	December 31,		
	2011	2010	2009
Options to purchase common stock	9,592	8,096	5,960
Warrants to purchase common stock	6,685	4,027	474
Series A convertible preferred stock (as converted to common stock)	8,070	—	—
Restricted stock units	3,106	—	—
Shares issuable related to the ESPP	48	40	80
Total shares	<u>27,501</u>	<u>12,163</u>	<u>6,514</u>

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***Stock-Based Compensation***

The Company applies the accounting guidance for stock compensation, which establishes accounting for share-based payment awards made to employees and directors, including employee stock options and employee stock purchases. Under this guidance, stock-based compensation cost is measured at the grant date based on the calculated fair value of the award, and is recognized as an expense on a straight-line basis over the employee's requisite service period, generally the vesting period of the award.

The following table summarizes stock-based compensation related to stock options, restricted stock awards, restricted stock unit, and employee stock purchases (in thousands):

	Years Ended December 31,		
	2011	2010	2009
Research and development	\$ 1,331	\$ 1,871	\$ 2,345
General and administrative	1,738	2,146	2,561
Stock-based compensation included in operating expenses	<u>\$3,069</u>	<u>\$ 4,017</u>	<u>\$ 4,906</u>

The Company uses the Black-Scholes option pricing model to determine the fair value of stock options and employee stock purchase plan shares. The key input assumptions used to estimate fair value of these awards include the exercise price of the award, the expected option term, the expected volatility of the Company's stock over the option's expected term, the risk-free interest rate over the option's expected term, and the Company's expected dividend yield, if any.

The fair value of share-based payments was estimated on the date of grant using the Black-Scholes option pricing model based on the following weighted average assumptions:

	Year Ended December 31, 2011		Year Ended December 31, 2010		Year Ended December 31, 2009	
	Employee Stock		Employee Stock		Employee Stock	
	Options	ESPP	Options	ESPP	Options	ESPP
Risk-free interest rate	2.4%	0.3%	2.8%	0.3%	2.7%	0.6%
Volatility	72.0%	72.0%	73.0%	72.0%	76.0%	74.0%
Expected term in years	6.10	1.25	6.12	1.25	6.07	1.25
Expected dividend yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

The risk-free interest rate that the Company uses in the option pricing model is based on the U.S. Treasury zero-coupon issues with remaining terms similar to the expected terms of the options. The Company does not anticipate paying dividends in the foreseeable future and therefore uses an expected dividend yield of zero in the option pricing model. The Company is required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. Historical data is used to estimate pre-vesting option forfeitures and record stock-based compensation expense only on those awards that are expected to vest.

The Company uses its own historical exercise activity and extrapolates the life cycle of options outstanding to arrive at its estimated expected term for new option grants.

The Company uses its own volatility history based on its stock's trading history for the period subsequent to the Company's IPO in April 2004. Prior to the second quarter of 2010, because its outstanding options had an expected term of approximately six years, the Company supplemented its own volatility history by using

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comparable companies' volatility history for the relevant period preceding the Company's IPO. Starting the second quarter of 2010, the Company solely uses its own volatility history because it now has sufficient history to approximate the expected term of options granted.

The Company measures compensation expense for awards of restricted stock and restricted stock units at fair value on the date of grant and recognizes the expense over the expected vesting period. The fair value for restricted stock and restricted stock unit awards is based on the closing price of the Company's common stock on the date of grant.

As of December 31, 2011, there was \$3.7 million of unrecognized compensation cost related to non-vested stock options, which is expected to be recognized over a weighted-average period of 2.4 years. As of December 31, 2011, there was \$2.9 million of unrecognized compensation cost related to non-vested restricted stock units, which is expected to be recognized over a weighted-average period of 1.7 years.

***Recent Accounting Pronouncements***

*Recently Adopted Accounting Pronouncements*

In October 2009, the Financial Accounting Standards Board ("FASB") issued new accounting guidance ASC 605-25 for recognizing revenue for multiple-deliverable revenue arrangements. The new guidance amends the existing guidance for separately accounting for individual deliverables in a revenue arrangement with multiple deliverables, and removes the criterion that an entity must use objective and reliable evidence of fair value to separately account for the deliverables. The new guidance also establishes a hierarchy for determining the value of each deliverable and establishes the relative selling price method for allocating consideration when vendor-specific objective evidence or third party evidence of value does not exist. The Company did not enter into any material new multiple deliverable revenue arrangements in 2011; therefore, the Company's adoption of the new guidance prospectively for new revenue arrangements entered into or materially modified beginning on January 1, 2011 did not have a material impact on its financial position or results of operations.

In January 2010, the FASB issued new accounting guidance for improving disclosures about fair value measurements, which requires a gross presentation of Level 3 fair value rollforwards. The Company's adoption of the guidance on January 1, 2011 did not have a material impact on its financial position or results of operations.

In April 2010, the FASB issued new accounting guidance ASC 605-28 on the milestone method of revenue recognition. The new guidance codifies the milestone method as an acceptable revenue recognition model when a milestone is deemed to be substantive. The Company's adoption of the guidance effective for milestones achieved beginning on January 1, 2011 did not have a material impact on its financial position or results of operations.

*Accounting Pronouncements Not Yet Adopted*

In June 2011, the FASB issued new accounting guidance that revises the manner in which entities present comprehensive income in their financial statements. The new guidance requires entities to present comprehensive income either in a continuous statement of comprehensive income, which replaces the statement of operations, or in two separate, consecutive statements. The new guidance does not change the items that must be reported in other comprehensive income, nor does it require new disclosures. The new guidance is effective for the Company beginning in the first quarter of 2012.

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**Note 2 — Supplementary Cash Flow Data**

Supplemental cash flow information was as follows (in thousands):

	Years Ended December 31,			Period from August 5, 1997 (Date of Inception) to December 31, 2011
	2011	2010	2009	
Cash paid for interest	\$ 41	\$ 170	\$ 399	\$ 4,609
Cash paid for income taxes	1	1	1	12
<b>Significant non-cash investing and financing activities:</b>				
Deferred stock-based compensation	—	—	—	6,940
Purchases of property and equipment through accounts payable	13	141	126	13
Purchases of property and equipment through trade in value of disposed property and equipment	—	—	—	258
Penalty on restructuring of equipment financing lines	—	—	—	475
Conversion of convertible preferred stock to common stock	—	—	—	133,172
Warrants issued in equity financing	—	—	1,585	1,585

**Note 3 — Cash Equivalents and Investments**

***Cash Equivalents and Available for Sale Investments***

The amortized cost and fair value of cash equivalents and available for sale investments at December 31, 2011 and 2010 were as follows (in thousands):

	December 31, 2011				
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Maturity Dates
Cash equivalents — money market funds	\$ 13,650	—	—	\$ 13,650	
Short-term investments — U.S. Treasury securities	\$ 30,187	\$ 4	\$ (1)	\$ 30,190	1/2012 — 6/2012
	December 31, 2010				
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Maturity Dates
Cash equivalents — money market funds	\$ 16,966	—	—	\$ 16,966	
Short-term investments — U.S. Treasury securities	\$ 54,129	\$ 4	\$ (8)	\$ 54,125	1/2011 — 12/2011
Long-term investments — U.S. Treasury securities	\$ 1,207	\$ —	\$ (1)	\$ 1,206	1/2012

As of December 31, 2011 and December 31, 2010, the Company's U.S. Treasury securities classified as short-term investments had unrealized losses of approximately \$1,000 and \$9,000, respectively. The unrealized

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losses in both periods were primarily caused by slight increases in short-term interest rates subsequent to the purchase date of the related securities. The Company collected the contractual cash flows on its U.S. Treasury securities that matured from January 1, 2011 through March 12, 2012 and expects to be able to collect all contractual cash flows on the remaining maturities of its U.S. Treasury securities.

Interest income was as follows (in thousands):

	Years Ended December 31,			Period from August 5, 1997 (Date of Inception) to December 31, 2011
	2011	2010	2009	\$
Interest income	\$ 132	\$ 318	\$ 574	\$ 28,525

***Investments in Auction Rate Securities and Investment Put Option Related to Auction Rate Securities Rights***

The Company's short-term investments in ARS as of December 31, 2009 refer to securities that were structured with short-term interest reset dates every 28 days but with maturities generally greater than 10 years. At the end of each reset period, investors could attempt to sell the securities through an auction process or continue to hold the securities. In February 2008, auctions began to fail for these securities and each auction since then failed. Consequently, the ARS ceased to be liquid and the Company was not able to access these funds at that time. Because there ceased to be an active market for ARS, they therefore did not have a readily determinable market value.

In connection with the failed auctions of the Company's ARS, which were marketed and sold by UBS AG and its affiliates, in October 2008, the Company accepted a settlement with UBS AG pursuant to which UBS AG issued to the Company Series C-2 Auction Rate Securities Rights (the "ARS Rights"). The ARS Rights provided the Company the right to receive the par value of its ARS, i.e., the liquidation preference of the ARS plus accrued but unpaid interest from UBS at any time between June 30, 2010 and July 2, 2012.

At December 31, 2009, the Company held approximately \$17.9 million in par value, \$15.5 million carrying value, of ARS classified as short-term investments based on its intention to liquidate the investments on June 30, 2010, the earliest date it could exercise the ARS Rights. On June 30, 2010, the Company exercised its ARS Rights, requiring that UBS AG purchase the Company's remaining outstanding ARS at par value of \$7.5 million. Accordingly, on the settlement date of July 1, 2010, UBS AG deposited the proceeds of \$7.5 million into the Company's money market account. The Company had recorded the ARS Rights as an investment put option, which was extinguished at the time that the ARS Rights were exercised.

The fair value of the Company's investments in its ARS as of December 31, 2009 was determined to be \$15.5 million. Changes in the fair value of the ARS, excluding the sale of ARS, were recognized in current period earnings in Interest and Other, net. Accordingly, in the year ended December 31, 2010, the Company recognized unrealized gains of \$2.4 million on its ARS to reflect the change in fair value, and the sale of \$17.9 million of its ARS at par value. In the year ended 2009, the Company recognized unrealized gains of \$1.0 million on its ARS to reflect the change in fair value, and the sale of \$2.1 million of ARS at par value.

The ARS Rights represented a firm agreement in accordance with the accounting guidance for derivatives and hedging, which defines a firm agreement as an agreement with an unrelated party, binding on both parties and usually legally enforceable, with the following characteristics: a) the agreement specifies all significant terms, including the quantity to be exchanged, the fixed price and the timing of the transaction; and b) the

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agreement includes a disincentive for nonperformance that is sufficiently large to make performance probable. The enforceability of the ARS Rights resulted in a put option that was recognized as a separate freestanding instrument that was accounted for separately from the ARS investments. The investment put option related to the ARS Rights did not meet the definition of a derivative instrument. Therefore, the Company elected to measure the investment put option related to the ARS Rights at fair value, in accordance with the fair value option permitted under fair value accounting guidance for financial instruments, to mitigate volatility in reported earnings due to their linkage to the ARS. The Company valued the investment put option related to the ARS Rights using a Black-Scholes option pricing model that included estimates of interest rates, based on data available, and was adjusted for any bearer risk associated with UBS's financial ability to repurchase the ARS beginning June 30, 2010. As of December 31, 2009, the Company recorded \$2.4 million as the fair value of the investment put option related to the ARS Rights, classified in short-term assets on the balance sheet. Changes in the fair value of the investment put option were recognized in current period earnings in Interest and Other, net. Accordingly, the Company recorded unrealized losses on the ARS Rights of \$2.4 million in 2010 and unrealized losses of \$1.0 million in 2009 in Interest and Other, net, in the statement of operations to reflect the change in fair value of the investment put option.

**Note 4 — Fair Value Measurements**

The Company adopted the fair value accounting guidance to value its financial assets and liabilities. Fair value is defined as the price that would be received for assets when sold or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). The Company utilizes market data or assumptions that the Company believes market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs can be readily observable, market corroborated or generally unobservable.

The Company primarily applies the market approach for recurring fair value measurements and endeavors to utilize the best information reasonably available. Accordingly, the Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible, and considers the security issuers' and the third-party insurers' credit risk in its assessment of fair value.

The Company classifies the determined fair value based on the observability of those inputs. Fair value accounting guidance establishes a fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurement) and the lowest priority to unobservable inputs (Level 3 measurement). The three defined levels of the fair value hierarchy are as follows:

Level 1 — Observable inputs, such as quoted prices in active markets for identical assets or liabilities;

Level 2 — Inputs, other than the quoted prices in active markets, that are observable either directly or through corroboration with observable market data; and

Level 3 — Unobservable inputs, for which there is little or no market data for the assets or liabilities, such as internally-developed valuation models.

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Financial assets measured at fair value on a recurring basis as of December 31, 2011 and 2010 are classified in the table below in one of the three categories described above (in thousands):

	December 31, 2011			Assets At Fair Value
	Fair Value Measurements Using			
	Level 1	Level 2	Level 3	
Money market funds	\$ 13,650	\$ —	\$ —	\$ 13,650
U.S. Treasury securities	30,190	—	—	30,190
Total	<u>\$ 43,840</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 43,840</u>
Amounts included in:				
Cash and cash equivalents	\$ 13,650	\$ —	\$ —	\$ 13,650
Short-term investments	30,190	—	—	30,190
Total	<u>\$ 43,840</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 43,840</u>

	December 31, 2010			Assets At Fair Value
	Fair Value Measurements Using			
	Level 1	Level 2	Level 3	
Money market funds	\$ 16,966	\$ —	\$ —	\$ 16,966
U.S. Treasury securities	55,331	—	—	55,331
Total	<u>\$ 72,297</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 72,297</u>
Amounts included in:				
Cash and cash equivalents	\$ 16,966	\$ —	\$ —	\$ 16,966
Short-term investments	54,125	—	—	54,125
Long-term investments	1,206	—	—	1,206
Total	<u>\$ 72,297</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 72,297</u>

The valuation technique used to measure fair value for the Company's Level 1 assets is a market approach, using prices and other relevant information generated by market transactions involving identical assets. The valuation technique used to measure fair value for Level 3 assets generally is an income approach, where, in most cases, the expected future cash flows are discounted back to present value for each asset, except for the investment put option related to the ARS Rights at December 31, 2009, for which the valuation was based on the Black-Scholes option pricing model and approximated the difference in value between the par value and the fair value of the associated ARS.

At December 31, 2009, the Company held approximately \$15.5 million in fair value of ARS classified as short-term investments. The assets underlying the ARS were student loans which are substantially backed by the federal government. The fair value of these securities as of December 31, 2009 was estimated utilizing a discounted cash flow ("DCF") model. The Company classified its ARS in the Level 3 category, as some of the inputs used in the DCF model were unobservable. The assumptions used in preparing the DCF model included estimates of interest rates, timing and amount of cash flows, credit and liquidity premiums and expected holding periods of the ARS, based on data that was available as of December 31, 2009. The significant assumptions of the DCF model were discount margins that were based on industry recognized student loan sector indices, an additional liquidity discount and an estimated term to liquidity. Other items that this analysis considered were the collateralization underlying the security investments, the creditworthiness of the counterparty and the timing of expected future cash flows. The Company's ARS were also compared, when possible, to other observable market data for securities with similar characteristics as the ARS.



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As of December 31, 2010 and 2011, the Company had no financial assets measured at fair value on a recurring basis using significant Level 3 inputs. As of December 31, 2009, the Company's financial assets measured at fair value on a recurring basis using significant Level 3 inputs consisted solely of the ARS and the investment put option related to the ARS Rights. The following table provides a rollforward of all assets measured at fair value using significant Level 3 inputs for the twelve months ended December 31, 2009, 2010 and 2011 (in thousands):

	ARS	Investment Put Option Related to ARS Rights
Balance as of December 31, 2009	\$ 15,542	\$ 2,358
Unrealized gain on ARS, included in Interest and Other, net	2,358	—
Unrealized loss on the investment put option related to ARS Rights, included in Interest and Other, net	—	(2,358)
Sale of ARS	(17,900)	—
Balance as of December 31, 2010 and 2011	<u>\$ —</u>	<u>\$ —</u>

The Company's equipment financing line debt is not recorded at fair value, but the Company is required to disclose its fair value. The Company determined the fair value of the equipment financing line debt using a DCF model. The major inputs to the model are expected cash flows, which equal the contractual payments, and borrowing rates available to the Company for similar debt as of the applicable balance sheet dates. The fair value and the carrying value of the equipment financing line debt were as follows (in thousands):

	December 31, 2011	December 31, 2010
Carrying value — equipment financing line	<u>\$ 152</u>	<u>\$ 985</u>
Fair value — equipment financing line	<u>\$ 138</u>	<u>\$ 947</u>

The carrying amount of the Company's accounts receivable and accounts payable approximates fair value due to the short-term nature of these instruments.

**Note 5 — Balance Sheet Components**

Property and equipment balances were as follows (in thousands):

	December 31.	
	2011	2010
Property and equipment, net:		
Laboratory equipment	\$ 17,016	\$ 17,130
Computer equipment and software	3,105	3,098
Office equipment, furniture and fixtures	623	556
Leasehold improvements	3,358	3,313
	<u>24,102</u>	<u>24,097</u>
Less: Accumulated depreciation and amortization	(22,792)	(21,776)
	<u>\$ 1,310</u>	<u>\$ 2,321</u>

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Property and equipment pledged as collateral against outstanding borrowings under the Company's equipment financing lines totaled \$5.2 million, less accumulated depreciation of \$5.1 million, at December 31, 2011, and \$7.3 million, less accumulated depreciation of \$6.5 million, at December 31, 2010. Depreciation expense was \$1.3 million, \$1.9 million and \$2.0 million for the years ended December 31, 2011, 2010 and 2009, respectively.

Accrued liabilities were as follows (in thousands):

	December 31,	
	2011	2010
Accrued liabilities:		
Clinical and preclinical costs	\$ 1,664	\$ 2,199
Consulting and professional fees	427	633
Bonus	—	1,408
Vacation pay	739	864
Other payroll related	107	104
Other accrued expenses	295	164
	<u>\$ 3,232</u>	<u>\$ 5,372</u>

Interest receivable on cash equivalents and investments of \$206,000 and \$285,000 is included in prepaid and other current assets at December 31, 2011 and 2010, respectively.

#### **Note 6 — Related Party Transactions**

##### ***Research and Development Arrangements***

###### *Amgen*

On December 29, 2006, the Company entered into a collaboration and option agreement with Amgen (the "Amgen Agreement") to discover, develop and commercialize novel small-molecule therapeutics that activate cardiac muscle contractility for potential applications in the treatment of heart failure, including omecantiv mecarbil, formerly known as CK-1827452. The Amgen Agreement provided Amgen a non-exclusive license and access to certain technology, and an option to obtain an exclusive license to omecantiv mecarbil and related compounds worldwide, except Japan. Under the agreement, the Company received an upfront, non-refundable license and technology access fee of \$42.0 million from Amgen, which the Company was recognizing as revenue ratably over the maximum term of the non-exclusive license, which was four years. Management determined that the obligations under the non-exclusive license did not meet the requirement for separate units of accounting and therefore should be recognized as a single unit of accounting.

In connection with entering into the Amgen Agreement, the Company contemporaneously entered into a common stock purchase agreement (the "CSPA") with Amgen, which provided for the sale of 3,484,806 shares of the Company's common stock at a price per share of \$9.47 and an aggregate purchase price of approximately \$33.0 million. On January 2, 2007, the Company issued 3,484,806 shares of common stock to Amgen under the CSPA. After deducting the offering costs, the Company received net proceeds of approximately \$32.9 million in January 2007. The common stock was valued using the closing price of the common stock on December 29, 2006, the last trading day of the common stock prior to issuance. The difference between the price paid by Amgen of \$9.47 per share and the stock price of \$7.48 per share of common stock totaled \$6.9 million. This premium was recorded as deferred revenue in January 2007 and was being recognized as revenue ratably over the maximum term of the non-exclusive license granted to Amgen under the collaboration and option agreement, which was four years.

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Prior to Amgen's exercise of its option, the Company conducted research and development activities at its own expense for omecamtiv mecarbil in accordance with an agreed upon plan. In May 2009, Amgen exercised its option. In connection with the exercise of the option, Amgen paid the Company a non-refundable option exercise fee of \$50.0 million in June 2009. At that time, Amgen assumed responsibility for the development and commercialization of omecamtiv mecarbil and related compounds, at Amgen's expense, subject to the Company's specified development and commercial participation rights. Amgen's exclusive license extends for the life of the intellectual property that is the subject of the license, and the Company has no further performance obligations related to research and development under the program, except as defined by the annual joint research and development plans as the parties may mutually agree. Accordingly, the Company recognized the \$50.0 million option exercise fee as license revenues from related parties in 2009.

Upon Amgen's exercise of the option, the Company was required to transfer all data and know-how necessary to enable Amgen to assume responsibility for development and commercialization of omecamtiv mecarbil and related compounds. Under the Amgen Agreement, the Company may be eligible to receive pre-commercialization and commercialization milestone payments of up to \$600.0 million in the aggregate on omecamtiv mecarbil and other potential products arising from research under the collaboration and royalties that escalate based on increasing levels of the annual net sales of products commercialized under the agreement. None of the future contingent milestone payments pursuant to this arrangement as of January 1, 2011 are considered substantive as they are the results of Amgen's performance. Therefore, they are not considered milestones under ASC 605-28. The agreement also provides for the Company to receive increased royalties by co-funding Phase III development costs of drug candidates under the collaboration. If the Company elects to co-fund such costs, it would be entitled to co-promote products in North America and participate in agreed commercial activities in institutional care settings, at Amgen's expense.

Prior to Amgen's exercise of its option in May 2009, the Company was amortizing the 2006 non-exclusive license and technology access fee from Amgen and related stock purchase premium over the maximum term of the non-exclusive license, which was four years. The non-exclusive license period ended upon the exercise of Amgen's option in May 2009. The Company has no further performance obligations related to the non-exclusive license. Accordingly, the Company recognized as revenue the balance of the deferred Amgen revenue at the time Amgen exercised its option.

Subsequent to Amgen obtaining the exclusive license to omecamtiv mecarbil and related compounds, the Company is providing research and development support of the program, as and when agreed to by both parties. Under the Amgen Agreement, Amgen reimburses the Company for such activities at predetermined rates per FTE, and for related out of pocket expenses at cost, including purchases of clinical trial material at manufacturing cost. The FTE rates are negotiated rates that are based upon the Company's costs, and which the Company believes approximate fair value. In 2009, pursuant to the Amgen Agreement, the Company transferred to Amgen the majority of the Company's existing inventories of omecamtiv mecarbil and related reference materials. The \$4.0 million purchase price for these materials was a negotiated price and represented the fair value of the materials transferred. The Company's out of pocket costs for the transferred materials were incurred and recorded as research and development expense in prior periods.

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Revenue from Amgen was as follows (in thousands):

	Years Ended December 31,		
	2011	2010	2009
FTE reimbursements	\$ 1,988	\$ 910	\$ 2,107
Reimbursements of other costs	66	577	1,018
Transfer of omecamtiv mecarbil materials	—	—	4,000
Total research and development revenues from Amgen	<u>2,054</u>	<u>1,487</u>	<u>7,125</u>
Nonrefundable option exercise fee	—	—	50,000
Deferred license revenue recognized	—	—	24,367
Total license revenue from Amgen	<u>—</u>	<u>—</u>	<u>74,367</u>
Total revenue from Amgen	<u>\$ 2,054</u>	<u>\$ 1,487</u>	<u>\$ 81,492</u>

In the period from August 5, 1997 (inception) through December 31, 2011, the Company has recognized as related party research and development revenues from Amgen \$10.7 million of reimbursements for FTE, material transfers and other costs, and \$50.0 million for the option exercise fee.

Related party accounts receivable from Amgen was as follows (in thousands):

	December 31,	December 31,
	2011	2010
Related party accounts receivable — Amgen	<u>\$ 14</u>	<u>\$ 41</u>

*GSK*

In 2001, the Company entered into a collaboration and license agreement with GSK, establishing a strategic alliance to discover, develop and commercialize mitotic kinesin inhibitors for the treatment of cancer and other diseases. Under this agreement, GSK paid the Company an upfront license fee for rights to certain technologies and milestone payments regarding performance and developments within agreed-upon projects. In conjunction with these projects, GSK agreed to reimburse the Company's costs associated with the strategic alliance. In connection with the agreement, in 2001, GSK made a \$14.0 million equity investment in the Company. GSK made additional equity investments in the Company in 2003 and 2004 of \$3.0 million and \$7.0 million, respectively. In 2001, the Company also received \$14.0 million for the upfront license fee, which was recognized ratably over the initial five-year research term of the agreement.

In December 2009, the Company and GSK agreed to terminate the collaboration and license agreement, effective February 28, 2010. All rights in the mitotic kinesin inhibitors from the strategic alliance (including ispinesib, SB-743921 and GSK-923295) have reverted to the Company, subject to certain royalty obligations to GSK. GSK remains responsible for all activities and costs associated with completing and reporting on the ongoing Phase I clinical trial of GSK-923295.

Revenue from GSK was as follows (in thousands):

	Years Ended December 31,		
	2011	2010	2009
Patent expense reimbursements	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 45</u>

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The Company has recognized as related party revenue \$32.5 million of reimbursements from GSK of patent, FTE and other expenses in the period from August 5, 1997 (inception) through December 31, 2011. During this period, the Company also received and recognized as revenue \$8.0 million for performance milestone payments under the agreement, as no ongoing performance obligations existed with respect to this aspect of the agreement.

Related party accrued liabilities related to GSK were as follows (in thousands):

	December 31, 2011	December 31, 2010
Related party payables and accrued liabilities	\$ 11	\$ —

**Other**

*Related Party Notes Receivable*

In 2002 the Company extended loans totaling \$650,000 to certain officers and employees of the Company. The loans accrued interest at rates ranging from 4.88% to 5.80% and had scheduled maturities on various dates between 2005 and 2011. Certain of the loans were collateralized by the common stock of the Company owned by the officers and by stock options and were repaid in full within eighteen months after the Company's IPO date of April 29, 2004. Certain of the loans were forgiven if the officers remained with the Company through the maturation of their respective loans. As of December 31, 2010, all of the loans were fully repaid or forgiven. The Company has not extended any loans to officers or employees of the Company since 2002.

Activity under the loans was as follows (in thousands).

	Years Ended December 31,		
	2011	2010	2009
Principal repayments	\$ —	\$ —	\$ 30
Principal forgiven	\$ —	\$ 9	\$ 9

**Note 7 — Other Research and Development Revenue Arrangements**

**Grants**

In 2010, the National Institute of Neurological Disorders and Strokes ("NINDS") awarded to the Company a \$2.8 million grant to support research and development of CK-2017357 directed to the potential treatment for myasthenia gravis for a period of up to three years. Management has determined that the Company is the principal participant in the grant arrangement, and, accordingly, the Company records amounts earned under the arrangement as revenue

In November 2010, the Company was notified by the U.S. Department of the Treasury that it would receive total cash grants of \$0.7 million based on its applications for certain investments in qualified therapeutic discovery projects under Section 48D of the Internal Revenue Code. The grants related to certain research and development costs the Company incurred in 2009 in connection with its cardiac, skeletal and smooth muscle contractility programs.

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Total grant revenues were as follows (in thousands):

	Years Ended December 31,		
	2011	2010	2009
NINDS myasthenia gravis	\$1,680	\$ 356	\$—
U.S. Department of the Treasury	—	734	—
Total grant revenue	<u>\$1,680</u>	<u>\$1,090</u>	<u>\$—</u>

***Other Research and Development Arrangements***

In October 2011, as part of an initiative to seek certain smaller collaborations intended to allow us to offset our research costs, the Company entered into an agreement with Global Blood Targeting, Inc., an early-stage biopharmaceutical company. Under an agreed research plan, scientists from Global Blood Targeting and our FTEs conduct research focused on small molecule therapeutics that target the blood. The Company provides to Global Blood Targeting access to certain research facilities, FTEs and other resources at agreed reimbursement rates that approximate our costs. The Company is the primary obligor in the collaboration arrangement, and accordingly, the Company records expense reimbursements from Global Blood Targeting as research and development revenue.

Research and development revenue from Global Blood was as follows (in thousands):

	Years Ended December 31,		
	2011	2010	2009
Expense reimbursements from Global Blood Targeting	<u>\$266</u>	<u>\$ —</u>	<u>\$ —</u>

**Note 8 — Debt**

***Equipment Financing Lines***

In April 2006, the Company entered into an equipment financing agreement with GE Capital under which the Company could borrow \$4.6 million through a line of credit expiring April 28, 2007. In 2007 and 2006, the Company executed draws on this line of credit totaling approximately \$4.1 million at interest rates ranging from 7.24% to 7.68%. As of December 31, 2011, the balance of equipment loans outstanding under this line was \$152,000. No additional borrowings are available to the Company under the agreement. The line is subject to the master security agreement between the Company and GE Capital and the related term sheets, and is collateralized by property and equipment of the Company purchased by such borrowed funds and other collateral as agreed to be the Company. In connection with the lines of credit with GE Capital, the Company is obligated to maintain a certificate of deposit with the lender (see Note 1 “Organization and Significant Accounting Policies — *Restricted Cash*”).

As of December 31, 2011, future minimum lease payments under the equipment lease line were as follows (in thousands):

2012	<u>152</u>
Total	<u>\$152</u>

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***Loan with UBS***

In connection with the settlement with UBS AG relating to the Company's ARS, in October 2008, the Company entered into a loan agreement with UBS Bank USA and UBS Financial Services Inc. On January 5, 2009, the Company borrowed approximately \$12.4 million under the loan agreement, with its ARS held in accounts with UBS Financial Services Inc. as collateral. Proceeds of sales of the ARS were first applied to repayment of the loan with the balance, if any, for the Company's account. The Company repaid the remaining balance of the loan in full during the second quarter of 2010.

Activity related to this loan was as follows (in thousands):

	Years Ended December 31,		
	2011	2010	2009
Beginning balance	\$—	\$ 10,201	\$ —
Proceeds from loan	—	—	12,441
Interest expense incurred	—	56	158
Interest income from ARS applied to loan balance	—	(140)	(273)
Proceeds from sales of ARS applied to loan balance	—	(10,117)	(2,125)
Ending balance	<u>\$—</u>	<u>\$ —</u>	<u>\$10,201</u>

***Interest Expense***

Total interest expense incurred by the Company was as follows (in thousands):

	Years Ended December 31,			Period from August 5, 1997 (Date of Inception) to December 31, 2011
	2011	2010	2009	
Interest expense	\$ 35	\$ 176	\$ 399	\$ 5,373

**Note 9 — Restructuring**

In October 2011, the Company announced a restructuring plan to realign its workforce and operations in line with its continued commitment to focus primarily on the development of its key later-stage development programs for CK-2017357 and omecantiv mecarbil and on its follow-on skeletal muscle troponin activator program and joint research with Amgen directed to next-generation compounds in its cardiac muscle contractility program. As a result, the Company reduced its workforce by 18 employees, or approximately 18%, to 83 employees. The Company provided severance, employee benefit continuation and career transition assistance to the employees directly affected by the restructuring. The Company incurred restructuring charges of \$1.2 million in the fourth quarter of 2011, primarily personnel-related termination costs.

	Employee Severance and Related Benefits
Restructuring liability at December 31, 2010	\$ —
2011 charges	1,192
Cash payments	(998)
Restructuring liability at December 31, 2011	<u>\$ 194</u>

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**Note 10 — Commitments and Contingencies****Leases**

The Company leases office space and equipment under a non-cancelable operating lease that expires in 2018. The lease terms provide for rental payments on a graduated scale and the Company's payment of certain operating expenses. The Company recognizes rent expense on a straight-line basis over the lease period.

Rent expense was as follows (in thousands):

	<u>Years Ended December 31,</u>			Period from
	<u>2011</u>	<u>2010</u>	<u>2009</u>	August 5, 1997 (Date of Inception) to December 31, <u>2011</u>
Rent expense	<u>\$2,990</u>	<u>\$2,964</u>	<u>\$3,003</u>	<u>\$ 30,291</u>

As of December 31, 2011, future minimum lease payments under noncancelable operating leases were as follows (in thousands):

2012	\$ 3,027
2013	3,110
2014	3,357
2015	3,469
2016	3,587
Thereafter	5,619
Total	<u>\$22,169</u>

In the ordinary course of business, the Company may provide indemnifications of varying scope and terms to vendors, lessors, business partners and other parties with respect to certain matters, including, but not limited to, losses arising out of the Company's breach of such agreements, services to be provided by or on behalf of the Company, or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with its directors and certain of its officers and employees that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors, officers or employees. The Company maintains director and officer insurance, which may cover certain liabilities arising from its obligation to indemnify its directors and certain of its officers and employees, and former officers and directors in certain circumstances. The Company maintains product liability insurance and comprehensive general liability insurance, which may cover certain liabilities arising from its indemnification obligations. It is not possible to determine the maximum potential amount of exposure under these indemnification obligations due to the limited history of prior indemnification claims and the unique facts and circumstances involved in each particular indemnification obligation. Such indemnification obligations may not be subject to maximum loss clauses.

**Note 11 — Convertible Preferred Stock**

Effective upon the closing of the initial public offering on April 29, 2004, all outstanding shares of the Company's convertible preferred stock converted into 17,062,145 shares of common stock. In January 2004, the Board of Directors approved an amendment to the Company's amended and restated certificate of incorporation



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changing the authorized number of shares of preferred stock to 10,000,000, effective upon the closing of the initial public offering. As of December 31, 2010 there were 10,000,000 shares of convertible preferred stock authorized and no shares outstanding.

On April 18, 2011, the Company entered into a securities purchase agreement (the “Deerfield Agreement”) with Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., Deerfield Special Situations Fund, L.P., and Deerfield Special Situations Fund International Limited (collectively, “Deerfield”). On April 20, 2011, pursuant to the Deerfield Agreement, the Company issued to Deerfield 8,070 shares of Series A convertible preferred stock (the “Series A Preferred Stock”) for a purchase price of \$1,500.00 per share for net proceeds of approximately \$9.3 million, as well as common stock and warrants that are discussed in Note 12 — Stockholders’ Equity (Deficit).

Each share of Series A Preferred Stock is convertible into 1,000 shares of common stock at any time at the holder’s option. However, the holder is prohibited from converting the Series A Preferred Stock into shares of common stock if, as a result of such conversion, the holder and its affiliates would own more than 9.98% of the total number of shares of common stock then issued and outstanding. In the event of the Company’s liquidation, dissolution, or winding up, holders of Series A Preferred Stock will receive a payment equal to \$0.001 per share before any proceeds are distributed to the common stockholders. Shares of Series A Preferred Stock generally have no voting rights, except as required by law and except that the consent of holders of a majority of the outstanding Series A Preferred Stock is required to amend the terms of the Series A Preferred Stock. Holders of Series A Preferred Stock are not entitled to receive any dividends, unless and until specifically declared by the Company’s board of directors. The Series A Preferred Stock ranks senior to the Company’s common stock as to distributions of assets upon the Company’s liquidation, dissolution or winding up, whether voluntarily or involuntarily. The Series A Preferred Stock may rank senior to, on parity with or junior to any class or series of the Company’s capital stock created in the future depending upon the specific terms of such future stock issuance.

The fair value of the common stock into which the Series A Preferred Stock is convertible exceeded the allocated purchase price of the Series A Preferred Stock by \$2.9 million on the date of issuance, resulting in a beneficial conversion feature. The Company recognized the beneficial conversion feature as a one-time, non-cash, deemed dividend to the holders of Series A Preferred Stock on the date of issuance, which is the date the stock first became convertible.

**Note 12 — Stockholders’ Equity (Deficit)**

***Authorized Shares***

On May 18, 2011, the stockholders approved an increase in the number of authorized shares of common stock from 170,000,000 to 245,000,000. The increase became effective in August 2011, when the Company filed the Certificate of Amendment of Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware.

***Common Stock Outstanding***

The Company’s Registration Statement (SEC File No. 333-112261) for its initial public offering was declared effective by the SEC on April 29, 2004 and the Company’s common stock commenced trading on the NASDAQ National Market, now the NASDAQ Global Market, on that date under the trading symbol “CYTK.” The Company sold 7,935,000 shares of common stock in the offering, including shares that were issued upon the

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full exercise by the underwriters of their over-allotment option, at \$13.00 per share for aggregate gross proceeds of \$103.2 million. In connection with this offering, the Company paid underwriters' commissions of \$7.2 million and incurred offering expenses of \$2.0 million. After deducting the underwriters' commissions and the offering expenses, the Company received net proceeds of approximately \$94.0 million from the offering. In addition, pursuant to an agreement with an affiliate of GSK, the Company sold 538,461 shares of its common stock to GSK immediately prior to the closing of the initial public offering at a purchase price of \$13.00 per share, for a total of approximately \$7.0 million in net proceeds.

In October 2005, the Company entered into a committed equity financing facility (the "2005 CEFF") with Kingsbridge Capital Ltd. ("Kingsbridge"), pursuant to which Kingsbridge committed to purchase, subject to certain conditions of the 2005 CEFF, up to \$75.0 million of the Company's newly-issued common stock during the next three years. Subject to certain conditions and limitations, from time to time under the 2005 CEFF, the Company could require Kingsbridge to purchase newly-issued shares of the Company's common stock at a price between 90% and 94% of the volume-weighted average price on each trading day during an eight-day, forward-looking pricing period. In 2007, the Company received gross proceeds of \$9.5 million from the drawdown of 2,075,177 shares of common stock pursuant to the 2005 CEFF. In 2006, the Company received gross proceeds of \$17.0 million from the drawdown of 2,740,735 shares of common stock pursuant to the 2005 CEFF. In 2005, the Company received gross proceeds of \$5.7 million from the draw down and sale of 887,576 shares of common stock before offering costs of \$178,000. No further draw downs are available to the Company under the 2005 CEFF.

In January 2006, the Company entered into a stock purchase agreement with certain institutional investors relating to the issuance and sale of 5,000,000 shares of its common stock at a price of \$6.60 per share, for gross offering proceeds of \$33.0 million. In connection with this offering, the Company paid an advisory fee to a registered broker-dealer of \$1.0 million. After deducting the advisory fee and the offering costs, the Company received net proceeds of approximately \$32.0 million from the offering. The offering was made pursuant to the Company's shelf registration statement on Form S-3 (SEC File No. 333-125786) filed on June 14, 2005.

In December 2006, the Company entered into stock purchase agreements with selected institutional investors relating to the issuance and sale of 5,285,715 shares of our common stock at a price of \$7.00 per share, for gross offering proceeds of \$37.0 million. In connection with this offering, the Company paid placement agent fees to three registered broker-dealers totaling \$1.85 million. After deducting the placement agent fees and the offering costs, the Company received net proceeds of approximately \$34.9 million from the offering. The offering was made pursuant to the Company's shelf registration statements on Form S-3 (SEC File No. 333-125786) filed on June 14, 2005 and October 31, 2006 (SEC File No. 333-138306).

In connection with entering into the collaboration and option agreement, the Company also entered into a CSPA with Amgen, which provided for the sale of 3,484,806 shares of the Company's common stock at a price per share of \$9.47 and an aggregate purchase price of approximately \$33.0 million. On January 2, 2007, the Company issued 3,484,806 shares of common stock to Amgen under the CSPA. After deducting the offering costs, the Company received net proceeds of approximately \$32.9 million in January 2007. The common stock was valued using the closing price of the common stock on December 29, 2006, the last trading day of the common stock prior to issuance. The difference between the price paid by Amgen of \$9.47 per share and the stock price of \$7.48 per share of common stock totaled \$6.9 million. This premium was recorded as deferred revenue in January 2007 and through May 2009, was recognized as revenue ratably over the maximum term of the non-exclusive license granted to Amgen under the collaboration and option agreement, which was approximately four years.

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In October 2007, the Company entered into a new committed equity financing facility (the “2007 CEFF”) with Kingsbridge, pursuant to which Kingsbridge committed to finance up to \$75.0 million of capital over a three-year period. In October 2010, the 2007 CEFF was amended to extend it until the first to occur of March 31, 2011 or the purchase by Kingsbridge of the maximum number of shares under the CEFF. Subject to certain conditions and limitations, including a minimum volume-weighted average price of \$2.00 for the Company’s common stock, from time to time under the 2007 CEFF, at the Company’s election, Kingsbridge was committed to purchase newly-issued shares of the Company’s common stock at a price between 90% and 94% of the volume-weighted average price on each trading day during an eight-day, forward-looking pricing period. As part of the 2007 CEFF arrangement, the Company issued a warrant to Kingsbridge to purchase 230,000 shares of the Company’s common stock at a price of \$7.99 per share, which represented a premium over the closing price of its common stock on the date the Company entered into the 2007 CEFF. The warrant expired unexercised in April 2011. In 2009, the Company sold 3,596,728 shares of its common stock to Kingsbridge under the 2007 CEFF for gross proceeds of \$6.9 million, before issuance costs of \$98,000. In 2010, the Company sold 5,339,819 shares of its common stock to Kingsbridge under the 2007 CEFF for gross proceeds of \$14.0 million, before issuance costs of \$1,000. The 2007 CEFF expired in 2011 and no further shares are available for sale under it.

In May 2009, pursuant to a registered direct equity offering, the Company entered into subscription agreements with selected institutional investors to sell an aggregate of 7,106,600 units for a price of \$1.97 per unit. Each unit consisted of one share of the Company’s common stock and one warrant to purchase 0.50 shares of common stock. Accordingly, a total of 7,106,600 shares of common stock and warrants to purchase 3,553,300 shares of common stock were issued and sold in this offering. The gross proceeds of the offering were \$14.0 million. In connection with the offering, the Company paid placement agent fees to two registered broker-dealers totaling \$0.8 million. After deducting the placement agent fees and the other offering costs, the Company received net proceeds of approximately \$12.9 million from the offering. The offering was made pursuant to the Company’s shelf registration statement on Form S-3 (SEC File No.: 333-155259) declared effective by the SEC on November 19, 2008. The difference of \$9.7 million between the total offering proceeds of \$12.9 million and the valuation of the warrants of \$3.2 million was allocated to the common stock issued and was recorded as such in stockholders’ equity.

On April 20, 2011, pursuant to the Deerfield Agreement, the Company issued to Deerfield (i) 5,300,000 shares of common stock for a purchase price of \$1.50 per share, (ii) 8,070 shares of Series A convertible preferred stock (the “Series A Preferred Stock”) for a purchase price of \$1,500.00 per share, and (iii) warrants to purchase 6,685,000 shares of the Company’s common stock at an initial exercise price of \$1.65 per share, for aggregate gross proceeds of approximately \$20.1 million. After issuance costs of approximately \$0.2 million, the net proceeds were approximately \$19.9 million.

The offering was made pursuant to a shelf registration statement that the Company filed with the SEC on November 10, 2008, which became effective on November 19, 2008 (File No. 333-155259). The closing of the offering took place on April 20, 2011.

In accordance with the accounting guidance for valuing stock and warrants when preferred stock, common stock and warrants are issued in a single transaction and all are to be accounted for as equity, the Company allocated the gross purchase proceeds using the relative fair value method. The fair value of the common stock issued to Deerfield was calculated based on the closing price of the stock on the commitment date as quoted on The NASDAQ Global Market. The Series A Preferred Stock was valued based on the fair value of the Company’s common stock on the commitment date times the conversion ratio of one share of preferred to one thousand shares of common stock. The fair value of the Series A Preferred Stock was determined to be essentially equivalent to the fair value of the common stock into which it is convertible, based on the preferred

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holders' ability to immediately convert the Series A Preferred Stock to common stock and the fact that the liquidation preference of the Series A Preferred Stock is only \$0.001 per share. The fair value of the warrants was determined using the Black-Scholes pricing model, as discussed above. The relative fair value ratio of each of the instruments issued was then applied to the total gross proceeds of \$20.1 million, resulting in allocated purchase prices of \$6.2 million for the common stock, \$9.4 million for the Series A Preferred Stock and \$4.5 million for the warrants.

On June 10, 2011, the Company entered into an At-The-Market Issuance Sales Agreement (the "MLV Agreement") with McNicoll, Lewis & Vlask LLC ("MLV"), pursuant to which the Company may issue and sell shares of common stock having an aggregate offering price of up to \$20.0 million or 14,383,670 shares, whichever occurs first, from time to time through MLV as the sales agent. The issuance and sale of shares by the Company under the MLV Agreement, if any, are subject to the continued effectiveness of its registration statement on Form S-3, which was declared effective by the SEC on June 23, 2011 (File No. 333-174869).

Sales of the Company's common stock through MLV are made on The NASDAQ Global Market by means of ordinary brokers' transactions at market prices or as otherwise agreed to by the Company and MLV. Subject to the terms and conditions of the MLV Agreement, MLV uses commercially reasonable efforts to sell the Company's common stock from time to time, based upon the Company's instructions (including any price, time or size limits or other customary parameters or conditions the Company may impose). The Company is not obligated to make any sales of common stock under the MLV Agreement. The offering of shares of common stock pursuant to the MLV Agreement will terminate upon the earlier of (1) the sale of all common stock subject to the MLV Agreement or (2) termination of the MLV Agreement. The MLV Agreement may be terminated by MLV or the Company at any time upon ten days notice to the other party, or by MLV at any time in certain circumstances, including the occurrence of a material adverse change in the Company's business. The Company pays MLV a commission rate equal to 3.0% of the gross sales price per share of any common stock sold through MLV under the MLV Agreement. The Company has provided MLV with customary indemnification and contribution rights. The Company incurred approximately \$0.1 million of issuance costs associated with this offering. As of December 31, 2011, the Company has issued 2,579,208 shares of common stock to MLV for net proceeds of approximately \$2.4 million.

***Warrants***

The Company has issued warrants to purchase convertible preferred stock, which became exercisable for common stock upon the conversion of the outstanding shares of preferred stock into common stock in conjunction with the Company's initial public offering. In September 1998, in connection with an equipment line of credit financing, the Company issued warrants to the lender. The Company valued the warrants by using the Black-Scholes option pricing model in fiscal year 1999 when the line was drawn, and the fair value of \$30,000 was recorded as a discount to the debt and amortized to interest expense over the life of the equipment line. In August 2005, these warrants were exercised by the lender in a cashless exercise, yielding 13,199 shares of common stock on a net basis. In connection with a convertible preferred stock financing in August 1999, the Company issued warrants to the preferred stockholders. The warrants were valued at \$467,000 using the Black-Scholes option pricing model and the value was recorded as issuance cost as an offset to convertible preferred stock. These warrants expired unexercised on August 30, 2006. In connection with an equipment line of credit, the Company issued warrants to the lender in December 1999. The value of the warrants was calculated using the Black-Scholes option pricing model and was deemed insignificant. In August 2005, these warrants were exercised by the lender in a cashless exercise, yielding 1,333 shares of common stock on a net basis.

The Company issued warrants to purchase 244,000 of common stock to Kingsbridge in connection with the 2005 CEFF. The warrants were exercisable at a price of \$9.13 per share beginning six months after the date of

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grant and for a period of five years thereafter. The warrants were valued at \$920,000 using the Black-Scholes option pricing model and the following assumptions: a contractual term of five years, risk-free interest rate of 4.3%, volatility of 67%, and the fair value of our stock price on the date of performance commitment, October 28, 2005, of \$7.02. The warrant value was recorded as an issuance cost in additional paid-in capital on the initial draw down of the CEFF in December 2005. These warrants have expired.

The Company issued warrants to purchase 230,000 shares of common stock to Kingsbridge in connection with the 2007 CEFF. The warrants were exercisable at a price of \$7.99 per share beginning six months after the date of grant and for a period of three years thereafter. The warrants were valued at \$594,000 using the Black-Scholes option pricing model and the following assumptions: a contractual term of three years, risk-free interest rate of 4.275%, volatility of 73%, and the fair value of the Company's stock price on the date of performance commitment, October 15, 2007, of \$6.00. The warrant value was recorded as an issuance cost in additional paid-in capital on the initial draw down of the 2007 CEFF. These warrants have expired.

The Company issued warrants to purchase 3,553,300 shares of common stock to selected institutional investors in connection with the May 2009 registered direct equity offering. The initial exercise price of the warrants was \$2.75 per share. If Amgen did not elect to exercise its option to obtain an exclusive, worldwide (excluding Japan) license to omecamtiv mecarbil for the potential treatment for heart failure by June 30, 2009, then the exercise price of the warrants would be changed to equal the volume-weighted average price of the Company's common stock for the five days prior to June 30, 2009. In such case, the exercise price of the warrants could not exceed \$2.75 or be less than \$1.50 per share. If Amgen did exercise its option to obtain the exclusive license, then the warrant exercise price would remain at \$2.75 per share. Because Amgen exercised its option to obtain the exclusive license prior to June 30, 2009, the exercise price of the warrants remained at \$2.75 per share. The warrants were exercisable from the date of issuance and for 30 months thereafter, and have expired. The warrants could not be exercised by a net cash exercise without the Company's consent. Failure to maintain an effective registration statement was not considered within the Company's control, and there was no circumstance that would require the Company to net cash settle the warrant in the event the Company did not have an effective registration statement. On the date of issuance, the warrants were valued at \$3.2 million using the Black-Scholes option pricing model, assigning probabilities to different assumed outcomes regarding whether Amgen would or would not exercise its option and obtain the exclusive license and to the resulting impact on the Company's stock price. The assumptions were as follows: a contractual term of 30 months; a risk-free interest rate of 1.16%; volatility of 89%; the fair value of the Company's common stock price on the issuance date, May 18, 2009, of \$1.97 per share; a 90% probability that Amgen would obtain the exclusive license and a resulting stock price of \$2.75 per share; and a 10% probability that Amgen would not obtain the exclusive license, with a resulting stock price of \$1.97 per share. The assumed stock price of \$2.75 upon Amgen obtaining the exclusive license approximated the per-share impact of an increase in the Company's market capitalization of \$50.0 million, the amount the Company would receive from Amgen for the exclusive license. The assumed stock price of \$1.97 if Amgen did not obtain the license assumed no change to the Company's market capitalization or stock price if Amgen did not obtain the exclusive license. The resulting valuation of \$3.2 million for the warrants was recorded as a liability in the balance sheet on the date of issuance.

On May 21, 2009, the date that the provision for repricing of warrants lapsed when Amgen exercised its option to obtain the license, the exercise price of the warrants became known, and the warrants were re-valued at \$4.8 million using the Black-Scholes option pricing model and the following assumptions: a contractual term of 30 months; a risk-free interest rate of 1.12%; volatility of 89%; the Company's enterprise value on the valuation date, May 21, 2009, factoring in the \$50 million proceeds from Amgen; and the contractual warrant exercise price of \$2.75. The \$1.6 million difference between the original valuation of the warrants and the subsequent

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valuation on May 21, 2009, was charged to Interest and Other, net, in the statement of operations for 2009. The resulting valuation amount of \$4.8 million for the warrants was reclassified from liabilities to additional paid-in capital in stockholders' equity.

On April 20, 2011, pursuant to the Deerfield Agreement, the Company issued to Deerfield warrants to purchase 6,685,000 shares of the Company's common stock at an initial exercise price of \$1.65 per share, for aggregate gross proceeds of approximately \$4.5 million. After issuance costs of approximately \$0.1 million, the net proceeds were approximately \$4.4 million. The warrants issued to Deerfield became exercisable on October 20, 2011 and will remain exercisable until April 20, 2015. The warrant holders are prohibited from exercising the warrants and obtaining shares of common stock if, as a result of such exercise, the holder and its affiliates would own more than 9.98% of the total number of shares of the Company's common stock then issued and outstanding. The Company valued the warrants as of the date of issuance at \$5.8 million using the Black-Scholes option pricing model and the following assumptions: a contractual term of four years, a risk-free interest rate of 1.66%, volatility of 80%, and the fair value of the Company's common stock on the issuance date of \$1.52.

Outstanding warrants as of December 31, 2011 were as follows:

	Number of Shares	Exercise Price	Expiration Date
Issued 4/20/2011	6,685,000	\$ 1.65	04/20/15

***Stock Option Plans***

*2004 Plan*

In January 2004, the Board of Directors adopted the 2004 Equity Incentive Plan (the "2004 Plan"), which was approved by the stockholders in February 2004. The 2004 Plan provides for the granting of incentive stock options, nonstatutory stock options, restricted stock, stock appreciation rights, stock performance units and stock performance shares to employees, directors and consultants. Under the 2004 Plan, options may be granted at prices not lower than 100% of the fair market value of the common stock on the date of grant for nonstatutory stock options and incentive stock options and may be granted for terms of up to ten years from the date of grant. Options granted to new employees generally vest 25% after one year and monthly thereafter over a period of four years. Options granted to existing employees generally vest monthly over a period of four years. At the May 2011 Annual Meeting of Stockholders, the number of shares of common stock authorized for issuance under the 2004 Plan was increased by 3,000,000. As of December 31, 2011, there were 15,768,940 shares of common stock reserved for issuance under the 2004 Plan.

*1997 Plan*

In 1997, the Company adopted the 1997 Stock Option/Stock Issuance Plan (the "1997 Plan"). The Plan provides for the granting of stock options to employees and consultants of the Company. Options granted under the 1997 Plan may be either incentive stock options or nonstatutory stock options. Incentive stock options may be granted only to Company employees (including officers and directors who are also employees). Nonstatutory stock options may be granted to Company employees and consultants. Options under the Plan may be granted for terms of up to ten years from the date of grant as determined by the Board of Directors, provided, however, that (i) the exercise price of an incentive stock option and nonstatutory stock option shall not be less than 100% and 85% of the estimated fair market value of the shares on the date of grant, respectively, and (ii) with respect to any 10% stockholder, the exercise price of an incentive stock option or nonstatutory stock option 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

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Company which lapse over a maximum period of ten years at such times and under such conditions as determined by the Board of Directors. Options granted under the 1997 Plan generally vested over four or five years (generally 25% after one year and monthly thereafter). As of December 31, 2011, the Company had reserved 439,231 shares of common stock for issuance related to options outstanding under the 1997 Plan, and there were no shares available for future grants under the 1997 Plan.

Activity under the two stock option plans was as follows:

	Shares Available for Grant of Option or Award	Stock Options Outstanding	Weighted Average Exercise Price per Share - Stock Options	Weighted Average remaining contractual Life	Aggregate Intrinsic Value
Options authorized	1,000,000	—	\$ —		
Options granted	(833,194)	833,194	0.20		
Options exercised	—	(147,625)	0.20		
Options forfeited	—	—	—		
Balance at December 31, 1998	166,806	685,569	0.12		
Increase in authorized shares	461,945	—	—		
Options granted	(582,750)	582,750	0.39		
Options exercised	—	(287,500)	0.24		
Options forfeited	50,625	(50,625)	0.20		
Balance 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 forfeited	68,845	(68,845)	0.30		
Balance 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 forfeited	109,158	(109,158)	0.67		
Balance 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 forfeited	152,326	(152,326)	0.78		
Balance 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 forfeited	49,325	(49,325)	0.89		
Balance at December 31, 2003	390,677	2,244,378	1.06		
Increase in authorized shares	1,600,000	—	—		
Options granted	(863,460)	863,460	7.52		
Options exercised	—	(404,618)	1.12		
Options forfeited	74,025	(58,441)	3.64		
Options retired	(36,128)	—	—		

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	Shares Available for Grant of Option or Award	Stock Options Outstanding	Weighted Average Exercise Price per Share - Stock Options	Weighted Average remaining contractual Life	Aggregate Intrinsic Value
Balance at December 31, 2004	1,165,114	2,644,779	3.10		
Increase in authorized shares	995,861	—	—		
Options granted	(996,115)	996,115	7.23		
Options exercised	—	(196,703)	1.48		
Options forfeited	182,567	(161,958)	5.89		
Balance at December 31, 2005	1,347,427	3,282,233	4.31		
Increase in authorized shares	1,039,881	—	—		
Options granted	(1,250,286)	1,250,286	7.04		
Options exercised	—	(354,502)	1.47		
Options forfeited	146,854	(145,317)	7.16		
Balance at December 31, 2006	1,283,876	4,032,700	5.31		
Increase in authorized shares	1,500,000	—	—		
Options granted	(1,647,570)	1,647,570	6.65		
Options exercised	—	(259,054)	1.95		
Options forfeited	360,990	(360,922)	6.94		
Balance at December 31, 2007	1,497,296	5,060,294	5.80		
Increase in authorized shares	3,500,000	—	—		
Options granted	(1,731,594)	1,731,594	3.41		
Restricted stock awards granted	(397,960)	—	—		
Options exercised	—	(95,796)	1.36		
Options forfeited	720,876	(720,876)	5.79		
Restricted stock awards forfeited	1,500	—	—		
Balance at December 31, 2008	3,590,118	5,975,216	5.18		
Increase in authorized shares	2,000,000	—	—		
Options granted	(1,792,750)	1,792,750	1.91		
Options exercised	—	(492,003)	1.19		
Options forfeited	291,500	(291,500)	6.06		
Restricted stock awards forfeited	9,360	—	—		
Balance at December 31, 2009	4,098,228	6,984,463	4.58		
Increase in authorized shares	2,300,000	—	—		
Options granted	(2,040,737)	2,040,737	2.97		
Options exercised	—	(176,433)	1.12		
Options forfeited/expired	752,279	(752,291)	3.89		
Restricted stock awards forfeited	17,925	—	—		
Balance at December 31, 2010	5,127,695	8,096,476	4.32		
Increase in authorized shares	3,000,000	—	—		
Options granted	(2,552,756)	2,552,756	1.59		
Restricted stock units granted	(3,190,500)	—	—		
Options exercised	—	(16,000)	1.09		
Options forfeited/expired	1,041,568	(1,041,568)	3.77		
Restricted stock units forfeited	85,000	—	—		
Balance at December 31, 2011	3,511,007	9,591,664	\$ 3.66	6.4	\$ 0.00



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	Shares Available for Grant of Option or Award	Stock Options Outstanding	Weighted Average Exercise Price per Share - Stock Options	Weighted Average remaining contractual Life	Aggregate Intrinsic Value
Exercisable at December 31, 2011		6,649,320	\$ 4.38	5.4	\$ 0.00
Vested and expected to vest as of December 31, 2011		9,458,504	\$ 3.68	6.4	\$ 0.00

The weighted-average grant date fair value of options granted during the year ended December 31, 2011 was \$1.04 per share. The total intrinsic value of options exercised during the year ended December 31, 2011 was \$8,000. The intrinsic value is calculated as the difference between the market value as of December 31, 2011 and the exercise price of shares. The market value as of December 31, 2011 was \$0.96 per share based on market value as of December 30, 2011 as reported by NASDAQ.

As of December 31, 2010, there were 5,471,163 options outstanding, exercisable and vested at a weighted-average exercise price of \$5.04 per share. As of December 31, 2009, there were 4,472,677 options outstanding, exercisable and vested at a weighted-average exercise price of \$5.37 per share. The weighted-average grant date fair value of options granted in the years ended December 31, 2010 and 2009 was \$1.97 and \$1.30, respectively.

Restricted stock unit activity was as follows:

	Number of Shares	Weighted Average Award Date Fair Value per Share
Restricted stock units outstanding at December 31, 2010	—	\$ —
Restricted stock units granted	3,190,500	1.13
Restricted stock units forfeited	(85,000)	1.13
Unvested restricted stock units outstanding at December 31, 2011	<u>3,105,500</u>	\$ 1.13

Restricted stock award activity was as follows:

	Number of Shares	Weighted Average Award Date Fair Value per Share
Restricted stock awards outstanding at December 31, 2007	—	\$ —
Awards granted	397,960	2.37
Awards forfeited	(1,500)	2.37
Unvested restricted stock awards outstanding at December 31, 2008	396,460	2.37
Awards released	(195,470)	2.37
Awards forfeited	(9,360)	2.37
Unvested restricted stock awards outstanding at December 31, 2009	191,630	2.37
Awards released	(173,705)	2.37
Awards forfeited	(17,925)	2.37
Unvested restricted stock awards outstanding at December 31, 2010 and 2011	<u>—</u>	<u>—</u>

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The Company measures compensation expense for restricted stock awards and restricted stock units at fair value on the grant date and recognizes the expense over the expected vesting period. The fair value for restricted stock awards and restricted stock units is based on the closing price of the Company's common stock on the grant date. Unvested restricted stock awards are subject to repurchase at no cost to the Company.

*Non-employee Stock-Based Compensation*

The Company records stock option grants to non-employees at their fair value on the measurement date. The measurement of stock-based compensation is subject to adjustment as the underlying equity instruments vest.

There were no stock option grants to non-employees in the years ended December 31, 2011, 2010 or 2009. When terminating, if employees continue to provide service to the Company as consultants and their grants are permitted to continue to vest, the expense associated with the continued vesting of the related stock options is classified as non-employee stock compensation expense after the status change.

In connection with services rendered by non-employees, the Company recorded stock-based compensation expense of \$18,000, \$0.1 million and \$0.1 million in 2011, 2010 and 2009, respectively, and \$1.6 million for the period from August 5, 1997 (date of inception) through December 31, 2011.

**ESPP**

In January 2004, the Board of Directors adopted the ESPP, which was approved by the stockholders in February 2004. Under the ESPP, statutory employees may purchase common stock of the Company up to a specified maximum amount through payroll deductions. The stock is purchased semi-annually at a price equal to 85% of the fair market value at certain plan-defined dates. The Company issued 112,931, 134,327 and 149,996 shares of common stock during 2011, 2010 and 2009, respectively, pursuant to the ESPP at an average price of \$1.11, \$1.70 and \$1.66 per share, in 2011, 2010 and 2009, respectively. At December 31, 2011 the Company had 316,383 shares of common stock reserved for issuance under the ESPP.

**Note 13 — 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 basis 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 the deferred tax assets to the amounts expected to be realized. The Company did not record an income tax provision in the year ended December 31, 2011 because the Company had a net taxable loss in the period.

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The Company recorded the following income tax provision as follows (in thousands):

	Years Ended December 31,		
	2011	2010	2009
<b>Current:</b>			
Federal	\$ —	\$(176)	\$ 150
State	—	—	—
Total	<u>\$ —</u>	<u>\$(176)</u>	<u>\$ 150</u>
<b>Deferred:</b>			
Federal	\$ —	\$ —	\$ —
State	—	—	—
Total	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

The Company recorded an income tax provision of \$150,000 in 2009 due to alternative minimum tax (“AMT”). However, due to the Department of the Treasury’s further guidance clarifying that utilization of the AMT net operating loss (“NOL”) was not limited to 90% as part of the 5-year NOL carryback provision brought about by the Worker, Homeownership, and Business Assistance Act of 2009, the 2009 AMT liability was reversed in 2010. In addition to the \$150,000 benefit related to the AMT liability, The Company also recognized a \$26,000 benefit related to the monetization of the federal research tax credit for a total benefit of \$176,000 in 2010.

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The significant components of the Company’s deferred tax assets and liabilities were as follows (in thousands):

	As of December 31,		
	2011	2010	2009
<b>Deferred tax assets:</b>			
Depreciation and amortization	\$ 7,579	\$ 9,151	\$ 10,458
Reserves and accruals	3,524	3,632	2,784
Net operating losses	141,226	121,603	103,166
Tax credits	<u>16,778</u>	<u>16,249</u>	<u>18,632</u>
Total deferred tax assets	169,107	150,635	135,040
Less: Valuation allowance	<u>(169,107)</u>	<u>(150,635)</u>	<u>(135,040)</u>
Net deferred tax assets	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

Based upon the weight of available evidence, which includes the Company’s historical operating performance, reported cumulative net losses since inception and difficulty in accurately forecasting the Company’s future results, the Company maintained a full valuation allowance on the net deferred tax assets as of December 31, 2011, 2010 and 2009. The valuation allowance was determined pursuant to the accounting guidance for income taxes, which requires an assessment of both positive and negative evidence when determining whether it is more likely than not that deferred tax assets are recoverable. The Company intends to maintain a full valuation allowance on the U.S. deferred tax assets until sufficient positive evidence exists to support reversal of the valuation allowance. The valuation allowance increased by \$18.5 million in 2011, increased by \$15.6 million in 2010, and decreased by \$9.6 million in 2009.

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As a result of certain realization requirements of accounting guidance for stock compensation, the table of deferred tax assets and liabilities shown above does not include certain deferred tax assets at December 31, 2011, 2010 and 2009 that arose directly from tax deductions related to equity compensation in excess of compensation recognized for financial reporting. Equity will be increased by \$1.8 million if and when such benefits are ultimately realized and reduce taxes payable.

The following are the Company's valuation and qualifying accounts (in thousands):

	Balance at Beginning of Period	Charged to Expenses	Charged to Other Accounts	Deductions	Balance at End of Period
Year Ended December 31, 2009:					
Deferred tax valuation allowance	\$ 144,600	(9,560)	—	—	\$ 135,040
Year Ended December 31, 2010:					
Deferred tax valuation allowance	\$ 135,040	15,595	—	—	\$ 150,635
Year Ended December 31, 2011:					
Deferred tax valuation allowance	\$ 150,635	18,472	—	—	\$ 169,107

The following is a reconciliation of the statutory federal income tax rate to the Company's effective tax rate:

	Years Ended December 31,		
	2011	2010	2009
Tax at federal statutory tax rate	(34)%	(34)%	34%
State income tax, net of federal tax benefit	(6)%	(6)%	6%
Research and development credits	(1)%	(4)%	(8)%
Deferred tax assets (utilized) not benefited	39%	42%	(37)%
Stock-based compensation	1%	1%	4%
Warrant expense	0%	0%	2%
Other	1%	0%	0%
Total	<u>0%</u>	<u>(1)%</u>	<u>1%</u>

The Company had federal net operating loss carryforwards of approximately \$374.6 million and state net operating loss carryforwards of approximately \$249.8 million before federal benefit at December 31, 2011. If not utilized, the federal and state operating loss carryforwards will begin to expire in various amounts beginning 2020 and 2012, respectively. The net operating loss carryforwards include deductions for stock options.

The Company had research credit carryforwards of approximately \$10.1 million and \$9.7 million for federal and California state income tax purposes, respectively, at December 31, 2011. If not utilized, the federal carryforwards will expire in various amounts beginning in 2021. The California state credit can be carried forward indefinitely.

In general, under Section 382 of the Internal Revenue Code, a corporation that undergoes an 'ownership change' is subject to limitations on its ability to utilize its pre-change net operating losses and tax credits to offset future taxable income. The Company's existing net operating losses and tax credits are subject to limitations arising from previous ownership changes. Future changes in the Company's stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Internal Revenue Code and result in additional limitations. During the year ended December 31, 2007, the Company conducted a study and

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determined that the Company would not be able to utilize a portion of its federal research credit as a result of such a restriction. Accordingly, the Company reduced its deferred tax assets and the corresponding valuation allowance by \$0.8 million. As a result, the research credit amount as of December 31, 2007 reflects the restriction on the Company's ability to use the credit.

The Company follows the accounting guidance that prescribes a comprehensive model for how companies should recognize, measure, present, and disclose in their financial statements uncertain tax positions taken or expected to be taken on a tax return. Tax positions are initially recognized in the financial statements when it is more likely than not that the position will be sustained upon examination by the tax authorities. Such tax positions are initially and subsequently measured as the largest amount of tax benefit that is greater than 50% likely of being realized upon ultimate settlement with the tax authority assuming full knowledge of the position and relevant facts.

The cumulative effect of adopting the current guidance on uncertain tax positions on January 1, 2007 resulted in no liability on the balance sheet. The total amount of unrecognized tax benefits as of the date of adoption was \$3.1 million. We are currently under examination by the Internal Revenue Service ("IRS") for the tax year 2009 and have made adjustments to our deferred balances for NOL carryforwards, Research credits, and charitable contribution carryovers as a result of information obtained from the IRS examination. As we maintained a full valuation allowance against our deferred tax assets, the adjustments resulted in no additional tax expense in the current period. We have also adjusted our unrealized tax benefits accordingly; however, in general, the statute of limitations for tax liabilities for these years remains open for the purpose of adjusting the amounts of the losses and credits carried forward from those years.

The following is a tabular reconciliation of the total amounts of unrecognized tax benefits ("UTBs") (in thousands):

	Federal and State Tax	Federal Tax Benefit of State Income Tax UTBs	Unrecognized Income Tax Benefits - Net of Federal Benefit of State UTBs
Unrecognized tax benefits balance at January 1, 2009	\$ 4,235	\$ 929	\$ 3,306
Addition for tax positions of prior years	—	—	—
Addition for tax positions related to the current year	507	104	403
Unrecognized tax benefits balance at December 31, 2009	4,742	1,033	3,709
Addition for tax positions of prior years	103	20	83
Addition for tax positions related to the current year	503	101	402
Unrecognized tax benefits balance at December 31, 2010	5,348	1,154	4,194
Reduction for tax positions of prior years	(244)	(53)	(191)
Addition for tax positions related to the current year	387	73	314
Unrecognized tax benefits balance at December 31, 2011	<u>\$5,491</u>	<u>\$ 1,174</u>	<u>\$ 4,317</u>

Included in the balance of unrecognized tax benefits as of December 31, 2011, 2010 and 2009 are \$4.3 million, \$4.2 million and \$3.7 million of tax benefits, respectively, that, if recognized, would result in adjustments to other tax accounts, primarily deferred taxes.

**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**NOTES TO FINANCIAL STATEMENTS — (Continued)**

The Company recognizes interest accrued related to unrecognized tax benefits and penalties as income tax expense. Related to the unrecognized tax benefits noted above, the Company did not accrue any penalties or interest during 2011, 2010 or 2009. The Company does not expect its unrecognized tax benefit to change materially over the next twelve months.

**Note 14 — Interest and Other, Net**

Components of Interest and Other, net were as follows (in thousands):

	<u>Years Ended December 31,</u>			<u>Period from</u>
	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>August 5, 1997</u> <u>(Date of</u> <u>Inception) to</u> <u>December 31,</u> <u>2011</u>
Unrealized gain on ARS (Note 3 and Note 4)	\$ —	\$ 2,358	\$ 1,031	\$ —
Unrealized loss on investment put options related to ARS Rights (Note 3 and Note 4)	—	(2,358)	(1,031)	—
Warrant expense	—	—	(1,585)	(1,585)
Interest income and other income	143	335	593	29,011
Interest expense and other expense	(39)	(163)	(409)	(5,972)
Interest and Other, net	<u>\$104</u>	<u>\$ 172</u>	<u>\$ (1,401)</u>	<u>\$ 21,454</u>

Investments that the Company designates as trading securities are reported at fair value, with gains or losses resulting from changes in fair value recognized in earnings and included in Interest and Other, net. The Company sold its remaining outstanding ARS on June 30, 2010, pursuant to its exercise of the ARS Rights and the transaction settled on July 1, 2010.

The Company elected to measure the investment put option related to the ARS Rights at fair value to mitigate volatility in reported earnings due to its linkage to the ARS. Changes in the fair value of the ARS were recognized in current period earnings in Interest and Other, net. The investment put option related to the ARS rights was extinguished on July 1, 2010, the settlement date of the sale of the remaining ARS.

Warrant expense for 2009 and the period from inception to December 31, 2011 was related to the change in the fair value of the warrant liability that was recorded in connection with the Company's registered direct equity offering in May 2009.

Interest income and other income primarily consisted of interest income generated from the Company's cash, cash equivalents and investments. Interest expense and other expense primarily consisted of interest expense on borrowings under the Company's equipment financing lines and, through June 30, 2010, interest expense on its loan agreement with UBS Bank USA and UBS Financial Services Inc.

**CYTOKINETICS, INCORPORATED**  
**(A Development Stage Enterprise)**  
**NOTES TO FINANCIAL STATEMENTS — (Continued)**

**Note 15 — Quarterly Financial Data (Unaudited)**

Quarterly results were as follows (in thousands, except per share data)

	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
<b>2011</b>				
Total revenues	\$ 763	\$ 1,053	\$ 1,427	\$ 757
Net loss	(11,712)	(13,632)	(10,639)	(11,877)
Net loss allocable to common stockholders	(11,712)	(16,489)	(10,639)	(11,877)
Net loss per share allocable to common stockholders — basic and diluted	\$ (0.18)	\$ (0.23)	\$ (0.15)	\$ (0.16)
<b>2010</b>				
Total revenues	\$ 621	\$ 462	\$ 394	\$ 1,099
Net loss	(12,189)	(13,144)	(12,341)	(11,613)
Net loss per share — basic and diluted	\$ (0.20)	\$ (0.21)	\$ (0.19)	\$ (0.17)

**Note 16 — Subsequent Events**

During the period January 1, 2012 through March 12, 2012, the Company issued 2,596,341 shares of common stock pursuant to the MLV Agreement at a weighted average price of \$1.12 per share for total net proceeds of \$2.8 million after commission and other costs of \$89,000.

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**Item 9. *Changes in and Disagreements With Accountants on Accounting and Financial Disclosure***

None.

**Item 9A. *Controls and Procedures***

*Evaluation of Disclosure Controls and Procedures.* Our management evaluated, with the participation of our Chief Executive Officer and our Chief Financial Officer, the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that the Company's disclosure controls and procedures are effective.

*Management's Report on Internal Control over Financial Reporting.* Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2011. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework. Our management has concluded that, as of December 31, 2011, our internal control over financial reporting is effective based on these criteria.

Our independent registered public accounting firm, PricewaterhouseCoopers LLP, has audited the effectiveness of our internal control over financial reporting as of December 31, 2011, as stated in their report, which is included herein.

*Changes in Internal Control over Financial Reporting.* There was no change in our internal control over financial reporting that occurred during the quarter ended December 31, 2011 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

*Inherent Limitations on Effectiveness of Controls.* Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal controls, will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within Cytokinetics have been detected.

**Item 9B. *Other Information***

None.



**PART III**

**Item 10. Directors, Executive Officers and Corporate Governance**

The information regarding our directors and executive officers, our director nominating process and our audit committee is incorporated by reference from our definitive Proxy Statement for our 2012 Annual Meeting of Stockholders, where it appears under the headings “Board of Directors” and “Executive Officers.”

**Section 16(a) Beneficial Ownership Reporting Compliance**

The information regarding our Section 16 beneficial ownership reporting compliance is incorporated by reference from our definitive Proxy Statement described above, where it appears under the headings “Section 16(a) Beneficial Ownership Reporting Compliance.”

**Code of Ethics**

We have adopted a Code of Ethics that applies to all directors, officers and employees of the Company. We publicize the Code of Ethics through posting the policy on our website, [www.cytokinetics.com](http://www.cytokinetics.com). We will disclose on our website any waivers of, or amendments to, our Code of Ethics.

**Item 11. Executive Compensation**

The information required by this Item is incorporated by reference from our definitive Proxy Statement referred to in Item 10 above, where it appears under the headings “Executive Compensation” and “Compensation Committee Interlocks and Insider Participation.”

**Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

The information required by this Item regarding security ownership of certain beneficial owners and management is incorporated by reference from our definitive Proxy Statement referred to in Item 10 above, where it appears under the heading “Security Ownership of Certain Beneficial Owners and Management.”

The following table summarizes the securities authorized for issuance under our equity compensation plans as of December 31, 2011:

<u>Plan Category</u>	<u>Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights</u>	<u>Weighted Average Exercise Price of Outstanding Options, Warrants and Rights</u>	<u>Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans</u>
Equity compensation plans approved by stockholders	9,591,664	\$ 3.66	3,827,390(1)
Equity compensation plans not approved by stockholders	—	—	—
Total	<u>9,591,664</u>	<u>\$ 3.66</u>	<u>3,827,390</u>

(1) Includes 316,383 shares of common stock reserved for issuance under the Employee Stock Purchase Plan.

**Item 13. Certain Relationships and Related Transactions, and Director Independence**

The information required by this Item is incorporated by reference from our definitive Proxy Statement referred to in Item 10 above where it appears under the headings “Certain Business Relationships and Related Party Transactions” and “Board of Directors.”

**Item 14. Principal Accounting Fees and Services**

The information required by this Item is incorporated by reference from our definitive Proxy Statement referred to in Item 10 above, where it appears under the heading “Principal Accountant Fees and Services.”

**PART IV**

**Item 15. Exhibits and Financial Statement Schedules**

(a) The following documents are filed as part of this Form 10-K:

(1) Financial Statements (included in Part II of this report):

- Report of Independent Registered Public Accounting Firm
- Balance Sheets
- Statements of Operations
- Statements of Stockholders' Equity (Deficit)
- Statements of Cash Flows
- Notes to Financial Statements

(2) Financial Statement Schedules:

None — All financial statement schedules are omitted because the information is inapplicable or presented in the notes to the financial statements.

(3) Exhibits:

<u>Exhibit Number</u>	<u>Description</u>
3.1	Amended and Restated Certificate of Incorporation.(1)
3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation.(17)
3.3	Amended and Restated Bylaws.(2)
3.4	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock.(3)
4.1	Specimen Common Stock Certificate.(4)
4.2	Registration Rights Agreement, dated as of December 29, 2006, by and between the Company and Amgen Inc.(5)
4.3	Form of Warrant to Purchase Common Stock of Cytokinetics, Inc.(3)
4.4	Form of Common Stock Warrant Agreement(18)
4.5	Form of Preferred Stock Warrant Agreement(18)
10.1	1997 Stock Option/Stock Issuance Plan.(2)
10.2	2004 Equity Incentive Plan, as amended.(17)
10.3	2004 Employee Stock Purchase Plan.(2)
10.4	Build-to-Suit Lease, dated May 27, 1997, by and between Britannia Pointe Grand Limited Partnership and Metaxen, LLC.(2)
10.5	First Amendment to Lease, dated April 13, 1998, by and between Britannia Pointe Grand Limited Partnership and Metaxen, LLC.(2)
10.6	Sublease Agreement, dated May 1, 1998, by and between the Company and Metaxen, LLC.(2)
10.7	Sublease Agreement, dated March 1, 1999, by and between Metaxen, LLC and Exelixis Pharmaceuticals, Inc.(2)

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<u>Exhibit Number</u>	<u>Description</u>
10.8	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.(2)
10.9	Second Amendment to Lease, dated July 11, 1999, by and between Britannia Pointe Grand Limited Partnership and Exelixis Pharmaceuticals, Inc.(2)
10.10	First Amendment to Sublease Agreement, dated July 20, 1999, by and between the Company and Metaxen, LLC.(2)
10.11	Agreement and Consent, dated July 20, 1999, by and among Exelixis Pharmaceuticals, Inc., the Company and Britannia Pointe Grand Limited Partnership.(2)
10.12	Amendment to Agreement and Consent, dated July 31, 2000, by and between the Company, Exelixis, Inc., and Britannia Pointe Grande Limited Partnership.(2)
10.13	Assignment and Assumption of Lease, dated September 28, 2000, by and between the Company and Exelixis, Inc.(2)
10.14	Sublease Agreement, dated September 28, 2000, by and between the Company and Exelixis, Inc.(2)
10.15	Sublease Agreement, dated December 29, 1999, by and between the Company and COR Therapeutics, Inc.(2)
10.16	Loan Proposal, executed January 18, 2006, by and between the Company and General Electric Capital Corporation.(7)
10.17	Loan Proposal, executed March 16, 2006, by and between the Company and General Electric Capital Corporation.(10)
*10.18	Collaboration and Option Agreement, dated as of December 29, 2006, by and between the Company and Amgen Inc.(11)
10.19	Common Stock Purchase Agreement, dated October 15, 2007, by and between the Company and Kingsbridge Capital Limited.(8)
10.20	Form of Indemnification Agreement between the Company and each of its directors and executive officers.(9)
*10.21	Scientific Advisory Board Consulting Agreement, dated April 1, 2008, by and between the Company and James. H. Sabry.(12)
10.22	Amended and Restated Executive Employment Agreement, dated May 21, 2007, by and between the Company and Robert Blum.(9)
10.23	Form of Executive Employment Agreement between the Company and its executive officers.(9)
*10.24	Amendment No. 1, dated June 17, 2008, to the Collaboration and Option Agreement by and between the Company and Amgen Inc.(15)
*10.25	Amendment No. 2, dated September 30, 2008, to the Collaboration and Option Agreement by and between the Company and Amgen Inc.(15)
10.26	Acceptance of UBS AG Settlement Offer Relating to Auction Rate Securities dated October 27, 2008.(15)
*10.27	Amendment No. 3, dated October 31, 2008, to the Collaboration and Option Agreement by and between the Company and Amgen Inc.(15)

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<u>Exhibit Number</u>	<u>Description</u>
10.28	Credit Line Agreement, effective December 30, 2008, by and among the Company, UBS Bank USA and UBS Financial Services Inc.(15)
*10.29	Amendment No. 4, dated February 20, 2009, to the Collaboration and Option Agreement by and between the Company and Amgen Inc.(15)
10.30	Form of Amendment No. 1 to Amended and Restated Executive Employment Agreements.(15)
10.31	Form of Subscription Agreement, dated May 18, 2009, between the Company and the investor signatories thereto.(14)
10.32	Form of Warrant, dated May 18, 2009, between the Company and the investor signatories thereto.(14)
10.33	Master Security Agreement, dated February 2, 2001, by and between the Company and General Electric Capital Corporation.(2)
10.34	Amendment No. 1, effective January 1, 2005, to Master Security Agreement by and between the Company and General Electric Capital Corporation.(13)
*10.35	Consent and Amendment No. 2, effective May 18, 2009, to Master Security Agreement by and between the Company and General Electric Capital Corporation.(13)
10.36	Cross-Collateral and Cross-Default Agreement by and between the Company and General Electric Capital Corporation.(2)
10.37	Amendment No. 1 to Common Stock Purchase Agreement, dated October 15, 2010, by and between the Company and Kingsbridge Capital Limited.(16)
10.38	Third Amendment to Lease, dated December 10, 2010, by and between the Company and Britannia Pointe Grand Limited Partnership.(19)
*10.39	Amendment No. 5, dated November 1, 2010, to the Collaboration and Option Agreement by and between the Company and Amgen Inc.(19)
10.40	Securities Purchase Agreement, dated April 18, 2011, between the Company and Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., Deerfield Special Situations Fund, L.P., and Deerfield Special Situations Fund International Limited.(3)
10.41	At the Market Issuance Sales Agreement, dated June 10, 2011, between the Company and McNicoll, Lewis & Vlak LLC.(6)
*10.42	Consulting Agreement between Cytokinetics, Inc. and David J. Morgans, dated November 1, 2011.
23.1	Consent of Independent registered public accounting firm.
24.1	Power of Attorney (see page 126).
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certifications of the Principal Executive Officer and the Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350).
101.INS †	XBRL Instance Document.
101.SCH †	XBRL Taxonomy Extension Schema Document.
101.CAL †	XBRL Taxonomy Extension Calculation Linkbase Document.

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<u>Exhibit Number</u>	<u>Description</u>
101.DEF†	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB†	XBRL Taxonomy Extension Label Linkbase Document
101.PRE†	XBRL Taxonomy Extension Presentation Linkbase Document.
(1)	Incorporated by reference from our registration statement on Form S-3, registration number 333-174869, filed with the Securities and Exchange Commission on June 13, 2011.
(2)	Incorporated by reference from our registration statement on Form S-1, registration number 333-112261, declared effective by the Securities and Exchange Commission on April 29, 2004.
(3)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 18, 2011.
(4)	Incorporated by reference from our Quarterly Report on Form 10-Q, filed with the Security and Exchange Commission on May 9, 2007.
(5)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 3, 2007.
(6)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on June 13, 2011.
(7)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 20, 2006.
(8)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on October 15, 2007.
(9)	Incorporated by reference from our Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on August 5, 2008
(10)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on March 22, 2006.
(11)	Incorporated by reference from our Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 12, 2007.
(12)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 2, 2008.
(13)	Incorporated by reference from our Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on August 6, 2009.
(14)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on May 19, 2009.
(15)	Incorporated by reference from our Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 12, 2009.
(16)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on October 26, 2010.
(17)	Incorporated by reference from our Quarterly Report on From 10-Q, filed with the Securities and Exchange Commission on August 4, 2011.
(18)	Incorporated by reference from our registration statement on Form S-3, registration number 333-178189, filed with the Securities and Exchange Commission on November 25, 2011.
(19)	Incorporated by reference from our Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 11, 2011.

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- \* Pursuant to a request for confidential treatment, portions of this Exhibit have been redacted from the publicly filed document and have been furnished separately to the Securities and Exchange Commission as required by Rule 406 under the Securities Act of 1933 or Rule 24b-2 under the Securities Exchange Act of 1934, as applicable.
- † Furnished herewith. In accordance with Rule 406T of Regulation S-T, the information in these exhibits shall not be deemed to be “filed” for purposes of Section 18 of the Exchange Act, or otherwise subject to liability under that section, and shall not be incorporated by reference into any registration statement or other document filed under the Securities Act of 1933, as amended, except as expressly set forth by specific reference in such filing.

(b) Exhibits

The exhibits listed under Item 15(a)(3) hereof are filed as part of this Form 10-K, other than Exhibit 32.1 which shall be deemed furnished.

(c) Financial Statement Schedules

None — All financial statement schedules are omitted because the information is inapplicable or presented in the notes to the financial statements.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities and Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CYTOKINETICS, INCORPORATED

By: /s/ ROBERT I. BLUM

Robert I. Blum  
President, Chief Executive Officer and Director

Dated: March 13, 2012

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Robert I. Blum and Sharon A. Barbari, and each of them, his true and lawful attorneys-in-fact, each with full power of substitution, for him in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact or their substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities and Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ ROBERT I. BLUM</u> Robert I. Blum	President, Chief Executive Officer and Director (Principal Executive Officer)	March 13, 2012
<u>/s/ SHARON A. BARBARI</u> Sharon A. Barbari	Executive Vice President, Finance and Chief Financial Officer (Principal Financial and Accounting Executive)	March 13, 2012
<u>/s/ L. PATRICK GAGE, PH.D.</u> L. Patrick Gage, Ph.D.	Chairman of the Board of Directors	March 13, 2012
<u>/s/ SANTO J. COSTA</u> Santo J. Costa	Director	March 13, 2012
<u>/s/ STEPHEN DOW</u> Stephen Dow	Director	March 13, 2012
<u>/s/ DENISE M. GILBERT, PH.D.</u> Denise M. Gilbert, Ph.D.	Director	March 13, 2012
<u>/s/ JOHN T. HENDERSON, M.B. CH.B.</u> John T. Henderson, M.B. Ch.B.	Director	March 13, 2012
<u>Sanford D. Smith</u>	Director	
<u>/s/ WENDELL WIERENGA, PH.D.</u> Wendell Wierenga, Ph.D.	Director	March 13, 2012

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3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation.(17)
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10.15	Sublease Agreement, dated December 29, 1999, by and between the Company and COR Therapeutics, Inc.(2)
10.16	Loan Proposal, executed January 18, 2006, by and between the Company and General Electric Capital Corporation.(7)



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<u>Exhibit Number</u>	<u>Description</u>
10.17	Loan Proposal, executed March 16, 2006, by and between the Company and General Electric Capital Corporation.(10)
*10.18	Collaboration and Option Agreement, dated as of December 29, 2006, by and between the Company and Amgen Inc.(11)
10.19	Common Stock Purchase Agreement, dated October 15, 2007, by and between the Company and Kingsbridge Capital Limited.(8)
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*10.29	Amendment No. 4, dated February 20, 2009, to the Collaboration and Option Agreement by and between the Company and Amgen Inc.(15)
10.30	Form of Amendment No. 1 to Amended and Restated Executive Employment Agreements.(15)
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*10.35	Consent and Amendment No. 2, effective May 18, 2009, to Master Security Agreement by and between the Company and General Electric Capital Corporation.(13)
10.36	Cross-Collateral and Cross-Default Agreement by and between the Company and General Electric Capital Corporation.(2)
10.37	Amendment No. 1 to Common Stock Purchase Agreement, dated October 15, 2010, by and between the Company and Kingsbridge Capital Limited.(16)

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<u>Exhibit Number</u>	<u>Description</u>
10.38	Third Amendment to Lease, dated December 10, 2010, by and between the Company and Britannia Pointe Grand Limited Partnership.(19)
*10.39	Amendment No. 5, dated November 1, 2010, to the Collaboration and Option Agreement by and between the Company and Amgen Inc.(19)
10.40	Securities Purchase Agreement, dated April 18, 2011, between the Company and Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., Deerfield Special Situations Fund, L.P., and Deerfield Special Situations Fund International Limited.(3)
10.41	At the Market Issuance Sales Agreement, dated June 10, 2011, between the Company and McNicoll, Lewis & Vlak LLC.(6)
*10.42	Consulting Agreement between Cytokinetics, Inc. and David J. Morgans, dated November 1, 2011.
23.1	Consent of Independent registered public accounting firm.
24.1	Power of Attorney (see page 126).
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certifications of the Principal Executive Officer and the Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350).
101.INS †	XBRL Instance Document.
101.SCH †	XBRL Taxonomy Extension Schema Document.
101.CAL†	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF†	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB†	XBRL Taxonomy Extension Label Linkbase Document
101.PRE†	XBRL Taxonomy Extension Presentation Linkbase Document.
(1)	Incorporated by reference from our registration statement on Form S-3, registration number 333-174869, filed with the Securities and Exchange Commission on June 13, 2011.
(2)	Incorporated by reference from our registration statement on Form S-1, registration number 333-112261, declared effective by the Securities and Exchange Commission on April 29, 2004.
(3)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 18, 2011.
(4)	Incorporated by reference from our Quarterly Report on Form 10-Q, filed with the Security and Exchange Commission on May 9, 2007.
(5)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 3, 2007.
(6)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on June 13, 2011.
(7)	Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 20, 2006.

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- (8) Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on October 15, 2007.
- (9) Incorporated by reference from our Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on August 5, 2008
- (10) Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on March 22, 2006.
- (11) Incorporated by reference from our Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 12, 2007.
- (12) Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 2, 2008.
- (13) Incorporated by reference from our Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on August 6, 2009.
- (14) Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on May 19, 2009.
- (15) Incorporated by reference from our Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 12, 2009.
- (16) Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on October 26, 2010.
- (17) Incorporated by reference from our Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on August 4, 2011.
- (18) Incorporated by reference from our registration statement on Form S-3, registration number 333-178189, filed with the Securities and Exchange Commission on November 25, 2011.
- (19) Incorporated by reference from our Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 11, 2011.
  - \* Pursuant to a request for confidential treatment, portions of this Exhibit have been redacted from the publicly filed document and have been furnished separately to the Securities and Exchange Commission as required by Rule 406 under the Securities Act of 1933 or Rule 24b-2 under the Securities Exchange Act of 1934, as applicable.
  - † Furnished herewith. In accordance with Rule 406T of Regulation S-T, the information in these exhibits shall not be deemed to be “filed” for purposes of Section 18 of the Exchange Act, or otherwise subject to liability under that section, and shall not be incorporated by reference into any registration statement or other document filed under the Securities Act of 1933, as amended, except as expressly set forth by specific reference in such filing.

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION (THE "COMMISSION") PURSUANT TO RULE 24b-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

**CYTOKINETICS, INC.  
CONSULTING AGREEMENT**

This Consulting Agreement (the "Agreement") is made and effective as of November 1, 2011 (the "Effective Date"), by and between Cytokinetics, Inc. (the "Company") and David J. Morgans, Jr., Ph.D., an individual ("Consultant").

WHEREAS, the Consultant was previously employed by the Company as Executive Vice President, Preclinical Research and Development, and the Company wishes to obtain services from Consultant from time to time regarding the Field of Interest (as defined below); and

WHEREAS, Consultant wishes to provide such services to the Company in accordance with the terms and conditions of this Agreement;

NOW, THEREFORE, in consideration of the premises and mutual promises set forth in this Agreement, and other good and valuable consideration, the exchange, receipt and sufficiency of which are acknowledged, the parties hereby agree as follows:

I. Services.

1.1 The Company hereby retains Consultant as a consultant and advisor to the Company. Consultant's consultation will involve the specialized field of preclinical and non-clinical drug discovery research and development and related business and corporate development activities (the "Field of Interest") and requires the application of the unique, special and extraordinary skills and knowledge that Consultant possesses in the Field of Interest.

1.2 Consultant hereby agrees, at the request of the Company, to perform the services for the Company, and provide the deliverables, set forth on Exhibit A to this Agreement (the "Services").

1.3 Consultant will provide the Services over the telephone or through written or electronic correspondence as requested by the Company, and will make himself available in person at the Company's offices or other agreed locations for 8 days per month at mutually agreeable times.

1.4 Consultant hereby represents and warrants that he will perform the Services using at all times his best professional knowledge, ability, skill, judgment and efforts, in a workman-like manner, and in accordance with the highest standards of competence, diligence and performance.

1.5 The Company will provide Consultant with all information and equipment the Company and Consultant agree are reasonably required for Consultant to perform the Services in a workmanlike manner, including but not limited to making a laptop computer available to Consultant. Consultant may from time to time request such additional information, equipment or other supports from the Company as he reasonably believes necessary to perform the Services. In addition, Consultant will be given access to any company systems that he reasonably requires to perform the

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Services including but not limited to voicemail, VPN access, access to any relevant files (electronic or paper), and access to relevant areas of the Company's internal network. Upon the earlier of: (a) the Company's request, or (b) the termination of this Agreement, Consultant will return to the Company any and all such equipment and all copies of any documents provided to the Consultant by or on behalf of the Company.

2. Expenses. The Company will reimburse Consultant's reasonable, documented expenses incurred at the Company's request in connection with the Services (including travel expenses, which will be reimbursed in accordance with the Company's standard travel policy), subject to customary verification in a form reasonably acceptable to the Company. Written invoices for expenses and accompanying documentation must be submitted within thirty (30) days of the end of the month in which such expenses were incurred. The Company will pay correct invoices within thirty (30) days of receipt.

3. Compensation.

3.1 From the Effective Date through April 30, 2012, for services provided by Consultant under this Agreement, the Company will pay to Consultant a monthly retainer of rate of \$15,520 as compensation for the 8 days of on-site consulting described in Section 1.3. Payment of the retainer will be paid monthly in advance on the first AP run of the month. In addition the Company will pay Consultant for additional Services at a rate of \$242.50 per hour. These additional hours must be approved by Cytokinetics (which may be provided by e-mail) in advance and in no calendar month may Consultant charge the Company for more than \$25,000 (inclusive of the retainer) without the further express written consent of Company (which may be provided by e-mail). Consultant shall provide the Company with a written invoice semi-monthly, which shall described the activities performed and the time spent by Consultant on such activities. Proper invoices shall be paid by Cytokinetics within (30) days of receipt. Time spent by the Consultant on travel is not compensable. Invoices will be sent to the attention of Accounts Payable.

3.2 During the term of this Agreement, as long as Consultant remains as an active Service Provider ( as such term is defined or interpreted in the Cytokinetics 1997 Stock Option Plan or 2004 Equity Incentive Plan, as the case may be) to Cytokinetics, with regard to those options for the purchase of Cytokinetics common stock that were granted to Consultant during his employment with Cytokinetics, such options shall continue to vest and Consultant shall have the right to exercise any vested options, subject to the applicable terms of the Cytokinetics 1997 Stock Option Plan or 2004 Equity Incentive Plan, as the case may be, and the applicable Stock Option Grant Agreement. Upon the termination of this Agreement, Consultant shall have three (3) months to exercise any remaining vested options, subject to the applicable terms of the Cytokinetics 1997 Stock Option Plan or 2004 Equity Incentive Plan, as the case may be.

3.3 The compensation paid under this Section 3 shall be the sole and full compensation provided to Consultant for his performance of the Services and all other obligations undertaken by Consultant hereunder.

4. Term and Termination. This Agreement will take effect as of the Effective Date and continue for an initial term expiring April 30, 2012. This Agreement may be extended with the written agreement of the parties hereto. Either party may terminate this Agreement at any time, with or without cause, upon sixty (60) days prior written notice to the other party. The obligations of Sections 4, 5, 6.2, 7, 8, 9, 11, 12 and 13 hereof will survive expiration or any termination of this

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Agreement. Expiration or termination of this Agreement will not relieve either party of any liability or obligation which accrued hereunder prior to the effective date of such termination, nor preclude either party from pursuing all rights and remedies it may have hereunder or at law or in equity with respect to any breach of this Agreement, nor prejudice either party's right to obtain performance of any obligation.

#### 5. Inventions.

5.1 Consultant will promptly disclose in writing to the Company's President, or to any other persons designated by the Company, all "Company Inventions." As used herein, "Company Inventions," means all improvements, inventions, designs, formulas, compounds, structures, works of authorship, trade secrets, technology, computer programs, ideas, processes, techniques, know-how, data and information, whether or not patentable or copyrightable, which Consultant, either alone or jointly, makes, discovers, conceives of and/or reduces to practice in the course of or as a result of performing Services, or through use of any Confidential Information (as defined below). Consultant will not disclose Company Inventions to any person outside the Company unless the Company so requests in writing.

5.2 All Company Inventions and all title, patents, patent rights, copyrights, mask work rights, trade secret rights and other intellectual property and rights anywhere in the world in connection therewith (collectively "Rights") will be the Company's sole and exclusive property. Consultant hereby assigns, and automatically will be deemed to have assigned, to the Company all Rights in and to all Company Inventions.

5.3 Consultant agrees to perform, during and after the term of this Agreement, all acts the Company reasonably deems necessary or desirable to permit and assist it in evidencing, perfecting, obtaining, maintaining, defending and enforcing its Rights in the Company Inventions and/or Consultant's assignment with respect thereto in any and all countries. Such acts may include, but are not limited to, execution of documents and assistance in legal proceedings. If for any reason whatsoever the Company is unable to secure Consultant's signature on any document needed in connection with furthering the purposes of this Section 5.3, Consultant hereby irrevocably designates and appoints the Company and its duly authorized officers and agents as Consultant's agents and attorneys-in-fact, to act for and in behalf and instead of Consultant, to execute and file any documents and to do all other lawfully permitted acts to further the purposes of this Section 5.3 with the same legal force and effect as if executed by Consultant.

5.4 Any assignment of copyright hereunder includes all rights of paternity, integrity, disclosure and withdrawal and any other rights that may be known as or referred to as "moral rights" (collectively "Moral Rights"). To the extent such Moral Rights cannot be assigned under applicable law and to the extent the following is allowed by the laws in various countries where Moral Rights exist, Consultant hereby waives such Moral Rights and consents to any action of the Company that would violate such Moral Rights in the absence of such consent. Consultant will confirm any such waivers and consents as requested by the Company.

#### 6. Third Party Agreements; Segregation of Services.

6.1 Subject to written waivers that the Company may provide upon request and which it will not unreasonably withhold, Consultant will not directly or indirectly, during the term of this

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Agreement: (i) provide any services in the Excluded Field (as defined below) to any other business or commercial entity, (ii) provide any services for any company that is competitive with the Company, or (iii) participate in the formation of any business or commercial entity that is competitive with the Company. Consultant will list in Exhibit B attached hereto all other companies for which Consultant is providing services (“Outside Companies”) as of the Effective Date, and will promptly update such list as new engagements or employment arises during the term of this Agreement. As used herein, “Excluded Field” means activities (including, without limitation, pharmacology and clinical applications) relating to the discovery and/or development of drugs or drug candidates for diseases related to muscle dysfunction whose mechanism of action involves direct interaction with: (a) [\*\*\*]; (b) [\*\*\*]; (c) [\*\*\*]; (d) [\*\*\*]; (e) [\*\*\*]; (f) [\*\*\*]; (g) [\*\*\*]; (h) [\*\*\*]; or (i) any other current (as of the Effective Date) or future molecular target, pathological process or disease pathway that is the subject of a research or development program by or on behalf of Cytokinetics, provided that if Consultant is unable to commit to exclusivity with respect to any future molecular target, pathological process or disease pathway he will promptly inform the Company and the parties will agree upon an appropriate resolution (which may include Consultant’s recusal from discussions or services relating to such molecular target, pathological process or disease pathway).

6.2 Consultant will not perform the Services on time that is required to be devoted to any third party. Consultant will not use the funding, resources, materials, personnel or facilities of any third party to perform the Services without the Company’s prior written consent, and will not perform the Services in any manner that would give any third party rights or access to any products of the Services. Without limiting the generality of the foregoing, Consultant will: (i) segregate the Services from Consultant’s work performed for any third party so as to minimize any questions of disclosure of, or rights under, any intellectual property; (ii) immediately notify the Company in writing if at any time Consultant believes that such questions may result from his or her performance under this Agreement; and (iii) assist the Company in fairly resolving any questions in this regard which may arise. Consultant represents and warrants that he or she has disclosed and immediately will disclose to the Company any conflicts between this Agreement and any other agreements binding Consultant.

6.3 Consultant will not disclose to the Company any information that Consultant is obligated to keep secret pursuant to a confidentiality agreement with a third party, and nothing in this Agreement will impose any obligation on Consultant to the contrary.

**\*\*\* Certain information on the page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.**

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6.4 During the term of this Agreement, [\*\*\*] in the Excluded Field, and any invention, improvement, discovery, process, formula or method or other intellectual property relating to or useful in, the Excluded Field, whether or not patentable or copyrightable, and whether or not discovered or developed by Consultant.

7. Non-Solicitation. Consultant agrees that for a period of twelve (12) months immediately following the term of this Agreement, Consultant will not either directly or indirectly solicit, induce, recruit or encourage any of the Company's employees or consultants to leave their employment.

8. Confidentiality.

8.1 As used herein, "Confidential Information" means: (i) any information disclosed to Consultant by or on behalf of the Company, either directly or indirectly, in writing, graphically, electronically, orally or by inspection, including, without limitation, information comprising or relating to any: (a) compound, extract, media, vector, gene, protein, sequence, cell, cell line, formulation, sample or other composition, including, without limitation, any structural information or methods of synthesis relating to any of the foregoing; (b) assay, procedure, algorithm, software program, discovery, invention, model, formula, data, result, idea or technique; (c) trade secret, trade dress, copyright, patent or other intellectual property right or any registration or application therefore or materials relating thereto; or (d) research, development, purchasing, manufacturing, engineering, marketing, servicing, sales, financing, legal or other business or corporate financial activities and/or present or future products, design details or specifications, prices, plans, forecasts, suppliers, clients, customers, employees, consultants or investors; (ii) all information developed by or for Consultant pursuant to the Services, including, without limitation, all Company Inventions; (iii) any information which the Company has received from a third party which the Company is obligated to treat as confidential or proprietary; and (iv) the terms, existence and subject matter of this Agreement. Consultant acknowledges that the Company's business is extremely competitive, dependent upon the maintenance of secrecy and any disclosure of any Confidential Information would result in serious harm to the Company.

8.2 Consultant will use the Confidential Information only as necessary for the Services, and will not use any Confidential Information in any way detrimental to the Company.

8.3 Consultant will:

(i) hold the Confidential Information and any information derived therefrom in strictest confidence and protect such Confidential Information (including, without limitation, taking at least that level of care Consultant employs with respect to his or her most sensitive confidential materials, but in any event a reasonable level of care);

**\*\*\* Certain information on the page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.**



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(ii) maintain all Confidential Information and any information derived therefrom wholly separate from information provided to Consultant by or belonging to any third party;

(iii) not take any Confidential Information or any information derived therefrom into the facilities of any third party;

(iv) not, directly or indirectly, disclose, transfer or otherwise make available any Confidential Information or any information derived therefrom to any third person; and

(v) not copy or reverse engineer any Confidential Information.

8.4 The term "Confidential Information" does not include any information that Consultant can show by competent, written proof:

(i) is or becomes generally known to the public through no improper action or inaction by Consultant;

(ii) was in Consultant's possession or known to Consultant prior to receipt from the Company; or

(iii) was rightfully disclosed to Consultant by a third party without restriction on further disclosure.

Notwithstanding the foregoing, all Company Inventions will remain at all times Confidential Information.

8.5 Consultant may disclose any Confidential Information that is duly required to be disclosed by law, government regulation or court order. If such disclosure is required, Consultant will give the Company at least 30 days advance written notice, or such advance written notice as is reasonably practicable under the circumstances, to enable the Company to seek confidential treatment of such Confidential Information, whether by protective order or otherwise, and Consultant will cooperate fully with the Company in such efforts.

8.6 Consultant will notify the Company in writing immediately upon becoming aware of any unauthorized release or other breach of this Section 8.

8.7 Upon the earlier of expiration or termination of this Agreement, or upon the Company's request, Consultant will promptly return to the Company all materials containing Confidential Information as well as data, records, reports, notes, compilations and other property, whether or not pertaining to Confidential Information, furnished by the Company to Consultant or produced by Consultant in connection with the Services rendered hereunder, together with all copies of any of the foregoing.

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8.8 Consultant is not granted any rights under any of the Company's patent rights, copyrights or other property rights, nor will this Agreement grant Consultant any rights in or to any Confidential Information, except for the purpose of providing Services to the Company.

9. Use of Name. Consultant's name may appear on the Company's website as a member of the Company's scientific advisory board and in certain Company disclosure documents, including, without limitation: (i) those provided to investors, potential investors, advisors, partners and affiliates of the Company; and (ii) those required by securities laws and in other regulatory and administrative filings in the ordinary course of the Company's business. Consultant will not use the Company's name without the Company's prior written consent.

10. No Conflict: Valid and Binding. Each party represents and warrants that neither the execution of this Agreement nor the performance of its obligations under this Agreement will result in a violation or breach of any other agreement by which such party is bound, and that this Agreement is valid and legally binding in accordance with its terms.

11. Compliance with Company Policies. Consultant agrees to fully comply with all of the Company's then-current policies and procedures.

12. Anti-Harassment Policy. The Company is committed to providing a work environment free of discrimination and harassment, and discrimination or harassment of any kind is strictly prohibited. Contractor's engaging in unlawful sexual harassment, other harassment or discrimination on any protected bases may result in the immediate termination of this Agreement.

13. Miscellaneous.

13.1 Notices. Any notice provided under this Agreement will be in writing and will be deemed to have been effectively given (i) upon receipt when delivered personally, (ii) one day after sending when sent by private express mail service (such as Federal Express), or (iii) 3 days after sending when sent by regular mail to the Company's main business address or to Consultant's address on file with the Company or to other such address as may have been designated by the Company or Consultant by notice to the other given as provided herein.

13.2 Construction. Each party acknowledges and agrees that, in reviewing and executing this Agreement, such party has had the opportunity to seek the advice of independent legal counsel, and has read and understood all of the terms and provisions of this Agreement and that this Agreement shall not be deemed to have been drafted by one party or the other.

13.3 Independent Contractor: Withholding. Consultant will at all times be an independent contractor, and as such will not have authority to bind the Company. Consultant will not enter into any agreements or incur any obligations on the Company's behalf. Consultant will not act as an agent nor be deemed to be an employee of the Company for the purposes of any employee benefit program, unemployment benefits, or otherwise. The Company will not withhold any amounts from Consultant's compensation for payment of any federal, state, or local taxes, and Consultant has sole responsibility to pay such taxes, if any, and file such returns as will be required by applicable laws and regulations. To the extent required by laws and regulations of the State of California and the U.S. Government, the Company will report such compensation to the appropriate state and federal

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regulatory agencies. Consultant hereby indemnifies the Company against any obligation imposed on the Company to pay withholding taxes or similar items or resulting from a court's or governmental entity's determination that Consultant is not an independent contractor to the Company.

13.4 Assignment. Due to the personal nature of the Services to be rendered by Consultant, Consultant may not assign this Agreement and may not subcontract any of the Services. The Company may assign all rights and/or liabilities under this Agreement without Consultant's consent. Subject to the foregoing, this Agreement will inure to the benefit of and be binding upon each of the heirs, assigns and successors of the respective parties. Any purported assignment that does not comport with this Section will be null, void and of no effect.

13.5 Severability. If any provision of this Agreement is declared invalid, illegal or unenforceable by a court of competent jurisdiction, such provision will be severed and the remaining provisions will continue in full force and effect.

13.6 Remedies. The remedies provided hereunder are cumulative, and are not exclusive of other remedies available to either party in law or equity. Consultant hereby acknowledges and agrees that in the event of Consultant's actual or threatened breach of this Agreement relating to confidentiality and/or intellectual property, including, without limitation, the actual or threatened disclosure of Confidential Information without the Company's prior express written consent, the Company will suffer an irreparable and continuing injury such that no remedy at law will afford it adequate protection against, or appropriate compensation for, such injury. Accordingly, Consultant hereby agrees that, in such event, and in addition to any other remedies that may be available in law, in equity or otherwise, the Company will be entitled to obtain injunctive relief against such breach or threatened breach of this Agreement without the necessity of proving actual damages or posting bond.

13.7 Governing Law; Dispute Resolution. This Agreement will be governed and construed in accordance with the laws of the State of California as applied to transactions taking place wholly within California between California residents. For any legal action arising from or related to this Agreement, the parties hereby irrevocably: (i) consent and submit to the personal jurisdiction of, and exclusive venue in, the state and federal courts located in San Francisco County, California; and (ii) waive any jurisdictional or venue objections to such courts, including, without limitation, *forum non conveniens*. The prevailing party in any action to enforce this Agreement will be entitled to costs and attorneys' fees. No provision of this Agreement will be strictly construed against either party, irrespective of which party is deemed to have authored such provision.

13.8 Entire Agreement; Amendment. This Agreement represents the entire understanding of the parties relating to the subject matter hereof and supersedes all prior agreements between the parties relating to the consulting services that Consultant will provide to the Company. For clarity, it is understood and agreed that the following agreements previously entered by the Company and the Consultant shall remain in full force and effect in accordance with their terms: the Stock Option Grant Agreements(s), the Arbitration Agreement (as to disputes relating to the Consultant's prior employment with the Company), the Proprietary Information and Inventions Assignment Agreement, and the Separation Agreement and Release. This Agreement may only be amended in writing executed by an officer of the Company and Consultant.

13.9 Indemnification. Consultant will indemnify and hold the Company and its directors, officers, employees and agents harmless from and against any and all damages, costs, expenses, losses and other liabilities, including, without limitation, reasonable attorney's fees and court costs, incurred in connection with any claim, action or proceeding arising in connection with Consultant's negligence, intentional misconduct or breach of any obligation, representation or warranty hereunder.

13.10 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.

13.11 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 will not be deemed to constitute a waiver with respect to any subsequent breach of any provision hereof, excepting only as to an express written and signed waiver as to a particular matter for a particular period of time.

13.12 Further Actions. Consultant agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

13.13 Counterparts. This Agreement may be executed in two or more counterparts, each of which will be deemed an original and all of which will together be deemed to constitute one agreement

13.14 Return of Equipment and Materials. The Company may provide to Consultant equipment (e.g., a computer) and/or documents, in electronic or hard copy form, to facilitate the performance of the Services on behalf of the Company. Upon the earlier of: (a) the Company's request, or (b) the termination of this Agreement, Consultant shall return to the Company any and all such equipment and all copies of any documents provided to the Consultant by or on behalf of the Company.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

CYTOKINETICS, INC.

CONSULTANT

By: /s/ Robert I. Blum  
Print Name: Robert I. Blum  
Title: President & CEO  
Date: 10/31/11

By: /s/ David J. Morgans, Jr. Ph.D.  
Print Name: David J. Morgans, Jr., Ph.D  
Date: 10/31/11

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**EXHIBIT A**

**SERVICES AND DELIVERABLES**

[\*\*\*]

**\*\*\* Certain information on the page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.**

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**\*\*\* Certain information on the page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.**

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**EXHIBIT B**

**OUTSIDE COMPANIES**

None

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-3 (Nos. 333-125786, 333-129786, 333-138306, 333-146814, 333-155259, 333-174869, and 333-178189) and Form S-8 (Nos. 333-115146, 333-125973, 333-133323, 333-136524, 333-140963, 333-149713, 333-152850, 333-161116, 333-168520, and 333-176089) of Cytokinetics, Incorporated of our report dated March 13, 2012 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP  
San Jose, CA  
March 13, 2012



**PRINCIPAL EXECUTIVE OFFICER CERTIFICATION PURSUANT TO  
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Robert I. Blum, certify that:

1. I have reviewed this Annual Report on Form 10-K of Cytokinetics, Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in the Exchange Act Rules 13a-(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ Robert I. Blum

Robert I. Blum,  
President, Chief Executive Officer and Director  
(Principal Executive Officer)

Date: March 13, 2012

**PRINCIPAL FINANCIAL OFFICER CERTIFICATION PURSUANT TO  
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Sharon A. Barbari, certify that:

1. I have reviewed this Annual Report on Form 10-K of Cytokinetics, Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in the Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ Sharon A. Barbari

Sharon A. Barbari,  
Executive Vice President, Finance and Chief  
Financial Officer (Principal Financial Officer)

Date: March 13, 2012

**CEO and CFO CERTIFICATIONS PURSUANT TO  
RULE 13a-14(b) AND SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002  
(18 U.S.C. Section 1350)**

Pursuant to Rule 13a-14(b) and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, Robert I. Blum, President, Chief Executive Officer and Director, and Sharon A. Barbari, Chief Financial Officer, of Cytokinetics, Incorporated (the "Company"), hereby certify that to the best of our knowledge:

1. The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2011, and to which this certification is attached as Exhibit 32.1 (the "Annual Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and
2. The information contained in this Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ Robert I. Blum

Robert I. Blum,  
President, Chief Executive Officer and Director  
(Principal Executive Officer)

By: /s/ Sharon A. Barbari

Sharon A. Barbari,  
Executive Vice President, Finance and Chief  
Financial Officer (Principal Financial Officer)

Date: March 13, 2012

This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Cytokinetics, Incorporated under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.

