

CYTOKINETICS INC
Form 10-K
March 11, 2010

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**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, 2009
- 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

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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

* The registrant has not yet been phased into the interactive data requirements.

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 \$125.4 million computed by reference to the last sales price of \$2.83 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, 2009. This calculation does not reflect a determination that certain persons are affiliates of the Registrant for any other purpose.

The number of shares outstanding of the Registrant's common stock on February 28, 2010 was 62,464,911 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for its 2010 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.

CYTOKINETICS, INCORPORATED

FORM 10-K

Year Ended December 31, 2009

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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 2010;

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, progress, timing and scope of clinical trials and development activities for our drug candidates and potential drug candidates conducted by ourselves or our partners, 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 studies of our drug candidates and other compounds, and the significance and utility of such results;

our and our partners' plans or ability to conduct the continued research and development of our drug candidates and other compounds;

our expected roles in research, development or commercialization under our strategic alliances, such as with Amgen Inc. (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 plans to seek strategic alternatives for our oncology program with third parties;

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 plans and ability to liquidate our auction rate securities (ARS) investments;

the issuance of shares of our common stock under our committed equity financing facility entered into with Kingsbridge Capital Limited (Kingsbridge) in 2007;

our ability to protect our intellectual property and to avoid infringing the intellectual property rights of others;

expected future sources of revenue and capital;

losses, costs, expenses and expenditures;

future payments under loan and lease obligations and equipment financing lines;

potential competitors and competitive products;

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increasing the number of our employees, 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;

our receipt of funds 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;

unexpected adverse side effects 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 studies or clinical trials 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 U.S. Food and Drug Administration (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;

our ability to enter into partnership agreements for any of our programs on acceptable terms and conditions;

UBS's ability to fulfill its obligations to purchase our ARS beginning on June 30, 2010 pursuant to our settlement agreement;

the conditions in our 2007 committed equity financing facility with Kingsbridge that must be fulfilled before we can require Kingsbridge to purchase our common stock, including the minimum volume-weighted average share price;

our ability to maintain the effectiveness of our registration statement permitting resale of securities to be issued to Kingsbridge by us in connection with our 2007 committed equity financing facility;

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;

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.

When used in this report, unless otherwise indicated, Cytokinetics, the Company, we, our and us refers to Cytokinetics, Incorporated.

CYTOKINETICS, and our logo used alone and with the mark CYTOKINETICS, are registered service marks and trademarks of Cytokinetics. Other service marks, trademarks and trade names referred to in this report are the property of their respective owners.

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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 cardiac muscle myosin, a motor protein that powers cardiac muscle contraction. Our lead drug candidate from this program, omecamtiv mecarbil (formerly known as CK-1827452), is a novel cardiac muscle myosin activator. We have conducted a clinical development program for omecamtiv mecarbil for the potential treatment of heart failure, comprised of a series of Phase I and Phase IIa clinical trials. In May 2009, Amgen acquired an exclusive license to develop and commercialize omecamtiv mecarbil worldwide, except Japan, subject to our development and commercialization participation rights. Amgen is now responsible for the clinical development of omecamtiv mecarbil. 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. CK-2017357 has been studied in two Phase I clinical trials and we anticipate initiating two Phase IIa clinical trials of CK-2017357 in 2010. We believe CK-2017357 may be useful in treating diseases or medical conditions associated with skeletal muscle weakness or wasting. In March 2010, CK-2017357 received an orphan drug designation from the FDA for the treatment of amyotrophic lateral sclerosis. We have also designated a second, structurally distinct, fast skeletal muscle sarcomere activator for development as a backup compound to CK-2017357. Both of these compounds 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 non-clinical development of compounds that directly inhibit smooth muscle myosin, the motor protein central to the contraction of smooth muscle, causing the relaxation of contracted smooth muscle. Compounds from this program may be developed as a potential treatment for diseases associated with bronchoconstriction, vascular constriction, or both.

Earlier research activities at the company were directed to the inhibition of mitotic kinesins, a family of cytoskeletal motor proteins involved in the process of cell division, or mitosis. This research produced three drug candidates that have progressed into clinical testing for the potential treatment of cancer: ispinesib, SB-743921 and GSK-923295. Ispinesib and SB-743921 are structurally distinct inhibitors of kinesin spindle protein and GSK-923295 is an inhibitor of centromere-associated protein E. In December 2009, we announced that we and GlaxoSmithKline (**GSK**) had agreed to terminate our strategic alliance, established in 2001, relating to our mitotic kinesin inhibitors. Further details regarding our strategic alliance with GSK can be found below in Item 1 of this report under **Oncology Program: Mitotic Kinesin Inhibitors** **GSK Strategic Alliance**. We are currently evaluating strategic alternatives for our oncology program with third parties.

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Following is a summary of the status of our drug candidates directed to muscle contractility:

Drug Candidate	Mechanism of Action	Mode of Administration	Potential Indication(s)	Planned 2010 Clinical Activities
Omecamtiv mecarbil	cardiac muscle myosin activator	oral, intravenous	heart failure	Amgen anticipated to initiate in the first half of 2010: <ul style="list-style-type: none"> a Phase Ib pharmacokinetic clinical trial of modified-release and immediate-release oral formulations in stable heart failure patients a Phase Ib safety and pharmacokinetic clinical trial of a modified-release oral formulation in patients with renal dysfunction
CK-2017357	fast skeletal muscle sarcomere activator	oral	diseases and conditions associated with muscle weakness or wasting, e.g., amyotrophic lateral sclerosis, claudication, sarcopenia, cachexia, myasthenia gravis	Cytokinetics anticipates initiating in the first half of 2010: <ul style="list-style-type: none"> a Phase IIa evidence of effect (EOE) clinical trial in patients with amyotrophic lateral sclerosis a Phase IIa EOE clinical trial in patients with claudication

During 2010, we intend to continue non-clinical development of our backup fast skeletal muscle sarcomere activator and of our smooth muscle myosin inhibitors.

All of our drug candidates and potential drug candidates have grown out of 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 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 five drug candidates that have progressed into clinical testing and one potential drug candidate currently in non-clinical development. Each 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 strategy is to discover, develop and commercialize novel drug products that modulate muscle function in ways that may benefit patients with disorders that cause serious diseases or medical conditions, with the goal 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, smooth and skeletal muscle contractility research and development programs. In these programs, we are investigating potential treatments for diseases or medical conditions where dysregulation 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. Many of these diseases and medical conditions affect in particular the growing population of aging patients, a demographic that is the subject of increasing political, regulatory and reimbursement attention. Accordingly, targeting unmet medical needs in these areas may provide us competitive opportunities.

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

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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 to other muscle functions and similarly may impact serious medical diseases and conditions.

This may allow us to develop a diversified pipeline of drug candidates in a cost-effective way while managing risk.

Building development and commercialization capabilities directed at concentrated 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. In this manner, 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.

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; hypertension is a disease in which elevated blood pressure may be decreased by relaxation of the arterial smooth muscle; and asthma is a disease 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 muscle metabolism 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. Following the exercise of its option, Amgen is now responsible for the clinical development of omecamtiv mecarbil, subject to Cytokinetics' development and commercialization participation rights.

CK-2017357 is our lead drug candidate from our skeletal muscle contractility program, and has been the subject of two Phase I clinical trials in healthy volunteers. We plan to initiate at least two Phase IIa clinical trials of CK-2017357 in 2010. Potential indications for which this drug candidate may be useful include skeletal muscle

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weakness associated with neuromuscular diseases and other medical conditions characterized by skeletal muscle weakness or wasting. We have also selected a potential drug candidate from this program that may serve as a backup compound to CK-2017357.

In addition, we are conducting non-clinical development of compounds that are inhibitors of 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.

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 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. However, the increase in calcium levels increases the velocity of cardiac muscle contraction and shortens systolic ejection time, which 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 muscle contractility and cardiac output 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. It is estimated that in 2006, 5.5 million patients in the United States suffered from chronic heart failure. In 2007, approximately 4.5 million patients in the United States had a hospital discharge diagnosis of heart failure. Over 2.4 million of those patients had a primary or secondary diagnosis of heart failure. 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. It is 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 \$37 billion. A portion of that cost is attributable to drugs used to treat each of chronic and acute heart failure. Sales of drugs to treat chronic heart failure reached almost \$2.5 billion in 2006, while sales of drugs to treat acute heart failure reached over \$350 million in 2007.

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. Amgen's option was exercisable during a defined period, the ending of which depended upon the satisfaction of certain conditions, primarily our delivery of certain Phase I and Phase IIa clinical data for omecamtiv mecarbil in accordance with an agreed

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development plan, the results of which reasonably supported its progression into Phase IIb clinical development. In February 2009, we delivered this data to Amgen and 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.

Omecamtiv Mecarbil (formerly CK-1827452). Our lead drug candidate from this program is omecamtiv mecarbil, a novel cardiac muscle myosin activator. We have 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. However, these effects resolved promptly with discontinuation of the infusions of omecamtiv mecarbil.

Amgen is now conducting clinical development of omecamtiv mecarbil following its exercise of its option. 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.

Clinical trials of omecamtiv mecarbil conducted or completed during 2009:

Phase IIa stable heart failure (safety, tolerability, pharmacokinetics and pharmacodynamics): Throughout 2009, we presented final data from our Phase IIa clinical trial evaluating omecamtiv mecarbil administered intravenously to patients with stable heart failure. The final results showed statistically significant increases in systolic ejection time, and in stroke volume, cardiac output, fractional shortening and ejection fraction (all measures of cardiac function), that occurred across the patient population in a concentration-dependent manner. In addition, the data demonstrated statistically significant correlations between increasing omecamtiv mecarbil plasma concentrations and decreases in left ventricular end-systolic volume, left ventricular end-diastolic volume and heart rate. Omecamtiv mecarbil appeared to be generally well-tolerated in stable heart failure patients over a range of plasma concentrations during continuous intravenous administration. Patients with reduced stroke volumes (<50ml) at baseline had generally greater pharmacodynamic responses to omecamtiv mecarbil than those in patients with greater stroke volumes at baseline, demonstrating robust pharmacodynamic activity in this more severely affected sub-population of patients from the trial.

Phase IIa ischemic cardiomyopathy and angina (safety and tolerability): Throughout 2009, we presented data from a double-blind, randomized, placebo-controlled Phase IIa clinical trial evaluating the effect of omecamtiv mecarbil on symptom-limited exercise tolerance in heart failure patients with ischemic cardiomyopathy and angina. The primary safety endpoint of this clinical trial was stopping an exercise treadmill test due to angina at a stage earlier than the

shorter of two baseline exercise treadmill tests. This endpoint occurred in one patient receiving placebo and in no patients receiving either the lower or higher of two dose levels of omecamtiv mecarbil. In heart failure patients with ischemic cardiomyopathy and angina, who theoretically could be most vulnerable to the possible deleterious consequences of systolic ejection time prolongation, treatment with omecamtiv mecarbil, at doses producing plasma concentrations previously demonstrated in other trials to increase cardiac function, did not

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appear to deleteriously affect a broad range of safety assessments in the setting of exercise. Two serious adverse events were reported. Both occurred in a single patient who had received intravenous omecamtiv mecarbil. Both these events were judged by the investigator to have been unrelated to treatment with omecamtiv mecarbil.

Phase IIa stable heart failure (cardiac catheterization): In July 2009, we announced the discontinuation of a Phase IIa clinical trial evaluating an intravenous formulation of omecamtiv mecarbil in patients with stable heart failure undergoing clinically indicated coronary angiography in the cardiac catheterization laboratory. This decision, made jointly by the companies, was due to the challenges of the current trial design and the constraints on enrolling eligible and consenting patients. The companies may revisit the objectives of this trial in the context of the overall clinical development program for omecamtiv mecarbil.

Phase IIa (oral pharmacokinetics): In April 2009, we initiated a Phase IIa, open-label, multi-center, multiple-dose clinical trial designed to evaluate and compare the oral pharmacokinetics of a modified release and an immediate release formulation of omecamtiv mecarbil under fed conditions in patients with stable heart failure. We have closed enrollment in this trial and completed all patient treatment. Cytokinetics and Amgen have been planning a Phase Ib, multi-center, open-label, dose-escalating, sequential-cohort, pharmacokinetic clinical trial of modified-release and immediate-release oral formulations of omecamtiv mecarbil in stable heart failure patients.

Planned Clinical Development. Cytokinetics and Amgen have been planning a Phase Ib, multi-center, open-label, dose-escalating, sequential-cohort, pharmacokinetic clinical trial of modified-release and immediate-release oral formulations of omecamtiv mecarbil in stable heart failure patients. We anticipate that Amgen will initiate this clinical trial in the first half of 2010. Cytokinetics and Amgen have also been planning a Phase Ib, multi-center, open-label, single-dose, safety and pharmacokinetic clinical trial of a modified-release oral formulation of omecamtiv mecarbil in patients with renal dysfunction. We anticipate that Amgen will initiate this clinical trial in the first half of 2010. Both of these clinical trials will be conducted using active pharmaceutical ingredient and drug product manufactured by Amgen.

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 amyotrophic lateral sclerosis (also known as ALS or Lou Gehrig's disease), claudication (which usually refers to cramping pains in the legs caused by peripheral arterial disease), myasthenia gravis, sarcopenia, post-surgical rehabilitation and general frailty associated with aging, and cachexia in connection with heart failure or cancer.

CK-2017357. CK-2017357 is the lead potential drug candidate from this program. In 2009, we announced that we had selected another compound from this program as a backup development compound to CK-2017357. CK-2017357

and its backup development compound are structurally distinct and selective small molecule activators of the fast skeletal sarcomere. These compounds act on fast skeletal muscle troponin. Activation of troponin increases its sensitivity to calcium, leading to an increase in skeletal muscle contractility. This mechanism of action has demonstrated encouraging pharmacological activity in preclinical models. We are evaluating the potential indications for which CK-2017357 may be useful. We anticipate initiating at least two Phase IIa clinical trials of CK-2017357 in 2010: one in patients with ALS and one in patients with claudication. Each of these

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Phase IIa clinical trials is intended to investigate whether CK-2017357 may produce evidence of pharmacodynamic effects in the respective patient population. In March 2010, CK-2017357 received an orphan drug designation from the FDA for the treatment of ALS.

Market Potential for CK-2017357 and Other Skeletal Sarcomere Activators. Limited options exist for the treatment of ALS, which afflicts between 20,000 and 30,000 people in the United States. The average life expectancy of an ALS patient is approximately three to five years from the onset of symptoms and only 10% of patients survive for more than 10 or more years. Death is usually due to respiratory failure because of diminished strength in the skeletal muscles responsible for breathing. Claudication is a condition that may impact as many as 3 million people in the United States. We are evaluating other market opportunities for CK-2017357 and for other compounds that may arise from our skeletal muscle contractility program.

CK-2017357 Clinical Development:

Phase I (first-time in humans): In June 2009, we initiated the first part, or Part A, of a Phase I, first-time-in-humans, ascending, single-dose, double-blind, placebo-controlled clinical trial of CK-2017357. This trial is designed to assess the safety, tolerability and pharmacokinetic profile of this drug candidate administered orally in healthy male volunteers and to determine its maximum tolerated dose and plasma concentration. Doses of up to 2000 mg have been administered in this trial without intolerable adverse events being observed.

Part B of this trial, initiated in November 2009 and completed in January 2010, was a double-blind, randomized, placebo-controlled, crossover study in healthy male volunteers of single oral doses of CK-2017357 that were tolerated in Part A. The volunteers in Part B received each of three single oral doses of 250, 500 and 1000 mg of CK-2017357 and oral placebo treatment in a 4-period crossover design. In order to assess the effects of CK-2017357 on skeletal muscle function, the force generated by the tibialis anterior muscle was measured during external nerve stimulation across a range of frequencies. In preclinical studies characterizing the relationship between the force produced by the muscle and the frequency at which it was stimulated, CK-2017357 appeared to produce more force at lower to mid-range nerve stimulation frequencies, which are the physiologic frequencies at which motor neurons stimulate skeletal muscle during normal function, than placebo. Part B of this trial was designed to assess if these effects of CK-2017357 could be recapitulated in humans. The doses of CK-2017357 administered in Part B produced concentration-dependent, statistically significant increases versus placebo in the force developed by the tibialis anterior. CK-2017357 was well-tolerated in Part B, and no serious adverse events were reported. Adverse events of dizziness and euphoric mood appeared to increase in frequency with increasing doses of CK-2017357; however, all of these adverse events were characterized as mild in severity. We intend to make a more complete presentation of data from Part B of this trial at an appropriate scientific forum to be determined.

Phase I (multi-dose): In November 2009, we initiated and in January 2010, we completed a Phase I clinical trial designed to determine the safety and tolerability of CK-2017357 after multiple oral doses to steady state in healthy male volunteers. A secondary objective of this trial was to evaluate the pharmacokinetic profile of CK-2017357 after multiple oral doses to steady state. The trial evaluated doses that produced plasma concentrations in the range associated with the pharmacodynamic activity observed in Part B of the single-dose, first-time-in-humans Phase I clinical trial of CK-2017357. At steady state, both the maximum plasma concentration and the area under the CK-2017357 plasma concentration versus time curve from before dosing until 24 hours after dosing were generally dose proportional. In general, systemic exposure to CK-2017357 in this trial was high and inter-subject variability was low. In addition, these multiple dose regimens of CK-2017357 were well-tolerated, and no serious adverse events were reported. Adverse events of dizziness appeared to increase in frequency with increasing doses of CK-2017357, consistent with the incidence of dizziness observed at similar doses in Part B of the single-dose Phase I clinical trial. Events of euphoric mood occurred on CK-2017357 but not on placebo; however, they did not appear to be related to the dose level and their frequency was lower than was observed at similar dose levels in Part B of the single-dose

Phase I clinical trial.

Planned Clinical Development: Our goal in 2010 is to initiate and report data from at least two Phase IIa clinical trials of CK-2017357 designed to detect potential improvements in muscle function in populations of patients with neuromuscular disease or medical conditions associated with muscle wasting or fatigue. These clinical trials, which we refer to as evidence of effect clinical trials, are intended to translate pharmacodynamic assessments

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demonstrated in healthy volunteers to impaired populations and potentially to establish statistically significant and clinically relevant evidence of pharmacodynamic effects. These trials may then form the basis for larger clinical trials designed to demonstrate proof of concept in which improvements may be seen in the consequences of disease over time. We anticipate initiating an evidence of effect clinical trial of CK-2017357 in patients with ALS in the first half of 2010. We also anticipate initiating an evidence of effect clinical trial of CK-2017357 in patients with claudication in the first half of 2010.

CK-2017357 Non-Clinical Development:

In December 2009, we presented non-clinical data relating to CK-2017357 and our skeletal muscle contractility program at the Society on Cachexia and Wasting Disorders 5th Annual Cachexia Conference.

We anticipate continuing non-clinical development studies of the backup potential drug candidate in our skeletal muscle contractility program throughout 2010.

Ongoing research in skeletal muscle activators. Our research on the direct activation of skeletal muscle continues in two areas. In addition to continuing our work with selective fast skeletal sarcomere activators from new structural series, we are conducting translational research with our existing series of skeletal sarcomere activators to explore the potential applications of this novel approach in preclinical studies. We also have a research program aimed at the discovery and validation of 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. Because the contractile elements in non-striated muscle are not arranged into sarcomeres, 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 bronchoconstriction and may have application for indications such as asthma or chronic obstructive pulmonary disease. Our smooth muscle myosin inhibitors, administered orally or intravenously, have demonstrated pharmacological activity in preclinical models of vascular constriction. Smooth muscle myosin inhibitors administered orally may have application in systemic hypertension. We intend to continue to conduct non-clinical development of compounds from this program.

Ongoing research in smooth muscle myosin inhibitors. In November 2009, we presented three abstracts summarizing non-clinical data from our smooth muscle myosin inhibitor program at the 2009 Scientific Sessions of the American Heart Association.

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 vasodilators that act by indirectly causing smooth muscle relaxation, such as commonly used 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.

Oncology Program: Mitotic Kinesin Inhibitors

Overview. We currently have three drug candidates for the potential treatment of cancer: ispinesib, SB-743921 and GSK-923295. All of these arose from our earlier research activities directed to the role of the cytoskeleton in cell division and were progressed under our strategic alliance with GSK. This strategic alliance was established in 2001 to discover, develop and commercialize novel small molecule therapeutics targeting mitotic kinesins for applications in the treatment of cancer and other diseases. Mitotic kinesins are a family of cytoskeletal motor proteins involved in the process of cell division, or mitosis. Under this strategic alliance, we focused primarily on two mitotic kinesins: kinesin spindle protein (KSP) and centromere-associated protein E (CENP-

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E). Inhibition of KSP or CENP-E interrupts cancer cell division, causing cell death. Ispinesib and SB-743921 are structurally distinct small molecules that specifically inhibit KSP. GSK-923295 specifically inhibits CENP-E.

In November 2006, we amended our strategic alliance with GSK and assumed responsibility, at our expense, for the continued research, development and commercialization of inhibitors of KSP, including ispinesib and SB-743921, and other mitotic kinesins, other than CENP-E. GSK retained an option to resume responsibility for the development and commercialization of either or both of ispinesib and SB-743921. This option expired at the end of 2008. Accordingly, we retain all rights to ispinesib and SB-743921, subject to certain royalty obligations to GSK. We have agreed with GSK to terminate our strategic alliance effective February 28, 2010. Accordingly, we have retained all rights to GSK-923295, subject to certain royalty obligations to GSK. GSK remains responsible for completing its Phase I clinical trial of GSK-923295, at its expense. We are evaluating strategic alternatives for the future development and commercialization of ispinesib, SB-743921 and GSK-923295 with third parties.

We have completed patient treatment in the Phase I portion of a Phase I/II clinical trial of ispinesib in breast cancer patients and have closed the trial. We have completed patient enrollment in the Phase I portion of our Phase I/II clinical trial for SB-743921 in patients with Hodgkin or non-Hodgkin lymphoma and intend to complete the Phase I portion of this trial. GSK is completing the on-going Phase I clinical trial of GSK-923295. We are evaluating strategic alternatives for the future development and commercialization of ispinesib, SB-743921 and GSK-923295 with third parties.

Background on Anti-Cancer Market. It is estimated that the market for oncology products exceeded \$48 billion worldwide in 2008. Within this market, we estimate that sales of drugs that inhibit mitosis, or anti-mitotic drugs, comprise a large portion of the commercial market for anti-cancer drugs. Taxanes, an important subset of anti-mitotic drugs, include paclitaxel from Bristol-Myers Squibb, and docetaxel from Sanofi-Aventis Pharmaceuticals Inc.

Mitotic Kinesin Inhibitors. Since their introduction over 40 years ago, anti-mitotic drugs such as taxanes and vinca alkaloids have advanced the treatment of cancer and are commonly used for the treatment of several tumor types. However, these drugs have demonstrated limited treatment benefit against certain cancers. In addition, these drugs target tubulin, a cytoskeletal protein involved not only in mitosis and cell proliferation, but also in other important cellular functions. Inhibition of these other cellular functions produces dose-limiting toxicities such as peripheral neuropathy, an impairment of peripheral nervous system function.

Mitotic kinesins are also essential to mitosis, but, unlike tubulin, are not believed to be present in non-dividing cells. We believe that drugs that inhibit KSP, CENP-E and other mitotic kinesins may represent the next generation of anti-mitotic cancer drugs by arresting mitosis and cell proliferation without impacting unrelated, normal cellular functions, thereby avoiding many of the toxicities commonly experienced by patients treated with existing anti-mitotic drugs. We believe that our anti-cancer drug candidates may be safer and, in certain tumor types, more effective than current anti-mitotic drugs. Preclinical studies of ispinesib, SB-743921 and GSK-923295 indicate that the primary toxicities of these drug candidates are limited to gastrointestinal side effects and a reduction in bone marrow function. In clinical trials of ispinesib and SB-743921, the major dose-limiting toxicity observed was neutropenia, a decrease in the number of a certain type of white blood cell, which was generally reversible. Limited or no evidence of drug-related toxicities to the nervous system, heart, lung, kidney or liver was observed. In a Phase I clinical trial of GSK-923295, the dose-limiting toxicities were fatigue and hypokalemia, a lower-than normal amount of potassium in the blood. We believe that these safety profiles could potentially increase the therapeutic value of our mitotic kinesin inhibitors relative to other anti-mitotic drugs, and that a mitotic kinesin inhibitor drug candidate that is shown to have efficacy in one tumor type may also potentially have applications in other tumor types.

Ispinesib. Under our strategic alliance, GSK, in collaboration with the National Cancer Institute, sponsored the initial clinical trials program for ispinesib, which consisted of nine Phase II clinical trials and eight Phase I or Ib clinical

trials evaluating ispinesib in a variety of both solid and hematologic cancers. To date, we believe clinical activity for ispinesib has been observed in non-small cell lung, ovarian and breast cancers, with the most clinical activity observed in a Phase II clinical trial evaluating ispinesib in the treatment of patients with locally advanced or metastatic breast cancer that had failed treatment with taxanes and anthracyclines. In addition, preclinical and Phase Ib clinical data on ispinesib indicate that it may have an additive effect when combined with certain existing

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chemotherapeutic agents. As a result of the expiration of GSK's option relating to ispinesib, we have retained all development and commercialization rights to ispinesib, subject to certain royalty obligations to GSK.

Throughout 2009, we continued to conduct the Phase I portion of an open-label, non-randomized Phase I/II clinical trial designed to evaluate ispinesib as monotherapy administered as a first-line treatment in chemotherapy-naïve patients with locally advanced or metastatic breast cancer. This trial was designed to be a proof-of-concept study to potentially amplify the previously observed signals of clinical activity in breast cancer patients by using a more dose-dense schedule. The primary objectives of the Phase I portion of this clinical trial were to determine the dose-limiting toxicities and maximum-tolerated dose, and to assess the safety and tolerability of ispinesib administered as a 1-hour intravenous infusion on days 1 and 15 of a 28-day cycle. In June 2009, we presented interim data from this trial, which included tumor reductions of at least 30% in three patients. Ispinesib appeared to demonstrate anti-cancer activity with a similar tolerability profile when compared with prior clinical trials conducted with a once every 21 days dosing schedule. We have completed patient treatment in the Phase I portion of this trial and have closed the trial. We are evaluating strategic alternatives for the future development and commercialization of ispinesib with third parties.

SB-743921.

SB-743921 was studied by GSK in a dose-escalating Phase I clinical trial in advanced cancer patients using a once every 21-day dosing schedule. Dose-limiting toxicities in this clinical trial consisted predominantly of neutropenia and elevations in hepatic enzymes and bilirubin. Disease stabilization, ranging from 9 to 45 weeks, was observed in seven patients; one patient with cholangiocarcinoma had a confirmed partial response at the maximum tolerated dose. As a result of the expiration of GSK's option relating to SB-743921, we have retained all development and commercialization rights to SB-743921, subject to certain royalty obligations to GSK.

Throughout 2009, we continued to conduct the Phase I portion of a Phase I/II clinical trial of SB-743921 in patients with Hodgkin or non-Hodgkin lymphoma. The primary objectives of the Phase I portion of this trial are to determine the dose-limiting toxicities and maximum tolerated dose and to assess the safety and tolerability of SB-743921 administered as a 1-hour intravenous infusion on days 1 and 15 of a 28-day cycle, a more dose-dense schedule than was previously evaluated, first without and then with the prophylactic administration of granulocyte colony-stimulating factor (G-CSF). Throughout 2009, we presented interim data from this trial at several scientific conferences. For SB-743921 given with G-CSF support, the maximum-tolerated dose was 9 mg/m² and the main dose-limiting toxicity of SB-743921 was thrombocytopenia and neutropenia. A greater dose-density was achieved with SB-743921 given on a once every two week schedule without prophylactic G-CSF than a once every 21 days schedule. Grade 3 or 4 toxicities other than myelosuppression were infrequent, and there was no evidence of neuropathy or alopecia greater than grade 1. An efficacy signal was observed at doses at or above 6 mg/m² in Hodgkin lymphoma patients. Of the 55 patients evaluable for efficacy, four partial responses (three patients with Hodgkin lymphoma and one with indolent non-Hodgkin lymphoma) were observed. The duration of the response in the patients with a partial response was between 8 weeks and 28 weeks. The authors concluded that further evaluation of SB-743921 in selected Hodgkin lymphoma populations as a single agent, and in combination with other promising drug candidates, is warranted. We have closed enrollment in this trial and intend to complete patient treatment in the Phase I portion of this trial. We are evaluating strategic alternatives for the future development and commercialization of SB-743921 with third parties.

GSK-923295.

GSK-923295, an inhibitor of CENP-E, is the third drug candidate to arise from our strategic alliance with GSK. GSK-923295 causes partial and complete shrinkages of human tumors in animal models and has exhibited properties in these studies distinguishing it from ispinesib and SB-743921. Following the agreed termination of our strategic

alliance with GSK in February 2010, we have retained all development and commercialization rights to GSK-923295, subject to certain royalty obligations to GSK.

During 2009, GSK continued to enroll patients and dose-escalate in its Phase I clinical trial of GSK-923295. The primary objective of this dose-escalation and pharmacokinetic Phase I clinical trial is to determine the maximum-tolerated dose, dose-limiting toxicities, safety and pharmacokinetics of GSK-923295 in patients with advanced, refractory solid tumors. GSK-923295 was well-tolerated at doses ranging from 10 to 190 mg/m². Among

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the 38 patients enrolled in the trial, six received the maximum tolerated dose of 190 mg/m², and eight received a higher dose of 250 mg/m², at which dose-limiting toxicity was observed in three of seven evaluable patients. Dose-limiting toxicities occurred in two patients with grade 3 fatigue and one with grade 3 hypokalemia, a lower-than-normal amount of potassium in the blood. No clear dose-related effects on hematologic parameters or gastro-intestinal toxicities were observed. A 50% decrease in the sum of tumor diameters (partial response) was observed in one patient with urothelial carcinoma, which was achieved after six cycles at 250 mg/m². GSK-923295 exposure appeared to be dose-proportional across the range of doses studied. GSK has agreed to complete this clinical trial, at its expense. We are evaluating strategic alternatives for the future development and commercialization of GSK-923295 with third parties.

Non-Clinical Research: Non-clinical data relating to GSK-923295 were presented at the April 2009 American Association of Cancer Research Annual Meeting, the June 2009 Annual Meeting of the American Society of Clinical Oncology, the November 2009 AACR-NCI-EORTC International Conference and the December 2009 32nd Annual San Antonio Breast Cancer Symposium.

Research and Development Expense

Our research and development expense was \$39.8 million, \$54.0 million, and \$53.4 million for 2009, 2008 and 2007, respectively, and \$377.3 million for the period from August 5, 1997 (date of inception) through December 31, 2009. Total operating expense was \$55.4 million, \$71.5 million, and \$70.1 million for 2009, 2008 and 2007, respectively, and \$495.9 million for the period from date of inception through December 31, 2009.

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, 2009, we had 144 issued U.S. patents and over 200 additional pending U.S. and foreign patent applications. In addition, we have an exclusive license from the University of California and Stanford University to 16 issued U.S. patents and an issued European patent. 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 relating to omecamtiv mecarbil and a U.S. patent relating to our skeletal muscle sarcomere activators, 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. With regard to our oncology drug candidates, we have a U.S. patent covering ispinesib that will expire in 2020, unless extended; a U.S. patent covering SB-743921 that will expire in 2023, unless extended; and a U.S. patent covering GSK-923295 that will expire in 2025, unless extended. We have additional U.S. and foreign patent applications pending for each of ispinesib, SB-743921 and GSK-923295. It is not known or determinable whether patents will issue from any of these 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 grant patents are not always

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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.

Currently, we are aware of an issued U.S. patent and at least one pending U.S. patent application assigned to Curis, Inc. (Curis), relating to certain compounds in the quinazolinone class. Ispinesib falls into this class of compounds. The Curis U.S. patent claims a method of inhibiting signaling by what is called the hedgehog pathway using certain quinazolinone compounds. Curis also has pending applications in Europe, Japan, Australia and Canada with claims covering certain quinazolinone compounds, compositions thereof and methods of their use. Two of the Australian applications have been allowed and two of the European applications have been granted. We have opposed the

granting of certain of these patents to Curis in Europe and in Australia. Curis has withdrawn one of the Australian applications. One of the European patents that we opposed was recently revoked and is no longer valid in Europe. Curis has appealed this decision.

Curis or a third party may assert that the manufacture, use, importation or sale of ispinesib may infringe one or more of its patents. We believe that we have valid defenses against the issued U.S. patent owned by Curis if it were to be asserted against us. However, we cannot guarantee that a court would find these defenses valid or that any additional defenses would be successful. We have not attempted to obtain a license to these patents. If we decide to seek a license to these patents, we cannot guarantee that such a license would be available on acceptable terms, if at all.

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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 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;

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 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 in animals. The results of preclinical tests, together with manufacturing information and analytical

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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. 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 Food and Drug Amendments Act of 2007 generally requires that the clinical trials we conduct for our drug candidates, both before and after approval, and the results of those trials, 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

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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. 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. Once the submission has been accepted for filing, by law the FDA has 180 days to review the application and respond to the applicant. The review process is often significantly extended by FDA requests for additional information or clarification. The FDA may refer the NDA to an advisory committee for review, evaluation and recommendation as to whether the application should be approved. The FDA often, but not always, follows the advisory board's recommendations. The FDA may deny approval of an NDA 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.

An 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.

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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 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 and cancer, 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, diseases and medical conditions associated with skeletal muscle weakness and wasting, and cancer. 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, diseases where there is muscle dysfunction, and cancer, 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 reliability;

the speed and cost-effectiveness at 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 istaroxamine, which is being developed by Debiopharm Group; bucindolol, which is being developed by ARCA biopharma, Inc.; relaxin, which is being developed by Novartis; and CD-NP, which is being developed by Nile Therapeutics, Inc. In addition, there are a number of medical devices being developed for the potential treatment of heart failure.

With respect to CK-2017357 and other compounds that may arise from our skeletal muscle contractility program, we are aware that Ligand Pharmaceuticals, Inc. is developing LGD-4033, a selective androgen receptor modulator, for muscle wasting; GTx, Inc. and Merck & Co. are collaborating to conduct clinical trials with ostarine, a selective androgen receptor modulator, for a variety of potential indications, including sarcopenia, cancer cachexia and other musculoskeletal wasting or muscle loss conditions; and Amgen is investigating AMG 745, a myostatin inhibitor, for its utility in inhibiting muscle loss associated with a variety of diseases and conditions. 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.

Similarly, if approved for marketing by the FDA, depending on the approved clinical indication, our anti-cancer drug candidates ispinesib, SB-743921 and GSK-923295 would compete against existing cancer treatments such as paclitaxel (and its generic equivalents), docetaxel, vincristine, vinorelbine, navelbine, ixabepilone and potentially against other novel anti-cancer drug candidates that are currently in development. These include compounds that are reformulated taxanes, other tubulin binding compounds or epothilones. We are also aware that Merck & Co., Inc., Eli Lilly and Company, Bristol-Myers Squibb Company, AstraZeneca AB, Array Biopharma Inc., ArQule, Inc., Anylam, Inc. and others are conducting research and development focused on KSP and other mitotic kinesins. In addition, Bristol-Myers Squibb Company, Merck & Co., Inc., Novartis, Genentech, Hoffman-La Roche Ltd., Eisai, Inc., Seattle Genetics, Inc. and other pharmaceutical and biopharmaceutical companies are developing other approaches to treating cancer.

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 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, 2009, our workforce consisted of 111 full-time employees, 29 of whom hold Ph.D. or M.D. degrees, or both, and 21 of whom hold other advanced degrees. Of our total workforce, 81 are engaged in research and development and 30 are engaged in business development, finance and administration functions.

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. As a result, we focused our research activities to our muscle contractility programs while continuing our then-ongoing clinical trials in heart failure and

cancer, and discontinued early research activities directed to oncology. To implement this plan, we reduced our workforce at the time by approximately 29%, or 45 employees, to 112 employees. The affected employees were provided with severance and related benefits payments and outplacement assistance.

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.

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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(a) 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 <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 <http://www.cytokinetics.com> or by contacting the Investor Relations Department at our corporate offices by calling 650-624-3000.

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 in the early stages of 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, GSK and others, equipment financings, interest on investments and government grants. We believe that our existing cash and cash equivalents, short-term investments, interest earned on investments, proceeds from our loan with UBS Bank USA and proceeds already received from our equity financings 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 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. Until we can generate a

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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 milestone and royalty payments that we may receive under our collaboration and option agreement with Amgen. We may not receive any further funds under either of these agreements. 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, such funding, if needed, may not be available to us on favorable terms, or at all.

If we can not raise the funds we need to operate our business, we will need to discontinue certain research and development activities and our stock price likely would be negatively affected.

We depend on Amgen for the conduct, completion and funding of the clinical development and commercialization of omecamtiv mecarbil (formerly known as CK-1827452).

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 now 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. For example, in October 2009, Amgen informed us that it wishes to conduct additional pharmacokinetic studies in heart failure patients receiving oral doses of omecamtiv mecarbil before commencing a Phase IIb study with omecamtiv mecarbil in this patient population. As a result, the start of the first Phase IIb trial for omecamtiv mecarbil is currently anticipated to occur in 2011. 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 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

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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 that have progressed into clinical development are: omecamtiv mecarbil, our drug candidate for the potential treatment of heart failure; CK-2017357, our drug candidate for the potential treatment of diseases associated with aging, muscle wasting and neuromuscular dysfunction; and ispinosib, SB-743921 and GSK-923295, our drug candidates for the potential treatment of cancer. 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 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 will need to demonstrate efficacy for the treatment of specific indications and monitor safety throughout the clinical 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 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 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 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 these applications are or have been filed with respect to our drug candidates, the

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results of preclinical studies do not necessarily predict the results of clinical trials. For example, although preclinical testing indicated that ispinesib causes tumor regression in a variety of tumor types, to date, Phase II clinical trials of ispinesib have not shown clinical activity in all of these tumor types. Similarly, 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.

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. For example, in a number of two-stage Phase II clinical trials designed to evaluate the safety and efficacy of ispinesib as monotherapy in the first- or second-line treatment of patients with different forms of cancer, ispinesib did not satisfy the criteria for advancement to Stage 2. 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 than we or our partners do, 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 to cease clinical trials with respect to any drug candidate. If these or other adverse effects are severe or frequent enough to outweigh the potential efficacy of a drug candidate, the FDA or other regulatory authorities could deny approval of that drug candidate for any or all targeted indications. The FDA, other regulatory authorities, our partners or we may suspend or terminate clinical trials with our drug candidates at any time. 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, intolerable doses 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 clinical trials of ispinesib, the most commonly observed dose-limiting toxicity was neutropenia, a decrease in the number of a certain type of white blood cell that results in an increase in susceptibility to infection. In a Phase I clinical trial of SB-743921, the dose-limiting toxicities observed were: prolonged neutropenia, with or without fever and with or without infection; elevated transaminases and hyperbilirubinemia, both of which are abnormalities of liver function; and hyponatremia, which is a low concentration of sodium in the blood. In a Phase I clinical trial of CK-2017357, adverse events of dizziness and euphoric mood appeared to increase in frequency with increasing doses of CK-2017357.

In addition, clinical trials of omecamtiv mecarbil, CK-2017357 and our anti-cancer drug candidates will enroll patients who typically suffer from serious diseases which put them at increased risk of death, and they 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

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study drug-related. For example, in the 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;

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;

an 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;

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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.

We have retained all rights to develop and commercialize CK-2017357, ispinesib, SB-743921 and GSK-923295. We currently do not have a strategic partner for these drug candidates. We are relying on GSK to complete its Phase I clinical trial for GSK-923295, and we then will be responsible for any further clinical development of GSK-923295. We expect to rely on one or more strategic partners or other arrangements with third parties to advance and develop each of CK-2017357, ispinesib, SB-743921, GSK-923295 and other 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.

We rely on Amgen to conduct preclinical 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.

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.

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

We utilize contract research organizations (CROs) for our clinical trials of CK-2017357, ispinesib and SB-743921 within and outside of the United States. 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.

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. We have relied on GSK to conduct these activities for the ongoing clinical development of GSK-923295. For CK-2017357, ispinesib, SB-743921 and our other drug candidates and potential drug candidates, we rely (and for omecamtiv mecarbil, we have relied) on a limited number of contract manufacturers, and, 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,

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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 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

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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 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 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 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, their methods of manufacture and use, and our technologies. Our ability to protect our 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 and drug candidates, including omecamtiv mecarbil, CK-2017357, ispinesib, SB-743921 and GSK-923295, 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

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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.

Under our license agreement with the University of California and Stanford University, we have obtained an exclusive license to certain issued U.S. and European patents relating to certain of our research activities. Since we have not fully met certain of our obligations under this license agreement, including certain diligence obligations, this agreement may be terminated, in which case we would no longer have a license to these patents or to future patents that may issue from the pending applications. This may impair our ability to continue to practice the research methods covered by the issued patents. Alternatively, our license rights may become non-exclusive, which would allow the University of California and Stanford University to grant third parties the right to practice those patents. Our drug candidates and potential drug candidates in development are not covered by the patents subject to this license agreement.

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.

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 U.S. Congress is currently considering bills that could change U.S. law regarding, among other things, post-grant review of issued patents and the calculation of damages once patent infringement has been determined by a court of law. If enacted into law, these provisions could severely weaken patent protection 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.

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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.

Currently, we are aware of an issued U.S. patent and at least one pending U.S. patent application assigned to Curis, Inc., relating to certain compounds in the quinazolinone class. Ispinesib falls into this class of compounds. The Curis U.S. patent claims a method of inhibiting signaling by what is called the hedgehog pathway using certain quinazolinone compounds. Curis also has pending applications in Europe, Japan, Australia and Canada with claims covering certain quinazolinone compounds, compositions thereof and methods of their use. Two of the Australian applications have been allowed and two of the European applications have been granted. We have opposed the granting of certain of these patents to Curis in Europe and in Australia. Curis has withdrawn one of the Australian applications. One of the European patents that we opposed was recently revoked and is no longer valid in Europe. Curis has appealed this decision.

Curis or a third party may assert that the manufacture, use, importation or sale of isspinesib may infringe one or more of its patents. We believe that we have valid defenses against the issued U.S. patent owned by Curis if it were to be asserted against us. However, we cannot guarantee that a court would find these defenses valid or that any additional defenses would be successful. We have not attempted to obtain a license to these patents. If we decide to seek a license to these patents, we cannot guarantee that such a license would be available on acceptable terms, if at all.

Other future products of ours may be impacted by patents of companies engaged in competitive programs with significantly greater resources (such as Bayer AG, Merck & Co., Inc., Merck GmbH, Eli Lilly and Company, Bristol-Myers Squibb Company and AstraZeneca AB). Further development of these products could be impacted by these patents and result in significant legal fees.

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

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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 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 may lose valuable intellectual property rights or personnel. A loss of key research personnel or their work product could hamper or prevent our ability to commercialize certain potential drugs, which could 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, cancer 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 istaroxamine, which is being developed by Debiopharm Group; bucindolol, which is being developed by ARCA biopharma, Inc.; relaxin, which is being developed by Novartis; and CD-NP, which is being developed by Nile Therapeutics, Inc. In addition, there are a number of medical devices being developed for the potential treatment of heart failure.

With respect to CK-2017357 and other compounds that may arise from our skeletal muscle contractility program, we are aware that Ligand Pharmaceuticals, Inc. is developing LGD-4033, a selective androgen receptor modulator, for muscle wasting; GTx, Inc. and Merck & Co. are collaborating to conduct clinical trials with ostarine, a selective

androgen receptor modulator, for a variety of potential indications, including sarcopenia, cancer cachexia and other musculoskeletal wasting or muscle loss conditions; and Amgen is investigating AMG 745, a myostatin inhibitor, for its utility in inhibiting muscle loss associated with a variety of diseases and conditions.

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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.

If approved for marketing by the FDA, depending on the approved clinical indication, our anti-cancer drug candidates ispinesib, SB-743921 and GSK-923295 would compete against existing cancer treatments such as paclitaxel (and its generic equivalents), docetaxel, vincristine, vinorelbine, navelbine, ixabepilone and potentially against other novel anti-cancer drug candidates that are currently in development. These include compounds that are reformulated taxanes, other tubulin binding compounds or epothilones. We are also aware that Merck & Co., Inc., Eli Lilly and Company, Bristol-Myers Squibb Company, AstraZeneca AB, Array Biopharma Inc., ArQule, Inc., Anylam, Inc. and others are conducting research and development focused on KSP and other mitotic kinesins. In addition, Bristol-Myers Squibb Company, Merck & Co., Inc., Novartis, Genentech, Hoffman-La Roche Ltd., Eisai, Inc., Seattle Genetics, Inc. and other pharmaceutical and biopharmaceutical companies are developing other approaches to treating cancer.

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;

- 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.

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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.

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 currently 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.

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 light of our continued need for funding and cost control, we may be required to implement future workforce and expense reductions, which may negatively affect our productivity and limit our research and development activities. For example, as part of our strategic restructuring and workforce reduction in 2008, we discontinued our early research activities in oncology. 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 addition, the implementation of workforce or expense reduction programs may divert the efforts of our management team and other key employees, which could adversely affect our business.

We currently have no sales or marketing staff 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 on 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

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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, which regulations differ from country to country. Neither we nor our partners are permitted to market our potential drugs in the United States until we receive approval of a 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.

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. 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. 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.

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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;

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 drugs 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 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 our drugs would cause our revenue 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

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

Until we can generate a sufficient amount of product revenue to finance our cash requirements, which we may never do, we expect to 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

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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 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 months and 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 drug candidates, such as omecamtiv mecarbil for heart failure; CK-2017357 for the potential treatment of diseases associated with aging, muscle wasting and neuromuscular dysfunction; and ispinesib, SB-743921 or GSK-923295 for cancer (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 alliances 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;

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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;

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; or

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 28, 2010, our executive officers, directors and their affiliates beneficially owned or controlled approximately 25.5% 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.

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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, 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. Our assessment, testing and evaluation of the design and operating effectiveness of our internal control over financial reporting resulted in our conclusion that, as of December 31, 2009, our internal control over financial reporting was effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosures. However, 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 will require us to file corporate financial statement information in a new interactive data format known as XBRL beginning in 2011. We will incur significant costs and need to invest considerable resources to implement and to remain in compliance with these new requirements.

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.

Risks Related To Our Financing Vehicles and Investments

Our committed equity financing facility with Kingsbridge may not be available to us if we elect to make a draw down, may require us to make additional blackout or other payments to Kingsbridge, and may result in dilution to our stockholders.

In October 2007, we entered into a committed equity financing facility with Kingsbridge. This committed equity financing facility entitles us to sell and obligates Kingsbridge to purchase, from time to time over a period of three years, shares of our common stock for cash consideration up to an aggregate of \$75.0 million, subject to certain

conditions and restrictions. To date, we have received \$10.3 million in gross proceeds under this committed equity financing facility. We may sell a maximum of 9,779,411 shares under this committed equity financing facility. This is approximately the maximum number of shares we may sell to Kingsbridge without our stockholders' approval under the rules of the NASDAQ Stock Market LLC. This limitation may further limit the amount of proceeds we are able to obtain from this committed equity financing facility.

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Kingsbridge will not be obligated to purchase shares under this committed equity financing facility unless certain conditions are met, which include a minimum volume-weighted average price of \$2.00 for our common stock; the accuracy of representations and warranties made to Kingsbridge; compliance with laws; effectiveness of the registration statement registering for resale the shares of common stock to be issued in connection with this committed equity financing facility; and the continued listing of our stock on NASDAQ. In addition, Kingsbridge may terminate this committed equity financing facility if it determines that a material adverse event has occurred affecting our business, operations, properties or financial condition and if such condition continues for a period of 10 days from the date Kingsbridge provides us notice of such material adverse event. If we are unable to access funds through this committed equity financing facility, we may be unable to access additional capital on reasonable terms or at all.

We are entitled, in certain circumstances, to deliver a blackout notice to Kingsbridge to suspend the use of the resale registration statement and prohibit Kingsbridge from selling shares under the resale registration statement. If we deliver a blackout notice in the 15 trading days following the settlement of a stock sale, or if the registration statement is not effective in circumstances not permitted by the agreement, then we must make a payment to Kingsbridge, or issue Kingsbridge additional shares in lieu of this payment. This payment or issuance of shares is calculated based on the number of shares actually held by Kingsbridge pursuant to the most recent sale of stock under the committed equity financing facility and the change in the market price of our common stock during the period in which the use of the registration statement is suspended. If the trading price of our common stock declines during a suspension of the registration statement, the blackout payment or issuance of shares could be significant.

When we choose to sell shares to Kingsbridge under this committed equity financing facility, or issue shares in lieu of a blackout payment, it will have a dilutive effect on our current stockholders' holdings, and may result in downward pressure on the price of our common stock. The share price for sales of stock to Kingsbridge under this committed equity financing facility is discounted by up to 10% from the volume weighted average price of our common stock. If we sell stock under this committed equity financing facility when our share price is decreasing, we will need to issue more shares to raise the same amount of cash than if our stock price was higher. Issuances of stock in the face of a declining share price will have an even greater dilutive effect than if our share price were stable or increasing, and may further decrease our share price.

We may be required to record impairment charges in future quarters as a result of the decline in value of our investments in auction rate securities.

We hold interest-bearing student loan auction rate securities (ARS) that represent investments in pools of assets. These ARS were intended to provide liquidity via an auction process that resets the applicable interest rate at predetermined calendar intervals, allowing investors to either roll over their holdings or gain immediate liquidity by selling such interests at par value. The uncertainties in the credit markets have affected all of our holdings in ARS and auctions for our ARS have failed to settle on their respective settlement dates. Consequently, these ARS are not currently liquid and we will not be able to access these funds until a future auction of the ARS is successful, the issuer redeems the outstanding ARS, the ARS mature or a buyer is found outside of the auction process. Maturity dates for these ARS range from 2036 to 2045. As of December 31, 2009, we have recorded \$2.4 million of cumulative unrealized losses in the statements of operations related to the ARS that we hold in our investment portfolio. If the current market conditions deteriorate further, or the anticipated recovery in market values does not occur, we may be required to record additional unrealized losses due to further declines in value in future quarters. This could adversely impact our results of operations and financial condition. We have entered into a settlement agreement with UBS AG relating to the failed auctions of our ARS through which UBS AG and its affiliates may provide us with additional funds based on these ARS. However, if we are unable to access the funds underlying or secured by these ARS in a timely manner, we may need to find alternate sources of funding for certain of our operations, which may not be available on favorable terms, or at all, and our business could be adversely affected.

We may not be able to recover the value of our ARS under our settlement agreement with UBS AG.

We have entered into a settlement agreement with UBS AG relating to the failed auctions of our ARS through which UBS AG and its affiliates may provide us with additional funds based on these ARS. In accepting the settlement offer, we agreed to give up certain rights and accept certain risks. Under this settlement, UBS AG has

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issued to us Series C-2 Auction Rate Securities Rights (the ARS Rights). The ARS Rights entitle us to require UBS AG to purchase our ARS, through UBS Securities LLC and UBS Financial Services Inc. (the UBS Entities) as agents for UBS AG, from June 30, 2010 through July 2, 2012 at par value, i.e., at a price equal to the liquidation preference of the ARS plus accrued but unpaid interest, if any. We intend to liquidate our ARS on June 30, 2010, the earliest date we can exercise the ARS Rights.

In connection with the ARS Rights, we granted to the UBS Entities the right to sell or otherwise dispose of, and/or enter orders in the auction process with respect to, our ARS on our behalf at its discretion, so long as we receive a payment of par value upon any sale or disposition. The ARS Rights are not transferable, tradable or marginable, and will not be listed or quoted on any securities exchange or any electronic communications network. If our ARS are sold through the UBS Entities, we will cease to receive interest on these ARS. We may not be able to reinvest the cash proceeds of any sale of these ARS at the same interest rate currently being paid to us with respect to our ARS.

In connection with the settlement, 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. We have drawn down the full amount available under the loan agreement. The borrowings under the loan agreement are payable upon demand, subject to UBS Financial Services' obligations to arrange alternative financing for us under certain circumstances. As of December 31, 2009, the loan balance was \$10.2 million as a result of the sale of certain ARS at par value.

While we entered into the settlement in expectation that UBS AG will fulfill its obligations in connection with the ARS Rights, UBS AG may not have sufficient financial resources to satisfy these obligations. The U.S. and worldwide financial markets have recently experienced unprecedented volatility, particularly in the financial services sector. UBS AG may not be able to maintain the financial resources necessary to satisfy its obligations with respect to the ARS Rights in a timely manner or at all. UBS AG's obligations in connection with the ARS Rights are not secured by UBS AG's assets or otherwise, nor guaranteed by any other entity. UBS AG is not required to obtain any financing to support its obligations. If UBS AG is unable to perform its obligations in connection with the ARS Rights, we will have no certainty as to the liquidity or value for our ARS. In addition, UBS AG is a Swiss bank and all or a substantial portion of its assets are located outside the United States. As a result, it may be difficult for us to serve legal process on UBS AG or its management or cause any of them to appear in a U.S. court. Judgments based solely on U.S. securities laws may not be enforceable in Switzerland. As a result, if UBS AG fails to fulfill its obligations, we may not be able to effectively seek recourse against it.

In consideration for the ARS Rights, we agreed to release UBS AG, the UBS Entities, and/or their affiliates, directors and officers from any claims directly or indirectly relating to the marketing and sale of our ARS, other than consequential damages. Even if UBS AG fails to fulfill its obligations in connection with ARS Rights, this release may still be held to be enforceable.

Item 1B. *Unresolved Staff Comments*

None.

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 in South San Francisco, California until 2013 with an option to renew that lease over that timeframe. We also lease 31,392 square feet at 256 East Grand Avenue in South San Francisco, California until 2011. 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. *Reserved*

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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
Fiscal 2008:		
First Quarter	\$ 4.73	\$ 3.00
Second Quarter	\$ 4.17	\$ 2.81
Third Quarter	\$ 5.69	\$ 3.61
Fourth Quarter	\$ 4.43	\$ 2.00
Fiscal 2009:		
First Quarter	\$ 2.87	\$ 1.45
Second Quarter	\$ 3.08	\$ 1.64
Third Quarter	\$ 5.30	\$ 2.71
Fourth Quarter	\$ 5.24	\$ 2.59

On February 26, 2010, the last reported sale price for our common stock on the NASDAQ Global Market was \$3.04 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 26, 2010, there were 124 holders of record of our common stock.

On December 29, 2006, in connection with entering into our collaboration and option agreement with Amgen, we contemporaneously entered into a common stock purchase agreement with Amgen, which provided for the sale of 3,484,806 shares of our common stock at a price per share of \$9.47, an aggregate purchase price of approximately \$33.0 million, and a registration rights agreement that provides Amgen with certain registration rights with respect to these shares. The shares were issued to Amgen on January 2, 2007. Pursuant to the common stock purchase agreement, Amgen has agreed to certain trading and other restrictions with respect to our common stock. We relied on the exemption from registration contained in Section 4(2) of the Securities Act in connection with the issuance and sale of the shares to Amgen.

Table of Contents**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, 2004 through December 31, 2009 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.

	12/31/04	12/31/05	12/31/06	12/31/07	12/31/08	12/31/09
Cytokinetics, Incorporated	\$ 100.00	\$ 63.80	\$ 72.98	\$ 46.15	\$ 27.80	\$ 28.39
NASDAQ Stock Market (U.S.) Index	\$ 100.00	\$ 102.28	\$ 112.81	\$ 124.70	\$ 59.78	\$ 86.87
NASDAQ Biotechnology Index	\$ 100.00	\$ 102.87	\$ 103.97	\$ 108.79	\$ 95.13	\$ 110.20

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.

Table of Contents**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,				
	2009	2008	2007	2006	2005
	(In thousands, except per share amounts)				
Statement of Operations Data:					
Revenues:					
Research and development revenues from related parties(2)	\$ 7,171	\$ 186	\$ 1,388	\$ 1,622	\$ 4,978
Research and development, grant and other revenues				4	1,134
License revenues from related parties(2)	74,367	12,234	12,234	1,501	2,800
Total revenues	81,538	12,420	13,622	3,127	8,912
Operating expenses:					
Research and development	39,840	53,950	53,388	49,225	40,570
General and administrative	15,626	15,076	16,721	15,240	12,975
Restructuring charges (reversals)	(23)	2,473			
Total operating expenses	55,443	71,499	70,109	64,465	53,545
Operating income (loss)	26,095	(59,079)	(56,487)	(61,338)	(44,633)
Interest and other, net(3)	(1,401)	2,705	7,593	4,223	2,381
Net income (loss) before income taxes	24,694	(56,374)	(48,894)	(57,115)	(42,252)
Provision for income taxes	150				
Net income (loss)	\$ 24,544	\$ (56,374)	\$ (48,894)	\$ (57,115)	\$ (42,252)
Net income (loss) per common share:					
Basic	\$ 0.43	\$ (1.14)	\$ (1.03)	\$ (1.56)	\$ (1.48)
Diluted	\$ 0.42	\$ (1.14)	\$ (1.03)	\$ (1.56)	\$ (1.48)
Weighted average shares used in computing net income (loss) per common share:(1)					
Basic	57,390	49,392	47,590	36,618	28,582
Diluted	57,961	49,392	47,590	36,618	28,582

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	2009	2008	As of December 31, 2007 (In thousands)	2006	2005
Balance Sheet Data:					
Cash, cash equivalents and short- and long-term investments(1)	\$ 112,369	\$ 73,503	\$ 139,764	\$ 109,542	\$ 76,212
Restricted cash	1,674	2,750	5,167	6,034	5,172
Working capital	96,735	36,033	95,568	127,228	67,600
Total assets	122,599	87,454	155,370	169,516	91,461
Long-term portion of equipment financing lines	985	2,615	4,639	7,144	6,636
Deficit accumulated during the development stage	(311,363)	(335,907)	(279,533)	(230,639)	(173,524)
Total stockholders equity(1)	101,428	49,766	99,916	106,313	73,561

- (1) Our initial public offering was declared effective by the SEC and our common stock commenced trading on April 29, 2004. We sold 7,935,000 shares of common stock in the offering for net proceeds of approximately \$94.0 million. In addition, we sold 538,461 shares of our common stock to GlaxoSmithKline (GSK) immediately prior to the closing of our initial public offering for net proceeds of approximately \$7.0 million. Also in conjunction with our initial public offering, all of the outstanding shares of our convertible preferred stock were converted into 17,062,145 shares of our common stock. In December 2005, we sold 887,576 shares of common stock to Kingsbridge Capital Limited (Kingsbridge) pursuant to the committed equity financing facility we entered into with Kingsbridge in 2005 for net proceeds of \$5.5 million. In 2006, we sold 10,285,715 shares in two registered direct offerings for net proceeds of approximately \$66.9 million, and sold 2,740,735 shares of common stock to Kingsbridge pursuant to the 2005 committed equity financing facility for net proceeds of \$17.0 million. 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.
- (2) Revenues from related parties consisted of revenues recognized under our research and development arrangements with related parties, including Amgen and GSK. See Note 5 in the Notes to Financial Statements for further details.
- (3) Interest and Other, net consisted of interest income/expense and other income/expense. For the year ended December 2009 and 2008, it also included warrant expense and an unrealized gain (loss) on our auction rate securities (ARS) and investment put option related to the Series C-2 ARS Rights issued to us by UBS AG. See Note 13 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

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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. We intend 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 activators of cardiac muscle myosin, a motor protein that powers cardiac muscle contraction. Our lead drug candidate from this program is omecamtiv mecarbil (formerly known as CK-1827452). We have conducted a clinical development program for omecamtiv mecarbil for the potential treatment of heart failure, comprised of a series of Phase I and Phase IIa clinical trials. In May 2009, Amgen acquired an exclusive license to develop and commercialize omecamtiv mecarbil worldwide, except Japan, subject to our development and commercialization participation rights. Amgen is now responsible for the clinical development of omecamtiv mecarbil.

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. CK-2017357 has been studied in two Phase I clinical trials and we plan to initiate at least two Phase IIa clinical trials of CK-2017357 in 2010. In March 2010, CK-2017357 received an orphan drug designation from the FDA for the treatment of amyotrophic lateral sclerosis. We have also designated a second, structurally distinct, fast skeletal muscle sarcomere activator for development as a backup compound to CK-2017357.

In our smooth muscle contractility program, we are conducting non-clinical development of compounds that directly inhibit smooth muscle myosin, the motor protein central to the contraction of smooth muscle, causing the relaxation of contracted smooth muscle. Compounds from this program may be developed as a potential treatment for diseases associated with bronchoconstriction, vascular constriction, or both.

Earlier research activities at the company were directed to the inhibition of mitotic kinesins, a family of cytoskeletal motor proteins involved in the process of cell division, or mitosis. This research produced three drug candidates that have progressed into clinical testing for the potential treatment of cancer: ispinesib, SB-743921 and GSK-923295. In December 2009, we announced that we and GlaxoSmithKline (GSK) had agreed to terminate our strategic alliance, established in 2001, relating to our mitotic kinesin inhibitors. We are currently evaluating strategic alternatives for our oncology program with third parties.

Muscle Contractility Programs

Cardiac Muscle Contractility Program

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 Inc. 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 this option and subsequently 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, except 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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We have 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. However, these effects resolved promptly with discontinuation of the infusions of omecamtiv mecarbil.

Throughout 2009, we presented final data from our Phase IIa clinical trial evaluating omecamtiv mecarbil administered intravenously to patients with stable heart failure. The final results showed statistically significant increases in systolic ejection time, and in stroke volume, cardiac output, fractional shortening and ejection fraction (all measures of cardiac function), that occurred across the patient population in a concentration-dependent manner. In addition, the data demonstrated statistically significant correlations between increasing omecamtiv mecarbil plasma concentrations and decreases in left ventricular end-systolic volume, left ventricular end-diastolic volume and heart rate. Omecamtiv mecarbil appeared to be generally well-tolerated in stable heart failure patients over a range of plasma concentrations during continuous intravenous administration. Patients with reduced stroke volumes (<50ml) at baseline had generally greater pharmacodynamic responses to omecamtiv mecarbil than those in patients with greater stroke volumes at baseline, demonstrating robust pharmacodynamic activity in this more severely affected sub-population of patients from the trial.

Throughout 2009, we presented data from a double-blind, randomized, placebo-controlled Phase IIa clinical trial evaluating the effect of omecamtiv mecarbil on symptom-limited exercise tolerance in heart failure patients with ischemic cardiomyopathy and angina. The primary safety endpoint of this clinical trial was stopping an exercise treadmill test due to angina at a stage earlier than the shorter of two baseline exercise treadmill tests. This endpoint occurred in one patient receiving placebo and in no patients receiving either the lower or higher of two dose levels of omecamtiv mecarbil. In heart failure patients with ischemic cardiomyopathy and angina, who theoretically could be most vulnerable to the possible deleterious consequences of systolic ejection time prolongation, treatment with omecamtiv mecarbil, at doses producing plasma concentrations previously demonstrated in other trials to increase cardiac function, did not appear to deleteriously affect a broad range of safety assessments in the setting of exercise. Two serious adverse events were reported. Both occurred in a single patient who had received intravenous omecamtiv mecarbil. Both these events were judged by the investigator to have been unrelated to treatment with omecamtiv mecarbil.

In April 2009, we initiated a Phase IIa, open-label, multi-center, multiple-dose clinical trial designed to evaluate and compare the oral pharmacokinetics of a modified release and an immediate release formulation of omecamtiv mecarbil under fed conditions in patients with stable heart failure. We have closed enrollment in this trial and completed all patient treatment. Cytokinetics and Amgen have been planning a Phase Ib, multi-center, open-label, dose-escalating, sequential-cohort, pharmacokinetic clinical trial of modified-release and immediate-release oral formulations of omecamtiv mecarbil in stable heart failure patients.

In July 2009, we announced the discontinuation of a Phase IIa clinical trial evaluating an intravenous formulation of omecamtiv mecarbil in patients with stable heart failure undergoing clinically indicated coronary angiography in the cardiac catheterization laboratory. This decision, made jointly by the companies, was due to the challenges of the current trial design and the constraints on enrolling eligible and consenting patients. The companies may revisit the objectives of this trial in the context of the overall clinical development program for omecamtiv mecarbil.

Amgen is now responsible for clinical development of omecamtiv mecarbil following its exercise of its option. 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. Cytokinetics and Amgen have been planning a Phase Ib, multi-center, open-label, dose-escalating, sequential-cohort, pharmacokinetic clinical trial of modified-release and immediate-release oral formulations of omecamtiv mecarbil in stable heart failure patients. We anticipate that Amgen will initiate this clinical trial in the

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first half of 2010. Cytokinetics and Amgen have also been planning a Phase Ib, multi-center, open-label, single-dose, safety and pharmacokinetic clinical trial of a modified-release oral formulation of omecamtiv mecarbil in patients with renal dysfunction. We anticipate that Amgen will initiate this clinical trial in the first half of 2010. Both of these clinical trials will be conducted using active pharmaceutical ingredient and drug product manufactured by Amgen.

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 when or if 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 \$9.9 million, \$20.9 million and \$22.4 million in the years ended December 31, 2009, 2008 and 2007, respectively. Subsequent to Amgen's option exercise, in 2009 we received and recognized \$7.1 million as revenue reimbursement from Amgen, including \$4.0 million for the transfer of our existing inventories of omecamtiv mecarbil and related reference materials and \$3.1 million for full-time employee equivalent (FTE) and out of pocket expense reimbursement.

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 Program

CK-2017357 is the lead potential drug candidate from this program. In 2009, we announced that we had selected another compound from this program as a backup development compound to CK-2017357. CK-2017357 and its backup development compound are structurally distinct and selective small molecule activators of the fast skeletal sarcomere. These compounds act on fast skeletal muscle troponin. Activation of troponin increases its sensitivity to calcium, leading to an increase in skeletal muscle contractility. This mechanism of action has demonstrated encouraging pharmacological activity in preclinical models. We are evaluating the potential indications for which CK-2017357 may be useful. In March 2010, CK-2017357 received an orphan drug designation from the FDA for the treatment of amyotrophic lateral sclerosis, also known as ALS or Lou Gehrig's disease.

In June 2009, we initiated the first part, or Part A, of a two-part, Phase I, first-time-in-humans, ascending, single-dose, double-blind, placebo-controlled clinical trial of CK-2017357. This trial is designed to assess the safety, tolerability and pharmacokinetic profile of this drug candidate administered orally in healthy male volunteers and to determine its maximum tolerated dose and plasma concentration. Doses of up to 2000 mg have been administered in this trial without intolerable adverse events being observed.

Part B of this trial, initiated in November 2009 and completed in January 2010, was a double-blind, randomized, placebo-controlled, crossover study in healthy male volunteers of single oral doses of CK-2017357 that were tolerated in Part A. The doses administered to the healthy volunteers in Part B produced concentration-dependent, statistically significant increases versus placebo in the force developed by the tibialis anterior, the muscle evaluated in this trial. The doses administered in Part B were well tolerated, and there were no serious adverse events reported. Adverse events of dizziness and euphoric mood were categorized as mild in severity, and appeared to increase in frequency with increasing doses of CK-2017357. We intend to make a more complete presentation of data from Part B of this trial at an appropriate scientific forum to be determined.

In November 2009, we initiated, and in January 2010 we completed, a Phase I clinical trial designed to determine the safety and tolerability of CK-2017357 after multiple oral doses to steady state in healthy male volunteers. The trial evaluated doses that produced plasma concentrations in the range associated with the pharmacodynamic activity observed in Part B of the single-dose Phase I study. At steady state, both the maximum plasma concentration and the area under the CK-2017357 plasma concentration versus time curve from before

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dosing until 24 hours after dosing were generally dose proportional. In general, systemic exposure to CK-2017357 in this trial was high and inter-subject variability was low. In addition, these multiple dose regimens of CK-2017357 were well tolerated, and no serious adverse events were reported. Adverse events of dizziness appeared to increase in frequency with increasing doses of CK-2017357, consistent with the incidence of dizziness observed at similar doses in Part B of the single-dose Phase I clinical trial. Events of euphoric mood occurred on CK-2017357 but not on placebo; however, they did not appear to be related to the dose level and their frequency was lower than was observed at similar dose levels in Part B of the single-dose Phase I clinical trial.

In December 2009, we presented non-clinical data relating to CK-2017357 and our skeletal muscle contractility program at the Society on Cachexia and Wasting Disorders 5th Annual Cachexia Conference.

We anticipate initiating at least two Phase IIa clinical trials of CK-2017357 in 2010: one in patients with ALS and one in patients with claudication. Each of these Phase IIa clinical trials is intended to investigate whether CK-2017357 may produce evidence of pharmacodynamic effects in the respective patient population.

We anticipate continuing non-clinical development studies of the backup potential drug candidate in our skeletal muscle contractility program throughout 2010.

CK-2017357 is 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 its 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 \$17.5 million, \$10.5 million and \$5.9 million in the years ended December 31, 2009, 2008 and 2007, 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, its back-up compound or other compounds from this program into and through development.

Smooth Muscle Contractility Program

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. 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 bronchoconstriction and may have application for indications such as asthma or chronic obstructive pulmonary disease. Our smooth muscle myosin inhibitors, administered orally or intravenously, have demonstrated pharmacological activity in preclinical models of vascular constriction. Smooth muscle myosin inhibitors administered orally may have application in systemic hypertension. We intend to continue to conduct non-clinical development of compounds from this program.

In November 2009, we presented three abstracts summarizing non-clinical data from our smooth muscle myosin inhibitor program at the 2009 Scientific Sessions of the American Heart Association.

This potential drug candidate is 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 its 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 \$5.0 million, \$7.3 million and \$7.0 million in the years ended December 31, 2009, 2008 and 2007, 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.

Oncology Program: Mitotic Kinesin Inhibitors

We currently have three drug candidates for the potential treatment of cancer: ispinesib, SB-743921 and GSK-923295. All of these arose from our earlier research activities directed to the role of the cytoskeleton in cell division and were progressed under our strategic alliance with GSK. This strategic alliance was established in 2001 to

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discover, develop and commercialize novel small molecule therapeutics targeting mitotic kinesins for applications in the treatment of cancer and other diseases. Mitotic kinesins are a family of cytoskeletal motor proteins involved in the process of cell division, or mitosis. Under this strategic alliance, we focused primarily on two mitotic kinesins: kinesin spindle protein (KSP) and centromere-associated protein E (CENP-E). Inhibition of KSP or CENP-E interrupts cancer cell division, causing cell death. Ispinesib and SB-743921 are structurally distinct small molecules that specifically inhibit KSP. GSK-923295 specifically inhibits CENP-E.

In November 2006, we amended our strategic alliance with GSK and assumed responsibility, at our expense, for the continued research, development and commercialization of inhibitors of KSP, including ispinesib and SB-743921, and other mitotic kinesins, other than CENP-E. GSK retained an option to resume responsibility for the development and commercialization of either or both of ispinesib and SB-743921. This option expired at the end of 2008. As a result, we have retained all rights to develop and commercialize ispinesib and SB-743921, subject to certain royalty obligations to GSK. In December 2009, we agreed with GSK to terminate this strategic alliance, effective February 28, 2010. Accordingly, we have retained all rights to develop and commercialize GSK-923295, subject to certain royalty obligations to GSK. We are evaluating strategic alternatives for the future development and commercialization of ispinesib, SB-743921 and GSK-923295 with third parties.

Ispinesib

Under our strategic alliance, GSK, in collaboration with the National Cancer Institute, sponsored the initial clinical trials program for ispinesib, which consisted of nine Phase II clinical trials and eight Phase I or Ib clinical trials evaluating ispinesib in a variety of both solid and hematologic cancers. To date, we believe clinical activity for ispinesib has been observed in non-small cell lung, ovarian and breast cancers, with the most clinical activity observed in a Phase II clinical trial evaluating ispinesib in the treatment of patients with locally advanced or metastatic breast cancer that had failed treatment with taxanes and anthracyclines. In addition, preclinical and Phase Ib clinical data on ispinesib indicate that it may have an additive effect when combined with certain existing chemotherapeutic agents. As a result of the expiration of GSK's option relating to ispinesib, we have retained all development and commercialization rights to ispinesib, subject to certain royalty obligations to GSK.

Throughout 2009, we continued to conduct the Phase I portion of an open-label, non-randomized Phase I/II clinical trial designed to evaluate ispinesib as monotherapy administered as a first-line treatment in chemotherapy-naïve patients with locally advanced or metastatic breast cancer. This trial was designed to be a proof-of-concept study to potentially amplify the previously observed signals of clinical activity in breast cancer patients by using a more dose-dense schedule. The primary objectives of the Phase I portion of this clinical trial were to determine the dose-limiting toxicities and maximum-tolerated dose, and to assess the safety and tolerability of ispinesib administered as a 1-hour intravenous infusion on days 1 and 15 of a 28-day cycle. In June 2009, we presented interim data from this trial, which included tumor reductions of at least 30% in 3 patients. Ispinesib appeared to demonstrate anti-cancer activity with a similar tolerability profile when compared with prior clinical trials conducted with a once every 21 days dosing schedule. We have completed patient treatment in the Phase I portion of this trial and have closed the trial. We are evaluating strategic alternatives for the future development and commercialization of ispinesib with third parties.

SB-743921

SB-743921 was studied by GSK in a dose-escalating Phase I clinical trial in advanced cancer patients using a once every 21-day dosing schedule. Dose-limiting toxicities in this clinical trial consisted predominantly of neutropenia and elevations in hepatic enzymes and bilirubin. Disease stabilization, ranging from 9 to 45 weeks, was observed in seven patients; one patient with cholangiocarcinoma had a confirmed partial response at the maximum tolerated dose. As a result of the expiration of GSK's option relating to SB-743921, we have retained all development and

commercialization rights to SB-743921, subject to certain royalty obligations to GSK.

Throughout 2009, we continued to conduct the Phase I portion of a Phase I/II clinical trial of SB-743921 in patients with Hodgkin or non-Hodgkin lymphoma. The primary objectives of the Phase I portion of this trial are to determine the dose-limiting toxicities and maximum tolerated dose and to assess the safety and tolerability of SB-743921 administered as a 1-hour intravenous infusion on days 1 and 15 of a 28-day cycle, a more dose-dense

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schedule than was previously evaluated, first without and then with the prophylactic administration of granulocyte colony-stimulating factor (G-CSF). Throughout 2009, we presented interim data from this trial at several scientific conferences. For SB-743921 given with G-CSF support, the maximum-tolerated dose was 9 mg/m² and the main dose-limiting toxicity of SB-743921 was thrombocytopenia and neutropenia. A greater dose-density was achieved with SB-743921 given on a once every two week schedule without prophylactic G-CSF than a once every 21 days schedule. Grade 3 or 4 toxicities other than myelosuppression were infrequent, and there was no evidence of neuropathy or alopecia greater than grade 1. An efficacy signal was observed at doses at or above 6 mg/m² in Hodgkin lymphoma patients. Of the 55 patients evaluable for efficacy, four partial responses (three patients with Hodgkin lymphoma and one with indolent non-Hodgkin lymphoma) were observed. The duration of the response in the patients with a partial response was between 8 weeks and 28 weeks. The authors concluded that further evaluation of SB-743921 in selected Hodgkin lymphoma populations as a single agent, and in combination with other promising drug candidates, is warranted. We have closed enrollment in this trial and intend to complete patient treatment in the Phase I portion of this trial. We are evaluating strategic alternatives for the future development and commercialization of SB-743921 with third parties.

GSK-923295

GSK-923295, an inhibitor of CENP-E, is the third drug candidate to arise from our strategic alliance with GSK. GSK-923295 causes partial and complete shrinkages of human tumors in animal models and has exhibited properties in these studies distinguishing it from ispinesib and SB-743921. Following the agreed termination of our strategic alliance with GSK in February 2010, we have retained all development and commercialization rights to GSK-923295, subject to certain royalty obligations to GSK, subject to certain royalty obligations to GSK.

Under our strategic alliance, GSK was responsible, at its expense, for the development of and commercialization of GSK-923295. During 2009, GSK continued to enroll patients and dose-escalate in its Phase I clinical trial of GSK-923295. The primary objective of this dose-escalation and pharmacokinetic Phase I clinical trial is to determine the maximum-tolerated dose, dose-limiting toxicities, safety and pharmacokinetics of GSK-923295 in patients with advanced, refractory solid tumors. GSK-923295 was well-tolerated at doses ranging from 10 to 190 mg/m². Among the 38 patients enrolled in the trial, six received the maximum tolerated dose of 190 mg/m², and eight received a higher dose of 250 mg/m², at which dose-limiting toxicity was observed in three of seven evaluable patients. Dose-limiting toxicities occurred in two patients with grade 3 fatigue and one with grade 3 hypokalemia, a lower-than-normal amount of potassium in the blood. No clear dose-related effects on hematologic parameters or gastro-intestinal toxicities were observed. A 50% decrease in the sum of tumor diameters (partial response) was observed in one patient with urothelial carcinoma, which was achieved after six cycles at 250 mg/m². GSK-923295 exposure appeared to be dose-proportional across the range of doses studied. GSK has agreed to complete this clinical trial, at its expense. We are evaluating strategic alternatives for the future development and commercialization of GSK-923295 with third parties.

Non-clinical data relating to GSK-923295 were presented at the April 2009 American Association of Cancer Research Annual Meeting, the June 2009 Annual Meeting of the American Society of Clinical Oncology, the November 2009 AACR-NCI-EORTC International Conference and the December 2009 32nd Annual San Antonio Breast Cancer Symposium.

Each of ispinesib, SB-743921 and GSK-923295 is 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 its commercialization. We currently fund all research and development costs associated with ispinesib and SB-743921. Following GSK's completion of its Phase I clinical trial of GSK-923295, we will be responsible for any further research and development costs associated with GSK-923295. We recorded research and development expenses for activities relating to our mitotic kinesins oncology program of approximately \$3.6 million, \$7.0 million and \$5.8 million in the years ended December 31,

2009, 2008 and 2007, respectively. We received and recognized as revenue reimbursements from GSK of FTE and other expenses related to our mitotic kinesins oncology program of \$45,000, \$0.2 million and \$0.4 million for the years ended December 31, 2009, 2008 and 2007, respectively. Following completion of the current Phase I portions of the Phase I/II clinical trials for each of ispinesib and SB-743921 and the current Phase I clinical trial of GSK-923295, we do not currently intend to conduct any further development of these drug candidates ourselves. We are evaluating strategic alternatives to continue the development of ispinesib,

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SB-743921 and GSK-923295 with third parties. We may not be able to enter into an agreement regarding such an alternative on acceptable terms, if at all.

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;

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 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

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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 precommercialization and commercialization milestones. Milestone payments are non-refundable and are recognized as revenue when earned, as evidenced by the achievement of the specified milestones and the absence of ongoing performance obligations.

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 from GSK in 2006 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. 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. Milestone payments are non-refundable and are recognized as revenue when earned, as evidenced by achievement of the specified milestones and the absence of ongoing performance obligations. We record amounts received in advance of performance as deferred revenue. The revenues recognized to date are non-refundable, even if the relevant research effort is not successful. In December 2008, GSK's option to license ispinesib and SB-743291 expired and all rights to these drug candidates remain with us under the collaboration and license agreement, subject to our royalty obligations to GSK. In December 2009, we agreed with GSK to terminate this strategic alliance, effective February 28, 2010. Accordingly, we have retained all rights to develop and commercialize 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 precommercialization 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 later-stage 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 and 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 June 2006, under our amended collaboration and license agreement with GSK, we assumed responsibility for the continued research, development and

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commercialization of inhibitors of KSP, including ispinesib and SB-743921, and other mitotic kinesins other than CENP-E, at our sole expense. In addition, we expect to incur minimal research and development expenses for the close-out of the clinical trials for ispinesib and SB-743921 and for potential translational research relating to our mitotic kinesin inhibitors.

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, 2009, we incurred costs of approximately \$134.8 million for research and development activities relating to our cardiac muscle contractility program, \$35.9 million for our skeletal muscle contractility program, \$26.4 million for our smooth muscle contractility program, \$70.9 million for our mitotic kinesin inhibitors program, \$53.7 million for our proprietary technologies and \$55.6 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. We expect that general and administrative expenses will increase in 2010.

Restructuring

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. As a result, we focused our research activities to our muscle contractility programs while continuing our then-ongoing clinical trials in heart failure and cancer, and discontinued early research activities directed to oncology. To implement this plan, we reduced our workforce at the time by approximately 29%, or 45 employees, to 112 employees. The affected employees were provided with severance and related benefits payments and outplacement assistance.

We have completed all restructuring activities and recognized all anticipated restructuring charges. All severance payments were made as of December 31, 2008.

As a result of the restructuring plan, in 2008 we recorded total restructuring charges of \$2.2 million for employee severance and benefit related costs and a \$0.3 million charge related to the impairment of lab equipment that was held for sale. In 2009, we recorded a net reduction in restructuring charges of \$23,000, representing primarily the reversal of employee benefit related accruals partially offset by impairment losses on held-for-sale equipment.

Stock Compensation

The following table summarizes stock-based compensation related to stock options, restricted stock awards and employee stock purchases for 2009, 2008 and 2007, which was allocated as follows (in thousands):

	Years Ended December 31,		
	2009	2008	2007
Research and development	\$ 2,345	\$ 2,794	\$ 2,932
General and administrative	2,561	2,812	2,621

Stock-based compensation included in operating expenses	\$ 4,906	\$ 5,606	\$ 5,553
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As of December 31, 2009, there was \$5.4 million of total unrecognized compensation cost related to non-vested stock options granted under our stock plans. That cost is expected to be recognized over a weighted-average period of 2.3 years. The total unrecognized compensation expense related to restricted stock awards as of December 31, 2009 was \$0.3 million and is expected to be recognized over a weighted-average period of 0.7 years. In addition, through 2008, we continued to amortize deferred stock-based compensation recorded for stock options granted prior to our initial public offering. The remaining balance became fully amortized in 2008.

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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 bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce the deferred tax assets to the amounts expected to be realized. We did not record an income tax provision in the years ended December 31, 2008 and 2007 because we had a net taxable loss in each of those periods. We recorded an income tax provision of \$150,000 in 2009 due to Alternative Minimum Tax.

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, 2009 and 2008. 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 decreased by \$9.56 million in 2009, and increased by \$23.9 million and \$18.3 million in 2008 and 2007, respectively.

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 not undergoing any income tax examinations. 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 net operating loss carryforwards of approximately \$284.3 million and state net operating loss carryforwards of approximately \$111.6 million before federal benefit at December 31, 2009. If not utilized, the federal and state operating loss carryforwards will begin to expire in various amounts beginning 2020 and 2009, respectively. The net operating loss 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 \$10.4 million and \$11.8 million for federal and state income tax purposes, respectively, at December 31, 2009. If not utilized, the federal carryforwards will expire in various amounts beginning in 2021. The California state credit can be carried forward indefinitely.

The Tax Reform Act of 1986 limits the use of net operating loss and tax credit carryforwards in certain situations where equity transactions resulted in a change of ownership as defined by Internal Revenue Code Section 382. During the year ended December 31, 2007, we conducted a study and determined that our use of our federal research credit is subject to 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.

Interest and penalties were zero for 2009 and 2008. We account for interest 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, net of valuation allowances necessary to reflect expectations of realizability, to change materially over the next twelve months.

Table of Contents**Results of Operations*****Years ended December 31, 2009, 2008 and 2007****Revenues*

	Years Ended December 31,			Increase (Decrease)	
	2009	2008	2007	2009	2008
	(In millions)				
Research and development revenues from related parties	\$ 7.1	\$ 0.2	\$ 1.4	\$ 6.9	\$ (1.2)
License revenues from related parties	74.4	12.2	12.2	62.2	
Total revenues	\$ 81.5	\$ 12.4	\$ 13.6	\$ 69.1	\$ (1.2)

We recorded total revenues of \$81.5 million, \$12.4 million and \$13.6 million for the years ended December 31, 2009, 2008 and 2007, respectively.

Research and development revenues from related parties refers to revenues from our strategic alliances with Amgen and GSK. Research and development revenues from Amgen were \$7.1 million in 2009, and zero in 2008 and 2007. 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 \$45,000, \$0.2 million and \$1.4 million in 2009, 2008 and 2007, respectively. Research and development revenues from GSK in 2009 and 2008 consisted of patent expense reimbursements. Research and development revenues from GSK of \$1.4 million in 2007 consisted of a \$1.0 million milestone payment for GSK's initiation of a Phase I clinical trial of GSK-923295, and patent expense reimbursements of \$0.4 million. In each of June 2006, 2007 and 2008, the research term of our strategic alliance with GSK was extended for an additional year under an updated research plan focused only on CENP-E without corresponding FTE reimbursement. In December 2008, GSK's option to license each of *ispinesib* and SB-743921 as provided under the parties' collaboration and license agreement expired. Accordingly, we retain all rights to both *ispinesib* and SB-743921, subject to certain royalty obligations to GSK. In December 2009, we and GSK agreed to terminate the collaboration and license agreement, effective February 28, 2010. As a result, all rights to GSK-923295 reverted to us at that time, subject to certain royalty obligations to GSK.

License revenues from related parties refers to license revenues from our strategic alliance with Amgen. License revenues were \$74.4 million, \$12.2 million and \$12.2 million in 2009, 2008 and 2007, respectively. License revenues for 2009 consisted of the \$50.0 million option exercise fee received from Amgen in June 2009 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. License revenue of \$12.2 million in each of 2008 and 2007 consisted of amortization of the 2006 upfront non-exclusive license and technology access fee and stock purchase premium from Amgen.

Deferred revenue related to the Amgen collaboration and option agreement and our related common stock purchase agreement with Amgen was \$0.8 million at December 31, 2009 and \$24.5 million at December 31, 2008. The deferred

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revenue balance at December 31, 2009 related to Amgen's prepayment of FTE reimbursements. The deferred revenue balance at December 31, 2008 represented the unrecognized portion of the non-exclusive license and technology access fee and stock purchase premium from 2006.

Research and development expenses

	Years Ended December 31,			Increase (Decrease)	
	2009	2008	2007	2009	2008
	(In millions)				
Research and development expenses	\$ 39.8	\$ 54.0	\$ 53.4	\$ (14.2)	\$ 0.6

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Research and development expenses decreased \$14.2 million in 2009 compared to 2008, and increased \$0.6 million in 2008 compared to 2007. The decrease in 2009 was primarily due to decreases in clinical and preclinical outsourcing costs of \$9.8 million related to our cardiac muscle contractility and mitotic kinesin inhibitors clinical trial programs and preclinical outsourcing costs, \$2.2 million for personnel related costs and \$2.0 million for laboratory and facility related costs. The slight increase in 2008 research and development expenses, compared to 2007, was primarily due to an increase of \$3.7 million related to our cardiac muscle contractility and mitotic kinesin inhibitors clinical trial programs, partially offset by decreases of \$1.7 million in personnel expenses and \$1.3 million in laboratory and facilities expenses.

From a program perspective, the decline in research and development spending in 2009 compared to 2008 was due to decreases of \$11.0 million for our cardiac muscle contractility program, \$2.3 million for our smooth muscle contractility program, \$3.4 million for our mitotic kinesin inhibitors program, \$1.9 million for our proprietary technologies and \$2.6 million for our other research and preclinical programs, partially offset by an increase of \$7.0 million for our skeletal muscle contractility program. The increase in research and development spending in 2008 compared to 2007 was due to increases of \$4.6 million for our skeletal muscle contractility program and \$1.2 million for our mitotic kinesin inhibitors development program, \$0.3 million for our smooth muscle contractility program, partially offset by the decreases in spending for \$1.5 million for our cardiac muscle contractility program, \$3.0 million for our other research programs and \$1.0 million for proprietary technologies.

	Years Ended December 31,			Increase (Decrease)	
	2009	2008	2007	2009	2008
	(In millions)				
Cardiac muscle contractility	\$ 9.9	\$ 20.9	\$ 22.4	\$ (11.0)	\$ (1.5)
Skeletal muscle contractility	17.5	10.5	5.9	7.0	4.6
Smooth muscle contractility	5.0	7.3	7.0	(2.3)	0.3
Mitotic kinesin inhibitors	3.6	7.0	5.8	(3.4)	1.2
Proprietary technologies	1.0	2.9	3.9	(1.9)	(1.0)
All other research programs	2.8	5.4	8.4	(2.6)	(3.0)
Total research and development expenses	\$ 39.8	\$ 54.0	\$ 53.4	\$ (14.2)	\$ 0.6

We recognized revenue from Amgen for reimbursement of research and development costs of \$7.1 million in 2009 and zero for each of 2008 and 2007. The research and development revenue from Amgen in 2009 represents FTE and out of pocket expense reimbursements of \$3.1 million, and the sale of clinical trial and related materials from our cardiac muscle contractility development program for \$4.0 million. Pursuant to the Amgen collaboration and option agreement, in 2009 we transferred to Amgen for \$4.0 million the majority of our existing inventories of omecamtiv mecarbil and related reference materials. Our out of pocket costs for the transferred materials were incurred and recorded as research and development expense in prior periods. FTE reimbursements from Amgen are at negotiated rates that approximate our costs, and which we believe approximate fair value.

We recognized revenue from GSK for the reimbursement of research and development costs related to our mitotic kinesin inhibitors of \$45,000, \$0.2 million and \$1.4 million, for 2009, 2008, and 2007, respectively. The revenue from GSK in 2009 and 2008 consisted of reimbursements for patent costs. The revenue from GSK in 2007 consisted of a \$1.0 million milestone payment for GSK's initiation of a Phase I clinical trial of GSK-923295, and patent expense reimbursements of \$0.4 million.

We recorded the reimbursements from Amgen and GSK and the GSK milestone payment as research and development revenues from related parties.

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 on-going 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

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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 increase in 2010 for the following reasons: 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 for the potential treatment of diseases and medical conditions associated with muscle weakness or wasting, and of our smooth muscle myosin inhibitor compounds for the potential treatment of systemic hypertension and diseases and medical conditions associated with bronchoconstriction. We also expect to continue to incur costs associated with the close-out of each of the clinical trials of our drug candidates ispinesib and SB-743921. We anticipate research and development expenses for 2010 will be in the range of \$42.0 million to \$46.0 million. Non-cash expenses such as stock-based compensation and depreciation of approximately \$3.6 million are included in our estimate of 2010 research and development expenses.

General and administrative expenses

	Years Ended December 31,			Increase (Decrease)	
	2009	2008	2007	2009	2008
	(In millions)				
General and administrative expenses	\$ 15.6	\$ 15.1	\$ 16.7	\$ 0.5	\$ (1.6)

General and administrative expenses increased \$0.5 million in 2009 compared with 2008, and decreased \$1.6 million in 2008 compared with 2007. The increase in 2009 was primarily due to an increase in personnel expenses of \$1.2 million, partially offset by a decrease in legal expenses of \$0.7 million. The increase in personnel expense in 2009 was primarily due to no employee bonuses being paid for 2008 and a special bonus totaling \$1.5 million being paid to all employees in July 2009 in recognition of our employees' contributions which resulted both in Amgen exercising its option for an exclusive license to omecamtiv mecarbil and related compounds and in our closing of the registered direct equity offering in 2009, partially offset by decreases in salaries and stock-based compensation. The decrease in general and administrative expenses in 2008, compared to 2007, was primarily due to decreases of \$0.9 million in personnel expenses and \$0.8 million in legal expenses.

We expect that general and administrative expenses will increase in 2010. For 2010, we anticipate general and administrative expenses to be in the range of \$16.0 million to \$18.0 million. Non-cash expenses such as stock-based compensation and depreciation of approximately \$2.5 million are included in our estimate of 2010 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
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	2009	2008	2007	2009	2008
	(In millions)				
Unrealized gain (loss) on auction rate securities (ARS)	\$ 1.0	\$ (3.4)	\$	\$ 4.4	\$ (3.4)
Unrealized gain (loss) on investment put option related to ARS Rights	(1.0)	3.4		(4.4)	3.4
Warrant expense	(1.6)			(1.6)	
Interest income and other income	0.6	3.2	8.3	(2.6)	(5.1)
Interest expense and other expense	(0.4)	(0.5)	(0.7)	0.1	0.2
Interest and Other, net	\$ (1.4)	\$ 2.7	\$ 7.6	\$ (4.1)	\$ (4.9)

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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 and 2008.

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 has issued to us Series C-2 Auction Rate Securities Rights (the ARS Rights). The ARS Rights provide us the right to receive the par value of our ARS, i.e., the liquidation preference of the ARS plus accrued but unpaid interest. We elected to measure the ARS Rights at fair value, as permitted under fair value accounting for financial instruments, to mitigate volatility in reported earnings due to its linkage to the ARS. As of December 31, 2009 and December 31, 2008, the fair value of the investment put option related to the ARS Rights was \$2.4 million and \$3.4 million, respectively, and the ARS Rights are classified as short-term and long-term assets, respectively, on the balance sheet. Based on the change in fair value between December 31, 2008 and December 31, 2009, we recorded a corresponding charge of \$1.0 million to Interest and Other, net in the statement of operations for the year ended December 31, 2009. When the investment put option related to the ARS Rights was originally established in 2008, we recorded \$3.4 million gain to Interest and Other, net in the statement of operations for the year ended December 31, 2008. The ARS Rights are discussed in detail below under the heading Liquidity and Capital Resources.

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

Interest income and other income consists primarily of interest income generated from our cash, cash equivalents and investments. Interest income and other income decreased in the 2009 compared to 2008 primarily due to lower market interest rates earned on our investments. The decrease in interest and other income in 2008, compared to 2007, was due to lower average balances of cash, cash equivalents and investments and lower market interest rates.

Interest expense and other expense primarily consists of interest expense on borrowings under our equipment financing lines and, for 2009, interest expense on our loan with UBS Bank USA. The decrease in interest and other expense in 2009 compared to 2008 was primarily due to lower outstanding balances on our equipment financing lines, partially offset by interest on our loan with UBS which originated in January 2009. The decrease in interest and other expense in 2008 compared to 2007 was primarily due to lower average outstanding balances on our equipment financing lines, partially offset by higher average effective interest rates.

Liquidity and Capital Resources

From August 5, 1997, our date of inception, through December 31, 2009, 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 (including ARS), excluding restricted cash and the investment put option related to the ARS Rights, totaled \$112.4 million at December 31, 2009, up from \$73.5 million at December 31, 2008. The increase of \$38.9 million was primarily due to our receipt of a \$50.0 million option exercise fee from Amgen and net proceeds of \$12.9 million from our registered direct equity offering, \$12.4 million from the loan with UBS Bank USA, and \$6.8 million from the 2007 committed equity financing facility with Kingsbridge, partially offset by operating expenses.

We have received net proceeds from the sale of equity securities of \$335.9 million from August 5, 1997, the date of our inception, through December 31, 2009, 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,

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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, which include a minimum volume-weighted average price of \$2.00 for our common stock, from time to time under this facility, at our election, Kingsbridge is 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. The maximum number of shares we may issue in any pricing period is the lesser of 2.5% of our market capitalization immediately prior to the commencement of the pricing period or \$15.0 million. 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 represents a premium over the closing price of our common stock on the date we entered into this facility. This warrant became exercisable beginning six months after the October 2007 issuance date and will remain exercisable for a period of three years thereafter. We may sell a maximum of 9,779,411 shares under this facility (exclusive of the shares underlying the warrant). Under the rules of the NASDAQ Stock Market LLC, this is approximately the maximum number of shares we may sell to Kingsbridge without our stockholders' approval. This restriction may further limit the amount of proceeds we are able to obtain from this committed equity financing facility. We are not obligated to sell any of the \$75.0 million of common stock available under this facility and there are no minimum commitments or minimum use penalties. The committed equity financing facility does not contain any restrictions on our operating activities, any automatic pricing resets or any minimum market volume restrictions. 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, for the year-to-date period through March 11, 2010, we have received gross proceeds of \$3.4 million by selling 1,187,198 shares of our common stock to Kingsbridge under the 2007 committed equity financing facility. As of March 11, 2010, 4,995,485 shares remain available to us for sale under the 2007 committed equity financing facility.

In January 2006, we entered into a stock purchase agreement with certain institutional investors relating to the issuance and sale of 5,000,000 shares of our common stock at a price of \$6.60 per share, for gross offering proceeds of \$33.0 million. In connection with this offering, we paid an advisory fee to a registered broker-dealer of \$1.0 million. After deducting the advisory fee and the offering costs, we received net proceeds of approximately \$32.0 million from the offering.

In December 2006, we 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, we paid placement agent fees to three registered broker-dealers totaling \$1.9 million. After deducting the placement agent fees and the offering costs, we received net proceeds of approximately \$34.9 million from the offering.

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.

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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.

As of December 31, 2009, we have received \$99.1 million in non-equity payments from Amgen and \$54.5 million in non-equity payments from GSK.

Under equipment financing credit lines, we received \$23.7 million from August 5, 1997, the date of our inception, through December 31, 2009. Interest earned on investments, excluding non-cash amortization/accretion of purchase premiums/discounts, was \$1.6 million, \$2.9 million and \$4.6 million in 2009, 2008 and 2007, respectively, and \$28.0 million from August 5, 1997, the date of our inception, through December 31, 2009.

Net cash provided by operating activities 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. Net income in the period 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. Deferred revenue decreased to \$0.8 million as of December 31, 2009 from \$24.5 million at December 31, 2008, because we recognized as revenue the remaining balance of the Amgen deferred revenue from 2006 when the non-exclusive license period ended in the second quarter of 2009 upon Amgen's exercise of its option. The balance of deferred revenue of \$0.8 million at December 31, 2009 consisted of prepayments of FTE reimbursements. Net cash used by operating activities in 2008 was \$61.3 million and primarily resulted from our net loss of \$56.4 million. Deferred revenue decreased \$12.1 million in 2008 to \$24.5 million at December 31, 2008 from \$36.6 million at December 31, 2007. The decrease was primarily due to the \$12.2 million amortization of deferred Amgen license revenue. Net cash used in operating activities was \$3.0 million in 2007 and primarily resulted from the net loss of \$48.9 million, partially offset by the receipt from Amgen in January 2007 of the \$42.0 million upfront, non-refundable license and technology access fee under the collaboration and option agreement entered into in December 2006.

Net cash used in investing activities was \$53.5 million in 2009 and primarily represented cash used to purchase investments, net of proceeds from the maturity of investments (including ARS), of \$54.1 million. Restricted cash totaled \$1.7 million at December 31, 2009, down from \$2.8 million at December 31, 2008, 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 used in investing activities was \$10.0 million in 2008 and primarily represented cash used in purchase of investments, net of proceeds from the maturity of investments, of \$11.9 million. Restricted cash totaled \$2.8 million at December 31, 2008, down from \$5.2 million at December 31, 2007. This decrease was due to the contractual semi-annual reduction in the amount of security deposit required by GE Capital in connection with our equipment financing credit lines. Net cash provided by investing activities was \$45.5 million in 2007 and primarily represented proceeds from the maturity of investments, net of investment purchases, of \$47.0 million, partly offset by funds used to purchase property and equipment of \$2.6 million.

Net cash provided by financing activities was \$28.8 million in 2009 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. Net cash used by financing activities was \$3.5 million in 2008 and primarily represented principal payments of \$4.1 million on our equipment financing credit lines with GE Capital, partially offset by the proceeds of \$0.5 million from our employee stock purchase plan and \$0.1 million from the exercise of stock options. In August 2007, we secured a new equipment financing credit line with GE Capital of up to \$3.0 million, which

expired as of September 30, 2008. No funds were borrowed under this line. Net cash provided by financing activities was \$34.7 million for the year ended December 31, 2007 and primarily represented net proceeds of approximately \$32.9 million from the issuance of common stock to Amgen, less \$6.9 million that was recorded as deferred revenue, and \$9.5 million gross proceeds from the issuance of stock under the 2005 committed equity financing facility with Kingsbridge.

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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 resets 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 have experienced multiple failed auctions since February 2008, as the amount of securities submitted for sale has exceeded the amount of purchase orders. As a result, the ARS are currently not liquid.

The assets underlying these ARS are student loans that are substantially backed by the federal government. As of December 31, 2009, our ARS with par values totaling \$13.3 million had a credit rating of AAA, our ARS with par values totaling \$0.3 million had a credit rating of Aa1, and our ARS with par values totaling \$4.3 million had a credit rating of A3. All of these securities continue to pay interest according to their stated terms (generally 120 basis points over the ninety-one day U.S. Treasury bill rate) with interest rates resetting every 28 days. These ARS are scheduled to ultimately mature between 2036 and 2045, although we do not intend to hold them until maturity. We intend to liquidate the ARS on June 30, 2010, the earliest date we can exercise the ARS Rights.

The valuation of our ARS investment portfolio is subject to uncertainties that are difficult to predict. The fair values of these ARS as of December 31, 2009 were estimated utilizing a discounted cash flow analysis. The assumptions used in preparing the discounted cash flow model include estimates of interest rates, timing and amount of cash flows, credit and liquidity premiums and expected holding periods of the ARS, based on data available. These assumptions are volatile and subject to change as the underlying sources of these assumptions and market conditions change, which could result in significant changes to the fair value of the ARS. The significant assumptions of this discounted cash flow model are discount margins which are based on industry recognized student loan sector indices, an additional liquidity discount and an estimated term to liquidity. Other items this analysis considers are the collateralization underlying the ARS, the creditworthiness of the counterparty and the timing of expected future cash flows. These ARS were also compared, when possible, to other observable market data with similar characteristics as the securities held by us. The fair value of our ARS as of December 31, 2009 and December 31, 2008 was determined to be \$15.5 million and \$16.6 million, respectively. Changes in the fair value of the ARS are recognized in current period earnings in Interest and Other, net. Accordingly, we recognized \$1.0 million of unrealized gain in 2009.

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 ARS Rights. The ARS Rights provide us the right to receive the par value of our ARS, i.e., the liquidation preference of the ARS plus accrued but unpaid interest. Pursuant to the ARS Rights, we may require UBS to purchase our ARS at par value at any time between June 30, 2010 and July 2, 2012. We intend to liquidate the ARS on June 30, 2010. In addition, UBS or its affiliates may sell or otherwise dispose of some or all of the ARS at its discretion at any time prior to expiration of the ARS Rights, subject to the obligation to pay us the par value of such ARS. The ARS Rights are not transferable, tradable or marginable, and will not be listed or quoted on any securities exchange or any electronic communications network. As consideration for ARS Rights, we agreed to release UBS AG, UBS Securities LLC and UBS Financial Services, Inc., and/or their affiliates, directors, and officers from any claims directly or indirectly relating to the marketing and sale of the ARS, other than for consequential damages. UBS's obligations in connection with the ARS Rights are not secured by its assets and UBS is not required to obtain any financing to support these obligations. UBS has disclaimed any assurance that it will have sufficient financial resources to satisfy its obligations in connection with the ARS Rights. If UBS has insufficient funding to purchase the ARS and the auction process continues to fail, we may incur further losses on the carrying value of the ARS.

The ARS Rights represent a firm agreement in accordance with accounting guidance for derivatives and hedging. The guidance 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 agreement includes a

disincentive for nonperformance that is sufficiently large to make performance probable. The enforceability of the ARS Rights results in a put option, which we recognized as a separate freestanding instrument that is 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 as short-term assets on the balance sheet. The investment put option related to the ARS Rights does not meet the definition of a derivative instrument. Therefore, we elected to

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measure the investment put option related to the ARS Rights at fair value, as permitted under accounting guidance for the fair value option for financial assets and liabilities, to mitigate volatility in reported earnings due to its linkage to the ARS. We 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 that was adjusted for any bearer risk associated with UBS's financial ability to purchase the ARS beginning June 30, 2010. Any change in the assumptions on which these estimates are based or market conditions would affect the fair value of the investment put option related to the ARS Rights. We anticipate that any future changes in the fair value of the investment put option related to the ARS Rights will be offset by the changes in the fair value of the related ARS with no material net impact to the statements of operations, subject to changes in UBS's credit risk rating and its ultimate ability to perform. We will continue to measure the investment put option related to the ARS Rights at fair value until the earlier of our exercise of the ARS Rights, UBS's purchase of the ARS in connection with the ARS Rights or the maturity of the ARS underlying the ARS Rights.

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 and its affiliates as collateral. The loan amount was based on 75% of the fair value as assessed by UBS at the time of the loan. We have drawn down the full amount available under the loan agreement. In general, the amount of interest payable under the loan agreement is intended to equal the amount of interest we would otherwise receive with respect to our ARS. During 2009, the interest rate due on the UBS loan was approximately the same as the interest rate earned from the ARS. The principal balance of the loan was lower than the par value of the ARS in 2009. During 2009, we paid \$158,000 of interest expense associated with the loan and received \$273,000 in interest income from the ARS. In accordance with the loan agreement, we applied the net interest received of \$115,000 and proceeds from ARS sales of \$2.1 million to the principal of the loan. The borrowings under the loan agreement are payable upon demand. However, UBS Financial Services Inc. or its affiliates will be required to arrange alternative financing for us on terms and conditions substantially the same as those under the loan agreement, unless the demand right was exercised as a result of certain specified events or the customer relationship between UBS and us is terminated for cause by UBS. If such alternative financing cannot be established, then a UBS affiliate will purchase the pledged ARS at par value. Proceeds of sales of the ARS will first be applied to repayment of the loan with the balance, if any, for our account.

We continue to monitor the market for ARS and consider its impact (if any) on the fair market value of our ARS. If the market conditions deteriorate further, we may be required to record additional unrealized losses in earnings, offset by corresponding increases in the investment put option related to the ARS Rights, assuming no deterioration of UBS's credit rating. At present, if we need to access the funds that are in an illiquid state, we may not be able to do so without the possible loss of principal until a future auction for the ARS is successful, another secondary market evolves for the ARS, they are redeemed by the issuer or they mature. If we are unable to sell these securities in the market or they are not redeemed, we could be required to hold them to maturity. We will continue to monitor and evaluate these investments for impairment on an ongoing basis.

Shelf Registration Statement. In November 2008, we filed a shelf registration statement with the SEC, which was declared effective in November 2008. 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 million. As of March 11, 2010, \$76.2 million remains available to us under this shelf registration statement, assuming all outstanding warrants are exercised in cash. The specific terms of offerings, if any, under the shelf registration statement would be established at the time of such offerings.

In August 2007, we secured a new equipment financing credit line with GE Capital of up to \$3.0 million, which expired September 30, 2008. The line of credit was subject to the terms of a master security agreement between us and GE Capital, dated February 2001 and as amended on March 24, 2005 and related term sheet. We did not borrow any

funds under this line.

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As of December 31, 2009, future minimum payments under our loan and lease obligations were as follows (in thousands):

	Within One Year	Two to Three Years	Four to Five Years	After Five Years	Total
Operating leases(1)	\$ 3,008	\$ 4,614	\$ 1,316	\$	\$ 8,938
Equipment financing lines	1,616	985			2,601
Loan with UBS(2)	10,201				10,201
Total	\$ 14,825	\$ 5,599	\$ 1,316	\$	\$ 21,740

- (1) Our long-term commitments under operating leases relate to payments under our two facility leases in South San Francisco, California, which expire in 2011 and 2013.
- (2) The loan with UBS is classified as short-term because we intend to repay it on June 30, 2010, the earliest date we may exercise our ARS Rights to require UBS to purchase the ARS that collateralize the loan at par value. See Note 7 in the Notes to Financial Statements for further details regarding the maturity date of the loan with UBS Bank USA.

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 as part of our strategic alliance with Amgen. We plan to continue clinical development of our fast skeletal sarcomere activator CK-2017357 for the potential treatment of diseases and conditions related to muscle weakness or wasting and non-clinical development of our back-up potential drug candidate from our skeletal sarcomere activator program. We plan to progress one or more of our smooth muscle myosin inhibitor compounds through non-clinical and clinical development. We expect to incur development expenses for the close-out of the clinical trials for ispinosib for the potential treatment of breast cancer and SB-743921 for the potential treatment of Hodgkin and non-Hodgkin lymphoma. We expect to incur significant research and development expenses as we advance the research and development of our other 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;

the expansion and advancement of our research programs;

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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 believe that our existing cash and cash equivalents, short-term investments, interest earned on investments, proceeds from our loan with UBS Bank USA, and proceeds already received from our equity financings 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 alliances, 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. Furthermore, financing obtained through future strategic alliances 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, 2009, 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 consist of ARS, municipal and government agency bonds, commercial paper, U.S. government 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, Investments and Fair Value Measurements for further detailed discussion. Investments with original maturities greater than approximately three months and remaining maturities less than one year are classified as short-term investments.

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Investments with remaining maturities greater than one year are classified as long-term investments. In addition, we classify investments as short-term or long-term based upon whether such assets are reasonably expected to be realized in cash or sold or consumed during our normal business operating cycle.

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 had 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.

The par value of our investments in ARS totaled \$17.9 million at December 31, 2009 and \$20.0 million at December 31, 2008. We determined that no impairment of our investments existed at December 31, 2007. Due to the resetting variable rates of the ARS, their fair value generally approximated cost until February 2008. There were no realized gains or losses from our ARS during the years ended December 31, 2009, 2008 or 2007. There were no failed auctions on any of our ARS through December 31, 2007 and we deemed that no impairment existed as of that date. The unrealized loss on the ARS was zero at December 31, 2007. At December 31, 2007, we classified \$20.0 million of our ARS as long-term due to the uncertainty as to whether such securities will be available for current operations. At December 31, 2009 and December 31, 2008, we classified our ARS as short-term and long-term trading securities, respectively, for which unrealized gains and losses are recorded in current period earnings.

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.

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. Our revenue arrangements with multiple elements are 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 is objective and reliable evidence of the fair value of the undelivered items. The consideration we receive is allocated among the separate units based on their respective fair values, and the applicable revenue recognition criteria are applied to each of the separate units. 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.

We recognize 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 are not met, we defer the milestone payment and recognize it as revenue over the estimated period of performance under the contract as we complete our performance obligations.

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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 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.

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 bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation

allowances are established when necessary to reduce the deferred tax assets to the amounts expected to be realized. We did not record an income tax provision in the years ended December 31, 2008 and 2007 because we had a net taxable loss in each of those periods. We recorded an income tax provision of \$150,000 in 2009 due to Alternative Minimum Tax.

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

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valuation allowance on the net deferred tax assets as of December 31, 2009 and 2008. 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 decreased by \$9.56 million in 2009, and increased by \$23.9 million and \$18.3 million in 2008 and 2007, respectively.

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 not undergoing any income tax examinations. 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 and penalties were zero for 2009 and 2008. We account for interest 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, net of valuation allowances necessary to reflect expectations of realizability, to change materially over the next twelve months.

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

We adopted the new accounting guidance for determining fair value when the volume and level of activity for an asset or liability have significantly decreased and for identifying transactions that are not orderly. The new guidance provides additional direction for determining fair values when there is no active market or where the price inputs represent distressed sales. The new guidance reaffirms existing guidance that fair value is the amount for which an asset would be sold in an orderly transaction (as opposed to a forced liquidation or distressed sale) under current market conditions at the date of the financial statements. The new guidance amends the disclosure provisions of existing guidance to require entities to disclose the valuation inputs and techniques in interim and annual financial statements, and to disclose fair value hierarchies and the Level 3 reconciliation by major security types. Our adoption of the new guidance did not have a material impact on our financial position or results of operations.

We adopted the new accounting guidance on interim disclosures about the fair value of financial instruments. The new guidance amends the existing guidance to require public companies to provide disclosures about the fair value of financial instruments in interim and annual financial statements. Our adoption of the new guidance did not have a material impact on our financial position or results of operations.

We adopted the new accounting guidance for recognition and presentation of other-than-temporary impairments. The new guidance provides additional direction for determining the credit and non-credit components of other-than-temporary impairments of debt securities classified as available-for-sale or held-to-maturity. The guidance also increases and clarifies existing disclosure requirements and extends the disclosure frequency to interim and annual periods. Our adoption of the new guidance did not have a material impact on our financial position or results of operations.

We adopted the new accounting guidance for subsequent events, which establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. It provides guidance regarding the period after the balance sheet date during which management should evaluate events or transactions for potential recognition or disclosure in the financial statements,

the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date, and the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. Our adoption of the new guidance did not have a material impact on our financial position or results of operations.

We adopted the Financial Accounting Standard Board's (FASB) new guidance on the hierarchy and sources of accounting principles generally accepted in the United States of America (GAAP). The new guidance

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identifies the sources of accounting principles and the framework for selecting the principles used in the preparation of financial statements of nongovernmental entities that are presented in conformity with GAAP in the United States. The guidance establishes the FASB Accounting Standards Codification (the Codification) as the source of authoritative accounting principles recognized by the FASB to be applied by nongovernmental entities in the preparation of financial statements in conformity with GAAP. The issuance of the Codification did not change GAAP. Our adoption of the new guidance did not have a material impact on our financial position or results of operations. However, all references to GAAP literature in our historical filings are superseded by references to the Codification.

We adopted the new accounting guidance for measuring liabilities at fair value. The new guidance amends existing guidance to provide clarification on how to measure the fair value of a liability in circumstances in which a quoted price in an active market for the identical liability is not available. It also clarifies that when estimating the fair value of a liability, an entity is not required to include or adjust an input relating to a restriction that prevents the transfer of the liability. The new guidance also clarifies that the quoted price for an identical liability when traded as an asset in an active market may be used as a Level 1 fair value measurement for a liability. Our adoption of the new guidance did not have a material impact on our financial position or results of operation.

Accounting Pronouncements Not Yet Adopted

In October 2009, the FASB issued new accounting guidance for recognizing revenue for a multiple-deliverable revenue arrangement. 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. We must adopt the new guidance prospectively for new revenue arrangements entered into or materially modified beginning in the first quarter of 2011. Earlier adoption is permitted. We are currently evaluating the impact that the new guidance will have on our financial statements and the timing of its adoption.

In January 2010, the FASB issued new accounting guidance for improving disclosures about fair value measurements. The new guidance requires a gross presentation of Level 3 fair value rollforwards and adds a new requirement to disclose transfers in and out of Level 3 and fair value measurements. The new guidance also clarifies existing guidance about the level of disaggregation of fair value measurements and disclosures regarding inputs and valuation techniques. The new guidance is effective for us beginning in the first quarter of 2010, except for the gross presentation of Level 3 rollforwards, which is effective for the first quarter of 2011. We do not expect the adoption of the new fair value guidance to have a material impact on our financial position or 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 investment portfolio. We have not used derivative financial instruments in our investment portfolio. We invest a portion of our excess cash in U.S. Treasuries and, by policy, limit the amount of credit exposure in any one issuer and investment class. 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.

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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-term investments is subject to interest rate risk, and will fall in value if market interest rates increase.

At December 31, 2009, we held approximately \$15.5 million of ARS classified as short-term investments, whose underlying assets are student loans which are substantially backed by the federal government. In February 2008, auctions began to fail for these securities and each auction since then has failed. Consequently, the ARS are not currently liquid and we will not be able to access these funds until a future auction of the ARS is successful, a buyer is found outside of the auction process, they are redeemed by the issuers or the ARS mature. As a result, our ability to liquidate our ARS and fully recover the carrying value of our investment in the near term may be limited or not exist. As of December 31, 2009, our ARS with par values totaling \$13.3 million had a credit rating of AAA, our ARS with par values totaling \$0.3 million had a credit rating of Aa1, and our ARS with par values totaling \$4.3 million had a credit rating of A3. At December 31, 2009, our investment advisors provided a valuation for the ARS utilizing a discounted cash flow approach to arrive at the valuation of our ARS, which was corroborated by a separate and comparable discounted cash flow analysis we prepared. Based on this Level 3 valuation defined by fair value accounting guidance, we valued the ARS at \$15.5 million, which represents a decline in value of \$2.4 million from par. The assumptions used in preparing the discounted cash flow model include estimates of, based on data available as of December 31, 2009, interest rates, timing and amount of cash flows, credit and liquidity premiums, and expected holding periods of the ARS. These assumptions are volatile and subject to change as the underlying sources of these assumptions and market conditions change, thereby could result in significant changes to the fair value of our ARS.

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 has issued to us the ARS Rights. The ARS Rights provide us the right to receive the par value of our ARS, i.e., the liquidation preference of the ARS plus accrued but unpaid interest. Pursuant to the ARS Rights, we may require UBS to purchase our ARS at par value at any time between June 30, 2010 and July 2, 2012. In addition, UBS or its affiliates may sell or otherwise dispose of some or all of the ARS at its discretion at any time prior to expiration of the ARS Rights, subject to the obligation to pay us the par value of such ARS. The ARS Rights are not transferable, tradable or marginable, and will not be listed or quoted on any securities exchange or any electronic communications network. As consideration for ARS Rights, we agreed to release UBS AG, UBS Securities LLC and UBS Financial Services, Inc., and/or their affiliates, directors, and officers from any claims directly or indirectly relating to the marketing and sale of the ARS, other than for consequential damages. UBS's obligations in connection with the ARS Rights are not secured by its assets and do not require UBS to obtain any financing to support these obligations. UBS has disclaimed any assurance that it will have sufficient financial resources to satisfy its obligations in connection with the ARS Rights. If UBS has insufficient funding to purchase the ARS and the auction process continues to fail, we may incur further losses on the carrying value of the ARS. We valued the put option using a Black-Scholes option pricing model that included estimates of interest rates, based on data available as of December 31, 2009, and was adjusted for any bearer risk associated with UBS's financial ability to repurchase the ARS beginning June 30, 2010. Any change in these assumptions and market conditions would affect the value of the ARS Rights. A decline in fair value of the ARS would be largely offset by an increase in fair value of the ARS Rights.

Prior to accepting the UBS offer, we recorded our ARS as investments available-for-sale. We recorded unrealized gains and losses on our available-for-sale debt securities, in accumulated other comprehensive income in the shareholders' equity section of our balance sheet. Such an unrealized loss did not reduce net income for the applicable accounting period. Simultaneously, due to the ARS Rights granted by UBS, we made a one-time election to transfer the related ARS holdings from available-for-sale securities to trading securities. As a result of this transfer, we recognized an other-than-temporary loss of approximately \$3.4 million, and reversed the related temporary valuation allowance that was previously recorded in other comprehensive loss on the balance sheet. We also recorded the

investment put option related to the ARS Rights in accordance with the fair value option permitted under fair value accounting guidance for financial instruments. We anticipate that any future changes in the fair value of the investment put option related to the ARS Rights will be offset by the changes in the fair value of the related ARS with no material net impact to the statement of operations, subject to UBS's continued expected

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performance of its obligations in connection with the ARS Rights. The investment put option related to the ARS Rights will continue to be measured at fair value under the fair value option permitted under fair value accounting guidance for financial instruments, until the earlier of our exercise of the ARS Rights, UBS's purchase of the ARS in connection with the ARS Rights, or the maturity of the ARS underlying the ARS Rights. See Note 3 in the Notes to Financial Statements for further details regarding our ARS and ARS Rights.

Our cash and cash equivalents are invested in highly liquid securities with original 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 interest payments associated with our loan with UBS are based on variable rates and are offset by the interest income earned on the ARS that collateralize the loan. None of the exercise of the ARS Rights, UBS's purchase of the ARS in connection with the ARS Rights, or the maturity of the ARS underlying the ARS Rights poses significant interest rate risk.

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

	2010	2011	2012	Beyond 2012	Total	Fair Value at December 31, 2009
Assets:						
Short-term investments	\$ 71,266				\$ 71,266	\$ 71,266
Average interest rate	0.19%				0.19%	
Liabilities:						
Equipment financing lines	\$ 1,616	\$ 833	\$ 152		\$ 2,601	\$ 2,425
Average interest rate	6.83%	7.31%	7.25%		7.01%	

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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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<u>Report of Independent Registered Public Accounting Firm</u>	74
<u>Balance Sheets</u>	75
<u>Statements of Operations</u>	76
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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, 2009 and 2008, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2009 and cumulatively, for the period from August 5, 1997 (date of inception) to December 31, 2009 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, 2009, 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.

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 11, 2010

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CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

BALANCE SHEETS

December 31,
2009 2008
(In thousands, except
share and per share data)

ASSETS

Current assets:		
Cash and cash equivalents	\$ 25,561	\$ 41,819
Short-term investments	71,266	15,048
Investments in auction rate securities	15,542	
Investment put option related to auction rate securities rights	2,358	
Related party accounts receivable	180	221
Related party notes receivable - short-term portion	9	40
Prepaid and other current assets	2,005	1,782
Total current assets	116,921	58,910
Investments in auction rate securities		16,636
Investment put option related to auction rate securities rights		3,389
Property and equipment, net	3,713	5,087
Assets held for sale		325
Related party notes receivable - long-term portion		9
Restricted cash	1,674	2,750
Other assets	291	348
Total assets	\$ 122,599	\$ 87,454

LIABILITIES AND STOCKHOLDERS EQUITY

Current liabilities:		
Accounts payable	\$ 1,683	\$ 1,382
Accrued liabilities	5,935	7,174
Short-term portion of equipment financing lines	1,616	2,025
Short-term portion of deferred revenue	751	12,296
Loan with UBS	10,201	
Total current liabilities	20,186	22,877
Long-term portion of equipment financing lines	985	2,615
Long-term portion of deferred revenue		12,196
Total liabilities	21,171	37,688

Commitments and contingencies (Note 9)

Stockholders' equity:

Convertible preferred stock:

Authorized: 10,000,000 shares in 2009 and 2008

Issued and outstanding: zero shares in 2009 and 2008

Common stock, \$0.001 par value:

Authorized: 170,000,000 shares in 2009 and 2008

Issued and outstanding: 61,275,036 shares in 2009 and 49,939,069 shares in 2008

Additional paid-in capital	412,729	385,605
Accumulated other comprehensive income	1	18
Deficit accumulated during the development stage	(311,363)	(335,907)
Total stockholders' equity	101,428	49,766
Total liabilities and stockholders' equity	\$ 122,599	\$ 87,454

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

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CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

STATEMENTS OF OPERATIONS

	Years Ended December 31,			Period from
	2009	2008	2007	August 5,
				1997
				(Date of
				Inception) to
				December 31,
				2009
	(In thousands, except per share data)			
Revenues:				
Research and development revenues from related parties	\$ 7,171	\$ 186	\$ 1,388	\$ 47,610
Research and development, grant and other revenues				2,955
License revenues from related parties	74,367	12,234	12,234	112,935
Total revenues	81,538	12,420	13,622	163,500
Operating expenses:				
Research and development	39,840	53,950	53,388	377,278
General and administrative	15,626	15,076	16,721	116,163
Restructuring charges (reversals)	(23)	2,473		2,450
Total operating expenses	55,443	71,499	70,109	495,891
Operating income (loss)	26,095	(59,079)	(56,487)	(332,391)
Interest and other, net	(1,401)	2,705	7,593	21,178
Income (loss) before income taxes	24,694	(56,374)	(48,894)	(311,213)
Provision for income taxes	150			150
Net income (loss)	\$ 24,544	\$ (56,374)	\$ (48,894)	\$ (311,363)
Net income (loss) per common share:				
Basic	\$ 0.43	\$ (1.14)	\$ (1.03)	
Diluted	\$ 0.42	\$ (1.14)	\$ (1.03)	
Weighted-average number of shares used in computing net income (loss) per common share:				
Basic	57,390	49,392	47,590	
Diluted	57,961	49,392	47,590	

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

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CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

STATEMENTS OF STOCKHOLDERS EQUITY (DEFICIT)

	Common 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	Capital	Compensation	(Loss)	Stage	(Deficit)	
	(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)
Balances, December 31, 1998	710,679	1	9			(2,015)		(2,005)
Issuance of common stock upon exercise of stock options for cash at \$0.015-\$0.58 per share	287,500		69					69
Issuance of warrants, valued using Black-Scholes model			41					41
Deferred stock-based compensation			237	(237)				
Amortization of deferred stock-based compensation					123			123
Components of comprehensive loss:								
Change in unrealized gain (loss) on investments						(8)		(8)
Net loss						(7,341)		(7,341)
Total comprehensive loss								(7,349)

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Balances, December 31, 1999	998,179	1	356	(114)	(8)	(9,356)	(9,121)
Issuance of common stock upon exercise of stock options for cash at \$0.015-\$0.58 per share	731,661	1	194				195
Deferred stock-based compensation			93	(93)			
Amortization of deferred stock-based compensation				101			101
Components of comprehensive loss:							
Change in unrealized gain (loss) on investments					86		86
Net loss						(13,079)	(13,079)
Total comprehensive loss							(12,993)
Balances, December 31, 2000	1,729,840	2	643	(106)	78	(22,435)	(21,818)
Issuance of common stock upon exercise of stock options for cash at \$0.015-\$1.20 per share	102,480		56				56
Repurchase of common stock	(33,334)		(19)				(19)
Compensation expense for acceleration of options			20				20
Deferred stock-based compensation			45	(45)			
Amortization of deferred stock-based compensation				93			93
Components of comprehensive loss:							
Change in unrealized gain (loss) on investments					190		190
Net loss						(15,874)	(15,874)
Total comprehensive loss							(15,684)
Balances, December 31, 2001	1,798,986	2	745	(58)	268	(38,309)	(37,352)
Issuance of common stock upon exercise of	131,189		68				68

stock options for cash at \$0.015-\$1.20 per share				
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)

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CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

STATEMENTS OF STOCKHOLDERS EQUITY (DEFICIT) (Continued)

	Common Stock		Additional	Deferred	Comprehensive	Accumulated	Other	Accumulated	Total
	Shares	Amount	Paid-In	Stock-Based	Income	Development	During the	Stage	Stockholders
			Capital	Compensation	(Loss)				Equity
	(In thousands, except share and per share data)								
Balances, December 31, 2002	1,926,596	\$ 2	\$ 809	\$ (50)	\$ 40	\$ (61,389)			\$ (60,588)
Issuance of common stock upon exercise of stock options for cash at \$0.20-\$1.20 per share	380,662		310						310
Stock-based compensation			158						158
Deferred stock-based compensation			4,369	(4,369)					
Amortization of deferred stock-based compensation				768					768
Components of comprehensive loss:									
Change in unrealized gain (loss) on investments						6			6
Net loss						(32,685)			(32,685)
Total comprehensive loss									(32,679)
Balances, December 31, 2003	2,307,258	2	5,646	(3,651)	46	(94,074)			(92,031)
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
	115,358								

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Issuance of common stock upon cashless exercise of warrants							
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)
Balances, 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:							

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Change in unrealized gain (loss) on investments	174		174
Net loss		(42,252)	(42,252)
Total comprehensive loss			(42,078)

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CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

STATEMENTS OF STOCKHOLDERS EQUITY (DEFICIT) (Continued)

	Common Stock		Additional Paid-In Capital	Deferred Stock-Based Compensation	Accumulated Deficit		Total Stockholders Equity (Deficit)
					Other Comprehensive Income (Loss)	Accumulated During the Development Stage	
	Shares	Amount	(In thousands, except share and per share data)				
Balances, 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)

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Balances, 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
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)
Balances, 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,				329			329

net of cancellations			
Components of			
comprehensive loss:			
Change in unrealized gain			
(loss) on investments	19		19
Net loss		(56,374)	(56,374)
Total comprehensive loss			(56,355)

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CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

STATEMENTS OF STOCKHOLDERS EQUITY (DEFICIT) (Continued)

	Common Stock		Additional Deferred Compensation		Accumulated Deficit		Other Comprehensive Income		Accumulated		Total	
	Shares	Amount	Capital	Compensation	(Loss)	During the	Development	Stage	Stockholders			
	(In thousands, except share and per share data)											
Balances, 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

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Balances, December 31,
2009

61,275,036 \$ 61 \$ 412,729 \$ \$ 1 \$ (311,363) \$ 101,428

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

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CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

STATEMENTS OF CASH FLOWS

	Years Ended December 31,			Period from
	2009	2008	2007	August 5, 1997
	(In thousands)			(Date of Inception) to December 31, 2009
Cash flows from operating activities:				
Net income (loss)	\$ 24,544	\$ (56,374)	\$ (48,894)	\$ (311,363)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:				
Depreciation and amortization of property and equipment	2,021	2,456	2,829	25,466
(Gain) loss on disposal of equipment	(40)	3	13	311
Non-cash impairment charges	103			103
Non-cash restructuring expenses	22	476		498
Non-cash interest expense		77	92	504
Non-cash forgiveness of loan to officer	10	51	116	425
Stock-based compensation	4,906	5,606	5,553	25,259
Tax benefit from stock-based compensation	(20)			(20)
Non-cash warrant expense	1,585			1,626
Other non-cash expenses		7	7	141
Changes in operating assets and liabilities:				
Related party accounts receivable	41	(145)	41,959	(531)
Prepaid and other assets	(166)	192	(275)	(2,324)
Accounts payable	334	(6)	(969)	1,722
Accrued liabilities	(1,183)	(1,540)	2,005	5,799
Related party payables and accrued liabilities		(22)	(142)	
Deferred revenue	(23,741)	(12,109)	(5,299)	751
Net cash provided by (used in) operating activities	8,416	(61,328)	(3,005)	(251,633)
Cash flows from investing activities:				
Purchases of investments	(132,205)	(24,462)	(51,700)	(801,570)
Proceeds from sales and maturities of investments	78,095	12,607	98,729	712,488
Purchases of property and equipment	(550)	(658)	(2,563)	(30,100)
Proceeds from sale of property and equipment	74			124
(Increase) decrease in restricted cash	1,076	2,417	867	(1,674)
Issuance of related party notes receivable				(1,146)
Proceeds from repayments of notes receivable	30	130	129	859

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Net cash provided by (used in) investing activities	(53,480)	(9,966)	45,462	(121,019)
Cash flows from financing activities:				
Proceeds from initial public offering, sale of common stock to related party and public offerings, net of issuance costs	12,937		26,012	206,871
Proceeds from draw down of Committed Equity Financing Facility, net of issuance costs	6,850		9,542	38,896
Proceeds from other issuances of common stock	837	599	1,312	6,994
Proceeds from issuance of preferred stock, net of issuance costs				133,172
Repurchase of common stock				(68)
Proceeds from loan with UBS	12,441			12,441
Repayment of loan with UBS	(2,240)			(2,240)
Proceeds from equipment financing lines			1,742	23,696
Repayment of equipment financing lines	(2,039)	(4,050)	(3,888)	(21,569)
Tax benefit from stock-based compensation	20			20
Net cash provided by (used in) financing activities	28,806	(3,451)	34,720	398,213
Net increase (decrease) in cash and cash equivalents	(16,258)	(74,745)	77,177	25,561
Cash and cash equivalents, beginning of period	41,819	116,564	39,387	
Cash and cash equivalents, end of period	\$ 25,561	\$ 41,819	\$ 116,564	\$ 25,561

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

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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 since inception and there can be no assurance that the Company will attain profitability. The Company had net income of \$24.5 million and net cash provided from operations of \$8.4 million for the year ended December 31, 2009 and an accumulated deficit of approximately \$311.4 million as of December 31, 2009. Cash, cash equivalents and short-term investments (excluding investments in auction rate securities and the investment put option related to the auction rate securities rights) increased to \$96.8 million at December 31, 2009 from \$56.9 million at December 31, 2008. The Company anticipates it will continue to have operating losses and net cash outflows in future periods. If sufficient additional capital is not available on terms acceptable to the Company, its liquidity will be impaired.

The Company has funded its operations primarily through sales of 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 and debt financings. Based on the current status of its development plans, the Company believes that its existing cash, cash equivalents and short-term investments (excluding investments in auction rate securities) at December 31, 2009 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.

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.

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 four 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.

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The recent economic turmoil in the United States, the continuing credit crisis that has affected worldwide financial markets, the extraordinary volatility in the stock markets and other current negative macroeconomic indicators, such as the global recession, 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 100%, 99% and 90% of total revenues for the years ended December 31, 2009, 2008 and 2007, respectively, were derived from Amgen. Accounts receivable due from Amgen was \$175,000 and 130,000 at December 31, 2009 and 2008, respectively and were included in related party accounts receivable. Approximately 0%, 1% and 10% of revenues for the years ended December 31, 2009, 2008 and 2007, respectively, were derived from GlaxoSmithKline (GSK), a strategic partner of the Company at the time. Accounts receivable from GSK totaled zero and \$89,000 at December 31, 2009 and 2008, respectively, and were included in related party accounts receivable. See also Note 5, Related Party Transactions, below regarding collaboration agreements with Amgen and 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, 2009, 2008 and 2007, all of the Company's revenues were received from entities located in the United States or from United States affiliates of foreign corporations.

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 was \$1.7 million and \$2.8 million at December 31, 2009 and 2008, respectively, and was classified as restricted cash.

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 consist of auction rate securities (ARS), U.S. municipal and government agency bonds, commercial paper, U.S. government treasury securities, and money

market funds. The Company designates all investments, except for its ARS 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. During the fourth quarter of fiscal year 2008, 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 loss. See Note 3 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. The Company classifies investments as short-term or long-term based

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upon whether such assets are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

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 it is determined 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.

See Note 3 for additional details on the Company's investment portfolio and events that occurred during 2008 that impacted the classification of ARS in the Company's balance sheet.

Fair Value of Financial Instruments

The carrying amount of the Company's cash and cash equivalents, accounts receivable and accounts payable and notes payable approximates fair value due to the short-term nature of these instruments. The Company bases the fair value of short-term investments, other than ARS and the investment put option related to the Series C-2 Auction Rate Securities Rights issued to the Company by UBS (the ARS Rights), on current market prices. The Company determines the fair value of its ARS and the investment put option related to the ARS Rights using discounted cash flow models (Note 3). In connection with the failed auctions of the Company's ARS, which were marketed and sold by UBS and its affiliates, in October 2008, the Company accepted a settlement with UBS pursuant to which UBS issued to the Company the ARS Rights. The carrying value of the investment put option related to the ARS Rights (Note 3) represents its fair value, based on the Black-Scholes option pricing model, which approximates the difference in value between the par value and the fair value of the associated ARS. As permitted under fair value accounting for financial instruments, the Company may elect fair value measurement for certain financial assets on a case by case basis. The Company has elected to use fair value measurement permitted under fair value accounting for the investment put option related to the ARS Rights.

The fair value of the equipment financing line debt is \$2.4 million compared to the book value of \$2.6 million, based on borrowing rates currently available to the Company. The fair value of the loan with UBS approximates the loan's book value of \$10.2 million due to the short-term nature of the loan.

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 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.

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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. See Note 8, Restructuring for a discussion of asset impairments recorded in the years ended December 31, 2009 and 2008.

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.

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 revenue arrangements with multiple elements are evaluated under the accounting guidance for revenue arrangements with multiple deliverables, and are 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 is objective and reliable evidence of the fair value of the undelivered items. The consideration the Company receives is allocated among the separate units based on their respective fair values, and the applicable revenue recognition criteria are applied to each of the separate units. 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.

The Company recognizes 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 are not met, the Company defers the milestone payment and recognizes it as revenue over the estimated period of performance under the contract as the Company completes its performance obligations.

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

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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.

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, 2009, 2008 and 2007 was equal to net income/(loss) adjusted for unrealized gains and losses on investments.

Segment Reporting

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

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Net Loss Per Common Share

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

	Years Ended December 31,		
	2009	2008	2007
Net income (loss)	\$ 24,544	\$ (56,374)	\$ (48,894)
Weighted-average common shares outstanding	57,717	49,477	47,591
Unvested restricted stock	(327)	(85)	
Shares subject to repurchase			(1)
Weighted-average shares used in computing net income (loss) per share basic	57,390	49,392	47,590
Dilutive effect of stock options, unvested restricted stock and warrants	571		
Weighted-average shares used in computing net income (loss) per share diluted	57,961	49,392	47,590
Net income (loss) per common share:			
Basic	\$ 0.43	\$ (1.14)	\$ (1.03)
Diluted	\$ 0.42	\$ (1.14)	\$ (1.03)

The following instruments were excluded from the computation of diluted net income (loss) per common share for the periods presented because including them would have had an antidilutive effect (in thousands):

	December 31,		
	2009	2008	2007
Options to purchase common stock	5,960	5,975	5,060
Unvested restricted stock		396	
Warrants to purchase common stock	474	474	474
Shares issuable related to the ESPP	80	43	36
Total shares	6,514	6,888	5,570

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.

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The following table summarizes stock-based compensation related to stock options, restricted stock awards and employee stock purchases, including amortization of deferred compensation recognized (in thousands):

	Years Ended December 31,		
	2009	2008	2007
Research and development	\$ 2,345	\$ 2,794	\$ 2,932
General and administrative	2,561	2,812	2,621
Stock-based compensation included in operating expenses	\$ 4,906	\$ 5,606	\$ 5,553

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, 2009		Year Ended December 31, 2008		Year Ended December 31, 2007	
	Employee Stock Options	ESPP	Employee Stock Options	ESPP	Employee Stock Options	ESPP
Risk-free interest rate	2.7%	0.58%	2.98%	2.15%	4.49%	4.33%
Volatility	76%	74%	64%	68%	73%	76%
Expected term (in years)	6.07	1.25	6.08	1.25	6.00	1.25
Expected dividend yield	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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 used the simplified method of estimating the expected term for share-based compensation from January 1, 2006, the date it adopted the new share-based payment accounting guidance, through December 31, 2007. Starting January 1, 2008, the Company ceased to use the simplified method, and now 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.

From January 1, 2006 through December 31, 2007, the Company estimated the volatility of its common stock by using an average of historical stock price volatility of comparable companies due to the limited length of trading history. Starting January 1, 2008, the Company has used its own volatility history based on its stock's trading history for the period subsequent to the Company's IPO in April 2004. Because its outstanding options have an expected term of approximately six years, the Company supplements its own volatility history by using comparable companies volatility history for the relevant period preceding the Company's IPO.

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

As of December 31, 2009, there was \$5.4 million of unrecognized compensation cost related to non-vested stock options, which is expected to be recognized over a weighted-average period of 2.3 years. Also, as of December 31, 2009, there was \$0.3 million of unrecognized compensation cost related to unvested restricted stock

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awards, which is expected to be recognized over a weighted-average period of 0.7 years. In addition, through 2008, the Company continued to amortize deferred stock-based compensation recorded for stock options granted prior to its IPO. The fair value of these pre-IPO awards was calculated at grant date using the intrinsic value method. The remaining balance became fully amortized in the fourth quarter of 2008.

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

The Company adopted the new accounting guidance for determining fair value when the volume and level of activity for an asset or liability have significantly decreased and for identifying transactions that are not orderly. The new guidance provides additional direction for determining fair values when there is no active market or where the price inputs represent distressed sales. The new guidance reaffirms existing guidance that fair value is the amount for which an asset would be sold in an orderly transaction (as opposed to a forced liquidation or distressed sale) under current market conditions at the date of the financial statements. The new guidance amends the disclosure provisions of existing guidance to require entities to disclose the valuation inputs and techniques in interim and annual financial statements, and to disclose fair value hierarchies and the Level 3 reconciliation by major security types. The Company's adoption of the new guidance did not have a material impact on its financial position or results of operations.

The Company adopted the new accounting guidance on interim disclosures about the fair value of financial instruments. The new guidance amends the existing guidance to require public companies to provide disclosures about the fair value of financial instruments in interim and annual financial statements. The Company's adoption of the new guidance did not have a material impact on its financial position or results of operations.

The Company adopted the new accounting guidance for recognition and presentation of other-than-temporary impairments. The new guidance provides additional direction for determining the credit and non-credit components of other-than-temporary impairments of debt securities classified as available-for-sale or held-to-maturity. The guidance also increases and clarifies existing disclosure requirements and extends the disclosure frequency to interim and annual periods. The Company's adoption of the new guidance did not have a material impact on its financial position or results of operations.

The Company adopted the new accounting guidance for subsequent events, which establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. It provides guidance regarding the period after the balance sheet date during which management should evaluate events or transactions for potential recognition or disclosure in the financial statements, the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date, and the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. The Company's adoption of the new guidance did not have a material impact on its financial position or results of operations.

The Company adopted the Financial Accounting Standard Board's (FASB) new guidance on the hierarchy and sources of accounting principles generally accepted in the United States of America (GAAP). The new guidance identifies the

sources of accounting principles and the framework for selecting the principles used in the preparation of financial statements of nongovernmental entities that are presented in conformity with GAAP in the United States. The guidance establishes the FASB Accounting Standards Codification (the Codification) as the source of authoritative accounting principles recognized by the FASB to be applied by nongovernmental entities in the preparation of financial statements in conformity with GAAP. The issuance of the Codification did not change GAAP. The Company s adoption of the new guidance did not have a material impact on its financial position or results of operations. However, all references to GAAP literature in the Company s historical filings are superseded by references to the Codification.

The Company adopted the new accounting guidance for measuring liabilities at fair value. The new guidance amends existing guidance to provide clarification on how to measure the fair value of a liability in circumstances in

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which a quoted price in an active market for the identical liability is not available. It also clarifies that when estimating the fair value of a liability, an entity is not required to include or adjust an input relating to a restriction that prevents the transfer of the liability. The new guidance also clarifies that the quoted price for an identical liability when traded as an asset in an active market may be used as a Level 1 fair value measurement for a liability. The Company's adoption of the new guidance did not have a material impact on its financial position or results of operation.

Accounting Pronouncements Not Yet Adopted

In October 2009, the FASB issued new accounting guidance for recognizing revenue for a multiple-deliverable revenue arrangement. 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 must adopt the new guidance prospectively for new revenue arrangements entered into or materially modified beginning in the first quarter of 2011. Earlier adoption is permitted. The Company is currently evaluating the impact that the new guidance will have on its financial statements and the timing of its adoption.

In January 2010, the FASB issued new accounting guidance for improving disclosures about fair value measurements. The new guidance requires a gross presentation of Level 3 fair value rollforwards and adds a new requirement to disclose transfers in and out of Level 3 and fair value measurements. The new guidance also clarifies existing guidance about the level of disaggregation of fair value measurements and disclosures regarding inputs and valuation techniques. The new guidance is effective for the Company beginning in the first quarter of 2010, except for the gross presentation of Level 3 rollforwards, which is effective for the first quarter of 2011. The Company does not expect its adoption of the new fair value guidance to have a material impact on its financial position or results of operations.

Note 2 Supplementary Cash Flow Data

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

	Years Ended December 31,			Period from
	2009	2008	2007	August 5, 1997
				(Date of Inception) to
				December 31, 2009
Cash paid for interest	\$ 399	\$ 412	\$ 594	\$ 4,398
Cash paid for income taxes	1	1	1	10
Significant non-cash investing and financing activities:				
Deferred stock-based compensation				6,940
Purchases of property and equipment through accounts payable	126	127	359	126
				258

Purchases of property and equipment through trade in value of disposed property and equipment		
Penalty on restructuring of equipment financing lines		475
Conversion of convertible preferred stock to common stock		133,172
Warrants issued in registered direct equity financing	1,585	1,585

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Note 3 Cash Equivalents, Investments and Fair Value Measurements*Cash Equivalents and Investments*

The amortized cost and fair value of cash equivalents and available for sale investments at December 31, 2009 and 2008 were as follows (in thousands):

		Amortized Cost	Unrealized Gains	Unrealized Losses	December 31, 2009		Maturity Dates
					Fair Value		
Cash equivalents	money market funds	\$ 23,773			\$ 23,773		
Short-term investments	U.S. Treasury securities	\$ 71,265	\$ 1	\$	\$ 71,266	1/2010	6/2010

		Amortized Cost	Unrealized Gains	Unrealized Losses	December 31, 2008		Maturity Dates
					Fair Value		
Cash equivalents	money market funds	\$ 41,224			\$ 41,224		
Short-term investments	U.S. Treasury securities	\$ 15,030	\$ 18	\$	\$ 15,048	1/2009	3/2009

As of December 31, 2009 and 2008, the Company's cash equivalents and short-term investments had no unrealized losses.

Interest income was \$0.6 million, \$3.2 million and \$8.3 million for the years ended December 31, 2009, 2008 and 2007, respectively, and \$28.1 million for the period August 5, 1997 (inception) through December 31, 2009.

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 and long-term investments in ARS as of December 31, 2008, refer to securities that are 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 can attempt to sell the securities through an auction process or continue to hold the securities. The Company has classified its ARS holdings as short-term investments as of December 31, 2009 and long-term investments as of December 31, 2008, based on its

intention to liquidate the investments on June 30, 2010, the earliest date it can exercise the ARS Rights.

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. The assets underlying these ARS are student loans that are substantially backed by the federal government. In February 2008, auctions began to fail for these securities and each auction since then has failed. Consequently, the ARS are not currently liquid and the Company will not be able to access these funds until a future auction of the ARS is successful, a buyer is found outside of the auction process, the ARS are redeemed by the issuer or they mature. Historically, the fair value of the ARS approximated par value due to the frequent interest rate resets associated with the auction process. However, there is not a current active market for the ARS, and therefore they do not have a readily determinable market value. Accordingly, the estimated fair value of the ARS no longer approximates par value. The ARS continue to pay interest according to their stated terms.

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The fair value of the Company's investments in its ARS as of December 31, 2009 and December 31, 2008 was determined to be \$15.5 million and \$16.6 million, respectively. In the fourth quarter of 2008, based on valuation models of the individual securities, the Company recognized in the statement of operations a loss of approximately \$3.4 million on ARS in Interest and Other, net, for which the Company concluded that an other-than-temporary impairment existed. Changes in the fair value of the ARS are recognized in current period earnings in Interest and Other, net. Therefore, the Company recognized the sale of \$2.1 million of ARS at par value and unrealized gains of \$1.0 million on its ARS in 2009 to reflect the change in fair 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 the ARS Rights. The ARS Rights provide 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. Pursuant to the ARS Rights, the Company may require UBS to purchase its ARS at par value at any time between June 30, 2010 and July 2, 2012. In addition, UBS or its affiliates may sell or otherwise dispose of some or all of the ARS at its discretion at any time prior to expiration of the ARS Rights, subject to the obligation to pay the Company the par value of such ARS. The ARS Rights are not transferable, tradable or marginable, and will not be listed or quoted on any securities exchange or any electronic communications network. As consideration for the ARS Rights, the Company agreed to release UBS AG, UBS Securities LLC and UBS Financial Services, Inc., and/or their affiliates, directors, and officers from any claims directly or indirectly relating to the marketing and sale of the ARS, other than for consequential damages. UBS's obligations in connection with the ARS Rights are not secured by its assets and UBS is not required to obtain any financing to support these obligations. UBS has disclaimed any assurance that it will have sufficient financial resources to satisfy its obligations in connection with the ARS Rights. If UBS has insufficient funding to buy back the ARS and the auction process continues to fail, the Company may incur further losses on the carrying value of the ARS.

The ARS Rights represent 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 agreement includes a disincentive for nonperformance that is sufficiently large to make performance probable. The enforceability of the ARS Rights results in a put option that is recognized as a separate freestanding instrument that is accounted for separately from the ARS investments. As of December 31, 2009 and December 31, 2008, the Company recorded \$2.4 million and \$3.4 million, respectively, as the fair value of the investment put option related to the ARS Rights, classified as short-term and long-term assets, respectively, on the balance sheet. The Company recorded a corresponding charge of \$1.0 million for 2009 and a credit of \$3.4 million for 2008, to Interest and Other, net, in the statement of operations. The investment put option related to the ARS Rights does 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 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. Any change in these assumptions and market conditions would affect the value of the investment put option related to the ARS Rights.

The Company records the investment put option related to the ARS Rights in accordance with the fair value option permitted under fair value accounting guidance for financial instruments. Changes in the fair value of the investment put option are recognized in current period earnings in Interest and Other, net. Accordingly, the Company recognized an unrealized loss of \$1.0 million on the investment put option in 2009. The Company anticipates that any future changes in the fair value of the investment put option related to the ARS Rights will be offset by the changes in the fair value of the related ARS with no material net impact to the statements of operations, subject to adjustment for changes in UBS's credit profile. The investment put option related to the ARS Rights will

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continue to be measured at fair value until the earlier of the Company's exercise of the ARS Rights, UBS's purchase of the ARS in connection with the ARS Rights, or the maturity of the ARS underlying the ARS Rights.

The Company continues to monitor the market for ARS and consider its impact (if any) on the fair market value of its investments. If the market conditions deteriorate further, the Company may be required to record additional unrealized losses in earnings, offset by corresponding increases in the investment put option related to the ARS Rights, assuming no deterioration of UBS's credit rating.

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.

Financial assets measured at fair value on a recurring basis as of December 31, 2009 and 2008 are classified in the table below in one of the three categories described above (in thousands):

	December 31, 2009		
	Fair Value Measurements Using		Assets
	Level 1	Level 3	At Fair Value

		Level 2		
Money market funds	\$ 23,773	\$	\$	\$ 23,773
U.S. Treasury securities	71,266			71,266
Investments in ARS			15,542	15,542
Investment put option related to ARS Rights			2,358	2,358
Total	\$ 95,039	\$	\$ 17,900	\$ 112,939
Amounts included in:				
Cash and cash equivalents	\$ 23,773	\$	\$	\$ 23,773
Short-term investments	71,266			71,266
Investments in ARS			15,542	15,542
Investment put option related to ARS Rights			2,358	2,358
Total	\$ 95,039	\$	\$ 17,900	\$ 112,939

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	December 31, 2008			Assets At Fair Value
	Fair Value Measurements Using			
	Level 1	Level 2	Level 3	
Money market funds	\$ 41,224	\$	\$	\$ 41,224
U.S. Treasury securities	15,048			15,048
Investments in ARS			16,636	16,636
Investment put option related to ARS Rights			3,389	3,389
Total	\$ 56,272	\$	\$ 20,025	\$ 76,297
Amounts included in:				
Cash and cash equivalents	\$ 41,224	\$	\$	\$ 41,224
Short-term investments	15,048			15,048
Investments in ARS			16,636	16,636
Investment put option related to ARS Rights			3,389	3,389
Total	\$ 56,272	\$	\$ 20,025	\$ 76,297

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 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, which is based on the Black-Scholes option pricing model and approximates 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 are student loans which are substantially backed by the federal government. The fair values of these securities as of December 31, 2009 were estimated utilizing a discounted cash flow (DCF) analysis. In the first quarter of fiscal year 2008, the Company reclassified its ARS to the Level 3 category, as some of the inputs used in the DCF model are unobservable. The valuation of the Company's ARS investment portfolio is subject to uncertainties that are difficult to predict. The assumptions used in preparing the DCF model include estimates of interest rates, timing and amount of cash flows, credit and liquidity premiums and expected holding periods of the ARS, based on data available as of December 31, 2009. These assumptions are volatile and subject to change as the underlying sources of these assumptions and market conditions change, which could result in significant changes to the fair value of the ARS. The significant assumptions of the DCF model are discount margins that are based on industry recognized student loan sector indices, an additional liquidity discount and an estimated term to liquidity. Other items that this analysis considers are 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.

Due to the change of the fair value of the Company's ARS and the investment put option related to the ARS Rights, unrealized gains of \$1.0 million on the ARS and unrealized losses of \$1.0 million on the investment put option related to the ARS Rights were included in Interest and Other, net in the accompanying statement of operations for 2009. The ARS investments continue to pay interest according to their stated terms.

Changes to estimates and assumptions used in estimating the fair value of the ARS and the investment put option related to the ARS Rights may result in materially different values. In addition, actual market exchanges, if any, may occur at materially different amounts. Other factors that may impact the valuation of the Company's ARS and investment put option related to the ARS Rights include changes to credit ratings of the securities and to the underlying assets supporting those securities, rates of default of the underlying assets, underlying collateral value, discount rates, counterparty risk and ongoing strength and quality of market credit and liquidity.

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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 reconciliation for all assets measured at fair value using significant Level 3 inputs for the twelve months ended December 31, 2009 (in thousands):

	ARS		Investment Put Option Related to ARS Rights
Balance as of December 31, 2008	\$ 16,636	\$	3,389
Unrealized gain on ARS, included in Interest and Other, net	1,031		
Unrealized loss on the investment put option related to ARS Rights, included in Interest and Other, net			(1,031)
Sale of ARS	(2,125)		
Balance as of December 31, 2009	\$ 15,542	\$	2,358

The total amount of assets measured using valuation methodologies based on Level 3 inputs represented approximately 16% of the Company's total assets that were measured at fair value as of December 31, 2009.

Note 4 Balance Sheet Components

	December 31,	
	2009	2008
Property and equipment, net (in thousands):		
Laboratory equipment	\$ 16,238	\$ 18,254
Computer equipment and software	3,699	3,700
Office equipment, furniture and fixtures	431	431
Leasehold improvements	3,293	3,146
	23,661	25,531
Less: Accumulated depreciation and amortization	(19,948)	(20,444)
	\$ 3,713	\$ 5,087

Property and equipment pledged as collateral against outstanding borrowings under the Company's equipment financing lines totaled \$8.8 million, less accumulated depreciation of \$6.5 million, at December 31, 2009 and

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\$10.1 million, less accumulated depreciation of \$6.1 million, at December 31, 2008. Depreciation expense was \$2.0 million, \$2.5 million and \$2.8 million for the years ended December 31, 2009, 2008 and 2007, respectively.

	December 31,	
	2009	2008
Accrued liabilities (in thousands):		
Clinical and pre-clinical costs	\$ 2,396	\$ 5,368
Consulting and professional fees	360	446
Bonus	1,902	13
Vacation and other payroll related	924	959
Other accrued expenses	223	388
Income tax payable	130	
	\$ 5,935	\$ 7,174

Interest receivable on cash equivalents and investments of \$378,000 and \$106,000 is included in prepaid