NUVEEN SENIOR INCOME FUND
Form N-CSRS
April 09, 2010

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM N-CSR
CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES
Investment Company Act file number 811-09571
Nuveen Senior Income Fund

(Exact name of registrant as specified in charter)
Nuveen Investments
333 West Wacker Drive
Chicago, IL 60606

(Address of principal executive offices) (Zip code)
Kevin J. McCarthy
Nuveen Investments
333 West Wacker Drive
Chicago, IL 60606

(Name and address of agent for service)
Registrant s telephone number, including area code: (312) 917-7700
Date of fiscal year end: July 31
Date of reporting period: January 31, 2010

Form N-CSR is to be used by management investment companies to file reports with the Commission not later than 10 days after the transmission to stockholders of any report that is required to be transmitted to stockholders under Rule 30e-1 under the Investment Company Act of 1940 (17 CFR 270.30e-1). The Commission may use the information provided on Form N-CSR in its regulatory, disclosure review, inspection, and policymaking roles.
A registrant is required to disclose the information specified by Form N-CSR, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-CSR unless the Form displays a currently valid Office of Management and Budget (OMB) control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. SS. 3507.

ITEM 1. REPORTS TO SHAREHOLDERS

Closed-End Funds

Nuveen Investments
Closed-End Funds
High current income from portfolios of senior corporate loans.

Semi-Annual Report
January 31, 2010

Nuveen Senior Income Fund NSL	**Nuveen Floating Rate Income Fund JFR**	**Nuveen Floating Rate Income Opportunity Fund JRO**

Chairman s
Letter to Shareholders

Dear Shareholder,

The global economic environment in which your Fund operates reflects continuing but uneven economic recovery. The U.S. and other major industrial countries are experiencing steady but comparatively low levels of economic growth, while emerging market countries are seeing a resumption of relatively strong economic expansion. The largest source of economic uncertainty is the potential impact of steps being considered by many governments to counteract the extraordinary governmental spending and credit expansion carried out to deal with the financial and economic crisis of 2008. Consequently, the implications for future tax rates, government spending, interest rates and the pace of economic recovery in the U.S. and other leading economies are extremely difficult to predict at the present time. The long term health of the global economy depends on restoring some measure of fiscal discipline around the world, but since all of the corrective steps require economic pain, it is not surprising that governments are reluctant to undertake them.

In the near term, governments remain committed to furthering economic recovery and realizing a meaningful reduction in their national unemployment rates. Such an environment should produce continued economic growth and, consequently, attractive investment opportunities. Over the longer term, the larger uncertainty mentioned earlier carries the risk of unexpected potholes in the road to sustained recovery. For this reason, Nuveen s investment management teams are working hard to balance return and risk by building well-diversified portfolios, among other strategies. I encourage you to read the following commentary on the management of your Fund. As always, I also encourage you to contact your financial consultant if you have any questions about your Nuveen Fund investment.

On behalf of the other members of your Fund s Board, we look forward to continuing to earn your trust in the months and years ahead.

Sincerely,
Robert P. Bremner
Chairman of the Board and Lead Independent Director
March 25, 2010

Portfolio Manager s Comments

Nuveen Senior Income Fund (NSL)

Nuveen Floating Rate Income Fund (JFR)

Nuveen Floating Rate Income Opportunity Fund (JRO)

The Funds investment portfolios have been managed by Gunther Stein of Symphony Asset Management, LLC, an affiliate of Nuveen Investments, since 2001. Gunther, who is Symphony s chief investment officer, has more than 20 years of investment management experience, much of it in evaluating and purchasing senior corporate loans and other high-yield debt.

Here Gunther talks about his management strategies and the performance of the Funds for the six-month period ended January 31, 2010.

What key strategies were used to manage the Funds during the six-month period ended January 31, 2010?

Certain statements in this report are forward-looking statements. Discussions of specific investments are for illustration only and are not intended as recommendations of individual investments. The forward-looking statements and other views expressed herein are those of the portfolio manager as of the date of this report. Actual future results or occurrences may differ significantly from those anticipated in any forward-looking statements and the views expressed herein are subject to change at any time, due to numerous market and other factors. The Funds disclaim any obligation to update publicly or revise any forward-looking statements or views expressed herein.

Over this period, the Fund continued to invest at least 80% of its total assets in adjustable rate senior secured loans. Other investment included U.S. dollar denominated senior loans of non-U.S. borrowers, senior loans that were not secured, other debt securities, and equity securities and warrants acquired in connection with the Funds investments in senior loans.

Conditions remained firm in the senior loan market throughout the six-month period, as the market continued its record-breaking year in terms of positive performance. Overall, the loan market posted gains in each month of the period.

The positive performance since the market correction has been driven by a combination of better-than-expected corporate performance, limited new supply and healthy demand. It is important to note that while the fundamentals of many companies have been weakening, they often have been better than the analysts consensus. Default projections, which had been as high as 15-20% for senior loans and high yield debt, generally have come back down to well under 10%.

The senior loan market saw approximately $55 billion of new issuance in 2009, most of which came in the second half of the year. Loan paydowns and inflows into the asset class more than absorbed this new supply, leaving secondary market levels generally higher. This was a common theme throughout the period, and a stark contrast to the market

environment seen in 2008 when new-issue loan supply was well over $100 billion and demand was nonexistent as the market deleveraged.

A common trend throughout the period was the refinancing of senior debt, much of which is shorter-maturity paper, using high yield bond issuance. In many cases, firms chose to term out their liabilities while locking in their funding cost using fixed-rate debt. This has

generally been a positive for the senior loan market, as refinancings have taken senior debt out at par while the average secondary market issue trades at a discount to par.

We feel that technical factors will keep the market firm in the short term, as new issues should remain limited and demand remains firm. This demand is coming from both investors looking to take on credit risk, as well as investors who want to swap into floating rate income given the steepness in the yield curve.

In terms of fundamentals, we remain cautiously optimistic in the near term. However, in the next two to three years we expect there may be a large spike in the outstanding maturities in the loan market. According to Credit Suisse, this may total roughly $600 billion between 2011 and 2015. While we believe that this market will be navigable for managers that understand the companies they invest in, it will be more challenging for the market overall and the more index-like managers. Also worth noting is that many of these maturities will be removed from the market earlier than expected via paydowns, refinancings, and other means. These all represent powerful catalysts for active managers who can make opportunistic investments in the asset class.

How did the Funds perform over this six-month period?

The performance of the Funds, as well as the performance of certain market indexes, is presented in the accompanying table.

Past performance does not guarantee future results. Current performance may be higher or lower than the data shown.

Returns do not reflect the deduction of taxes that shareholders may have to pay on Fund distributions or upon the sale of Fund shares. For additional information, see the individual Performance Overview for your Fund in this report.

1 The CSFB Leveraged Loan Index is a representative, unmanaged index of tradeable, senior, U.S. dollar-denominated leveraged loans. Index returns do not include the effects of any sales charges or management fees. It is not possible to invest directly in an index.

2 The Barclays Capital U.S. Aggregate Bond Index is an unmanaged index that includes all investment-grade, publicly issued, fixed-rate, U.S. dollar-denominated, nonconvertible debt issues and commercial mortgage backed securities with maturities of at least one year and outstanding par values of $150 million or more. Index returns do not include the effects of any sales charges or management fees. It is not possible to invest directly in an index.

Total Returns on Common Share Net Asset Value
For periods ended 1/31/10

	Cumulative	Annualized		
	6-Month	**1-Year**	**5-Year**	**10-Year**
NSL	22.68%	97.45%	3.50%	5.04%
JFR	19.24%	82.15%	3.17%	N/A
JRO	21.86%	95.91%	3.77%	N/A
CSFB Leveraged Loan Index[1]	5.27%	39.44%	3.85%	4.38%
Barclays Capital U.S. Aggregate Bond Index[2]	5.54%	8.51%	5.16%	6.53%

For the six-months ended January 31, 2010, all three Funds outperformed the CSFB Leveraged Loan Index and the Barclays Capital U.S. Aggregate Bond Index. During the period, higher risk assets generally outperformed higher quality assets. The risk-driven rally was most evident in some of the low dollar-priced names we hold in the Funds, such as Tribune Company and Univision. Both of these issuers, which are heavily involved in the media business and had recent LBO deals, came under pressure in 2008. However, we believed that both businesses had sufficient asset quality and some level of downside protection in terms of recovery value. Looking at return potential, we thought these distressed assets provided a unique total return opportunity due to their price appreciation potential. Historically, senior loan asset class returns generally have been driven by coupons.

Given the broad rally seen during the period, very few issues had negative performance. Howerver, there was some relative underperformance in higher quality names. Many of these assets were new-issue loans which provide healthy risk-adjusted income, but lacked the total return potential of lower priced and stressed/distressed assets. We did think, however, that the income generated by these new-issue loans, such as Reynolds and

Warner Chilcott, represented a solid value for the Funds in the current environment. Many of these issues have very tight creditor agreements and provide LIBOR floors which help support a higher coupon rate.

IMPACT OF THE FUNDS LEVERAGE STRATEGIES ON PERFORMANCE

One important factor impacting the returns of these Funds relative to the comparative indexes was the Funds use of financial leverage. The Funds use leverage because their managers believe that, over time, leveraging provides opportunities for additional income and total returns for common shareholders. However, use of leverage also can expose common shareholders to additional volatility. For example, as the prices of securities held by a Fund decline, the negative impact of these valuation changes on common share net asset value and common shareholder total return is magnified by the use of leverage. Conversely, leverage may enhance common share returns during periods when prices generally are rising.

Leverage made a significant positive contribution to the returns of each Fund over this period.

RECENT DEVELOPMENTS REGARDING THE FUNDS LEVERAGED CAPITAL STRUCTURES

Shortly after their inceptions, all three Funds issued auction rate preferred shares (APRS) to create financial leverage. As noted in the last several shareholder reports, the ARPS issued by many closed-end funds, including these Nuveen Funds, have been hampered by a lack of liquidity since February 2008. Since that time, more ARPS have been submitted for sale in each of their regularly scheduled auctions than there have been offers to buy. This means that these auctions have failed to clear, and that many, or all, of the ARPS holders who wanted to sell their shares in these auctions were unable to do so. This decline in liquidity in ARPS did not lower the credit quality of these shares, and auction rate preferred shareholders unable to sell their shares received distributions at the maximum rate applicable to failed auctions, as calculated in accordance with the pre-established terms of the ARPS.

One continuing implication for common shareholders of these Funds from the auction failures is that the Funds cost of leverage likely has been incrementally higher at times than it otherwise might have been had the auctions continued to be successful. As a result, the Funds common share earnings likely have been incrementally lower at times than they otherwise might have been.

Beginning in the summer of 2008, the Funds announced their intention to redeem most or all of their ARPS and retain their leveraged structure primarily through the use of bank borrowings. Leveraging using bank borrowings offers common shareholders most benefits and risks as leveraging with ARPS.

As of January 31, 2010, these Funds had redeemed all of their outstanding ARPS. For additional information, please visit the Nuveen CEF Auction Rate Preferred Resource Center at: http://www.nuveen.com/arps.

Common Share Distribution
and Share Price Information

As noted earlier, these Funds use financial leverage to potentially enhance opportunities for additional income for common shareholders. The Funds use of this leverage strategy continued to provide incremental income, although the extent of this benefit was reduced to some degree by short-term interest rates that remained relatively high during the early part of the period. This, in turn, kept the Funds borrowing costs high. All three fund s distributions increased twice over the six-month period.

During certain periods, each Fund may pay dividends at a rate that may be more or less than the amount of net investment income actually earned by the Fund during the period. If a Fund has cumulatively earned more than it has paid in dividends, it holds the excess in reserve as undistributed net investment income (UNII) as part of the Fund s common share NAV. Conversely, if a Fund has cumulatively paid dividends in excess of its earnings, the excess constitutes negative UNII that is likewise reflected in the Fund s common share NAV. As of January 31, 2010, all three Funds had positive UNII balances, based upon our best estimate, for tax purposes. For financial statement purposes, NSL had a negative UNII balance while JFR and JRO had positive UNII balances.

Common Share Repurchases and Share Price Information

As of January 31, 2010, JFR and JRO cumulatively repurchased common shares as shown in the accompanying table. Since the inception of the Funds repurchase program, NSL has not repurchased any of its outstanding common shares.

Fund	Common Shares Repurchased	% of Outstanding Common Shares
JFR	147,593	0.3%
JRO	19,400	0.1%

During the six-month reporting period, the Funds repurchased common shares at a weighted average price and a weighted average discount per common share as shown in the accompanying table.

Fund	Common Shares Repurchased	Weighted Average Price Per Share Repurchased	Weighted Average Discount Per Share Repurchased
JFR	137,893	$9.15	12.86%
JRO	9,700	$8.95	13.25%

As of January 31, 2010, the Fund s common share prices were trading at a discount (-) to their common share NAVs as shown in the accompanying table.

Fund	1/31/10 (-)Discount/ (+)Premium	Six-Month Average (-) Discount
NSL	+6.07%	-2.46%
JFR	-5.11%	-10.67%
JRO	-0.53%	-8.24%

NSL
Performance
OVERVIEW

Nuveen Senior Income Fund

as of January 31, 2010

Fund Snapshot

Common Share Price	$7.16
Common Share Net Asset Value	$6.75
Premium/(Discount) to NAV	6.07%
Latest Dividend	$0.0400
Market Yield	6.70%
Net Assets Applicable to Common Shares ($000)	$201,450

Average Annual Total Return
(Inception 10/26/99)

	On Share Price	**On NAV**
6-Month (Cumulative)	44.17%	22.68%
1-Year	120.71%	97.45%
5-Year	2.48%	3.50%
10-Year	5.70%	5.04%

Industries
(as a % of total investments)

Media	11.9%
Health Care Providers & Services	9.5%
Hotels, Restaurants & Leisure	8.9%
Building Products	6.4%
Specialty Retail	4.1%
Software	3.4%

Oil, Gas & Consumable Fuels	3.3%
Chemicals	3.1%
Real Estate Management & Development	2.9%
Road & Rail	2.9%
Food & Staples Retailing	2.6%
IT Services	2.6%
Automobiles	2.4%
Airlines	2.2%
Leisure Equipment & Products	2.1%
Commercial Services & Supplies	1.9%
Auto Components	1.9%
Diversified Telecommunication Services	1.7%
Diversified Financial Services	1.7%
Household Products	1.6%
Semiconductors & Equipment	1.6%
Communications Equipment	1.5%
Paper & Forest Products	1.4%
Short-Term Investments	3.9%
Other	14.5%

Top Five Issuers
(as a % of total long-term investments)

Building Materials Corporation of America	2.9%
Charter Communications Operating Holdings LLC	2.8%
HCA, Inc.	2.5%
Swift Transportation Company, Inc.	2.1%
Community Health Systems, Inc.	2.0%

Portfolio Allocation (as a % of total investments)

2009-2010 Monthly Dividends Per Common Share

Share Price Performance Weekly Closing Price

JFR
Performance
OVERVIEW

Nuveen Floating Rate Income Fund

as of January 31, 2010

Fund Snapshot

Common Share Price	$10.76
Common Share Net Asset Value	$11.34
Premium/(Discount) to NAV	-5.11%
Latest Dividend	$0.0510
Market Yield	5.69%
Net Assets Applicable to Common Shares ($000)	$536,084

Average Annual Total Return
(Inception 3/25/04)

	On Share Price	**On NAV**
6-Month (Cumulative)	32.29%	19.24%
1-Year	70.80%	82.15%
5-Year	2.39%	3.17%
Since Inception	2.09%	3.30%

Industries
(as a % of total investments)

Media	14.3%
Hotels, Restaurants & Leisure	9.2%
Health Care Providers & Services	8.3%
Road & Rail	4.3%
Specialty Retail	4.2%
Diversified Telecommunication Services	4.0%

Building Products	4.0%
IT Services	3.8%
Chemicals	3.3%
Software	3.3%
Real Estate Management & Development	3.1%
Oil, Gas & Consumable Fuels	2.7%
Communications Equipment	2.0%
Auto Components	1.8%
Pharmaceuticals	1.7%
Wireless Telecommunication Services	1.7%
Automobiles	1.7%
Airlines	1.7%
Leisure Equipment & Products	1.6%
Household Products	1.6%
Commercial Services & Supplies	1.6%
Electric Utilities	1.5%
Investment Companies	1.6%
Short-Term Investments	2.8%
Other	14.2%

Top Five Issuers
(as a % of total long-term investments)

Swift Transportation Company, Inc.	3.3%
Univision Communications, Inc.	2.8%
Charter Communications Operating Holdings LLC	2.6%
HCA, Inc.	2.3%
First Data Corporation	2.3%

Portfolio Allocation (as a % of total investments)

2009-2010 Monthly Dividends Per Common Share

Share Price Performance Weekly Closing Price

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. In addition, the FDA may require that a proposed Risk Evaluation and Mitigation Strategy, also known as a REMS, be submitted as part of an NDA if the FDA determines that it is necessary to ensure that the benefits of the drug outweigh its risks. The FDA and foreign regulatory agencies can delay, limit or deny approval of a drug candidate for many reasons, including, but not limited to:

they might determine that a drug candidate is not safe or effective;

they might not find the data from preclinical testing and clinical trials sufficient and could request that additional trials be performed;

they might not approve our, our partner s or the contract manufacturer s processes or facilities; or

they might change their approval policies or adopt new regulations.

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

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

Any regulatory approvals that we or our partners receive for our drug candidates may be subject to limitations on the indicated uses for which the drug may be marketed or require potentially costly post-marketing follow-up studies or compliance with a REMS. In addition, if the FDA or foreign regulatory agencies approves any of our drug

candidates, the labeling, packaging, adverse event reporting, storage, advertising, promotion and record-keeping for the drug will be subject to extensive regulatory requirements. The subsequent discovery of previously unknown problems with the drug, including adverse events of unanticipated severity or frequency, or the discovery that adverse effects or toxicities observed in

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preclinical research or clinical trials that were believed to be minor actually constitute much more serious problems, may result in restrictions on the marketing of the drug or withdrawal of the drug from the market.

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

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

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

introduction of competitive drugs to the market;

clinical safety and efficacy of alternative drugs or treatments;

cost-effectiveness;

availability of coverage and reimbursement from health maintenance organizations and other third-party payors;

convenience and ease of administration;

prevalence and severity of adverse side effects;

other potential disadvantages relative to alternative treatment methods; or

insufficient marketing and distribution support.

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

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

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

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

The use of our drug candidates in clinical trials may result in adverse effects. We cannot predict all the possible harms or adverse effects that may result from our clinical trials. We currently maintain limited product liability insurance. We may not

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have sufficient resources to pay for any liabilities resulting from a personal injury or other claim excluded from, or beyond the limit of, our insurance coverage. Our insurance does not cover third parties negligence or malpractice, and our clinical investigators and sites may have inadequate insurance or none at all. In addition, in order to conduct clinical trials or otherwise carry out our business, we may have to contractually assume liabilities for which we may not be insured. If we are unable to look to our own or a third party s insurance to pay claims against us, we may have to pay any arising costs and damages ourselves, which may be substantial.

In addition, if we commercially launch drugs based on our drug candidates, we will face even greater exposure to product liability claims. This risk exists even with respect to those drugs that are approved for commercial sale by the FDA and foreign regulatory agencies and manufactured in licensed and regulated facilities. We intend to secure additional limited product liability insurance coverage for drugs that we commercialize, but may not be able to obtain such insurance on acceptable terms with adequate coverage, or at reasonable costs. Even if we are ultimately successful in product liability litigation, the litigation would consume substantial amounts of our financial and managerial resources and may create adverse publicity, all of which would impair our ability to generate sales of the affected product and our other potential drugs. Moreover, 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

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the status of, payment and other terms, and timing of any strategic alliance, licensing or other arrangements that we have entered into or may establish.

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

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

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

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

All of our facilities and our important documents and records, such as hard copies of our laboratory books and records for our drug candidates and compounds and our electronic business records, are located in our corporate headquarters at a single location in South San Francisco, California near active earthquake zones. If a natural disaster, such as an earthquake or flood, a catastrophic event such as a disease pandemic or terrorist attack, or a localized extended outage of critical utilities or transportation systems occurs, we could experience a significant business interruption. Our partners and other third parties on which we rely may also be subject to business interruptions from such events. In addition, California from time to time has experienced shortages of water, electric power and natural gas. Future shortages and conservation measures could disrupt our operations and cause expense, thus adversely affecting our business and financial results.

Risks Related To an Investment in Our Securities

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

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

announcements concerning any of the clinical trials for our compounds, such as omecamtiv mecarbil for heart failure and CK-2017357 and CK-2066260 for the potential treatment of diseases associated with aging, muscle wasting and neuromuscular dysfunction (including, but not limited to, the timing of initiation or completion of such trials and the results of such trials, and delays or discontinuations of such trials, including delays resulting from slower than expected or suspended patient enrollment or discontinuations resulting from a failure to meet pre-defined clinical end-points);

announcements concerning our strategic alliance with Amgen or future strategic alliances;

failure or delays in entering additional drug candidates into clinical trials;

failure or discontinuation of any of our research programs;

issuance of new or changed securities analysts reports or recommendations;

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failure or delay in establishing new strategic alliances, or the terms of those alliances;

market conditions in the pharmaceutical, biotechnology and other healthcare-related sectors;

actual or anticipated fluctuations in our quarterly financial and operating results;

developments or disputes concerning our intellectual property or other proprietary rights;

introduction of technological innovations or new products by us or our competitors;

issues in manufacturing our drug candidates or drugs;

market acceptance of our drugs;

third-party healthcare coverage and reimbursement policies;

FDA or other U.S. or foreign regulatory actions affecting us or our industry;

litigation or public concern about the safety of our drug candidates or drugs;

additions or departures of key personnel;

substantial sales of our common stock by our existing shareholders, whether or not related to our performance; and

volatility in the stock prices of other companies in our industry or in the stock market generally.

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

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

As of April 30, 2011, our executive officers, directors and their affiliates beneficially owned or controlled approximately 12.6% 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.

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

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

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

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and new Securities and Exchange Commission, or SEC, regulations and NASDAQ Stock Market LLC rules are creating uncertainty for public companies. We are presently evaluating and monitoring developments with respect to new and proposed rules and cannot predict or estimate the amount of the additional costs we may incur or the timing of these costs. For example, compliance with the internal control requirements of Section 404 of the Sarbanes-Oxley Act has to date required the commitment of significant resources to document and test the adequacy of our internal control over financial reporting. We can provide no assurance as to conclusions of management or by our independent registered public accounting firm with respect to the effectiveness of our internal control over financial reporting in the future. In addition, the SEC has adopted regulations that will require us to file corporate financial statement information in a new interactive data format known as XBRL beginning in 2011. We may 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.

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

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

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

As of June 10, 2011, we had 72,279,751 shares of common stock outstanding. However, as of that same date, we also had outstanding 8,070 shares of our Series A Convertible Preferred Stock, which is convertible, without payment

of additional consideration, into 8,070,000 shares of common stock. The conversion of the outstanding shares of our Series A Convertible Preferred Stock into common stock would be substantially dilutive to the outstanding shares of common stock. Any dilution or potential dilution may cause our stockholders to sell their shares, which would contribute to a downward movement in the stock price of our common stock.

Risks Relating to This Offering

We will have broad discretion over the use of the proceeds to us from this offering and may apply it to uses that do not improve our operating results or the value of your securities.

We will have broad discretion to use the net proceeds to us from this offering, and investors will be relying solely on the judgment of our board of directors and management regarding the application of these proceeds. Although we expect to use the net proceeds from this offering for general corporate purposes, we have not allocated these net proceeds for specific purposes. Investors will not have the opportunity, as part of their investment decision, to assess whether the proceeds are being used appropriately. Our use of the proceeds may not improve our operating results or increase the value of the securities being offered hereby.

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You will experience immediate and substantial dilution.

The offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Assuming that an aggregate of 14,383,670 shares of our common stock are sold at a price of $1.18 per share, the last reported sale price of our common stock on NASDAQ on June 10, 2011, for aggregate gross proceeds of $17.0 million, and after deducting commissions and estimated aggregate offering expenses payable by us, you will experience immediate dilution of $0.25 per share, representing the difference between our as adjusted net tangible book value per share as of March 31, 2011 after giving effect to this offering and the assumed offering price. The exercise of outstanding stock options and warrants will result in further dilution of your investment. See the section entitled Dilution below for a more detailed illustration of the dilution you would incur if you participate in this offering.

This offering, together with other offerings by us, may harm the market price of, and market for, our common shares.

The common shares that may be offered and sold under this prospectus represent approximately 19.9% of our issued and outstanding common shares as of the date of this prospectus. We have commenced an at-the-market offering of up to $20.0 million in common shares and may conduct additional offerings of common shares from time to time in the near future. The sales, if any, by us as part of our at-the-market offering or any other offering may create downward pressure on the market price of our common shares. In addition, market participants may elect not to purchase our shares because of the actual or anticipated downward pressure placed on the market price for our common shares by this offering or separate offerings by the company, which may reduce trading volume and result in market price declines.

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DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents we incorporate by reference in this prospectus include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, which we refer to as the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, which we refer to as the Exchange Act, that involve substantial risks and uncertainties. All statements, other than statements of historical fact that we include in this prospectus and in the documents we incorporate by reference in this prospectus, including statements regarding our strategy, future operations, future financial position, future results of operations, future cash flows, projected costs, financing plans, product development, possible strategic alliances, competitive position, prospects, plans and objectives of management, may be deemed forward-looking statements for purposes of the Securities Act and the Exchange Act. We often use words such as anticipate, estimate, expect, project, intend, believe, may, predict, will, and would, and similar expressions, to identify forward-looking statements, although all forward-looking statements contain these identifying words.

These forward-looking statements include, among other things, statements about:

- guidance concerning revenues, research and development expenses and general and administrative expenses for 2011;
- 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, such as Amgen, including the anticipated timing for initiation of clinical trials and anticipated dates of data becoming available or being announced from clinical trials;
- the results from the clinical trials and non-clinical and pre-clinical studies of our drug candidates and other compounds, and the significance and utility of such results;
- our plans to file an IND for CK-2066260 with the FDA;
- our and our partners , such as Amgen s, plans or ability to conduct the continued research and development of our drug candidates and other compounds;
- our expected roles in research, development or commercialization under our strategic alliances, such as with Amgen;
- the properties and potential benefits of, and the potential market opportunities for, our drug candidates and other compounds, including the potential indications for which they may be developed;
- the sufficiency of the clinical trials conducted with our drug candidates to demonstrate that they are safe and efficacious;
- our receipt of milestone payments, royalties, reimbursements and other funds from current or future partners under strategic alliances, such as with Amgen;
- our plans to seek strategic alternatives for our mitotic kinesin inhibitor drug candidates 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 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;

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

potential competitors and competitive products;

retaining key personnel and recruiting additional key personnel;

expected future amortization of employee stock-based compensation; and

the potential impact of recent accounting pronouncements on our financial position or results of operations.

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

Amgen s decisions with respect to the timing, design and conduct of development activities for omecamtiv mecarbil, including decisions to postpone or discontinue research or development activities relating to omecamtiv mecarbil;

our ability to obtain additional financing;

our receipt of funds and access to other resources under our current or future strategic alliances;

difficulties or delays in the development, testing, production or commercialization of our drug candidates;

difficulties or delays in or slower than anticipated patient enrollment in our or our partners clinical trials;

adverse side effects, including potential drug-drug interactions, or inadequate therapeutic efficacy of our drug candidates that could slow or prevent product approval (including the risk that current and past results of preclinical research or non-clinical or clinical development may not be indicative of future clinical trials results);

results from non-clinical studies that may adversely impact the timing or the further development of our drug candidates and potential drug candidates;

the possibility that the FDA or foreign regulatory agencies may delay or limit our or our partners ability to conduct clinical trials or may delay or withhold approvals for the manufacture and sale of our products;

activities and decisions of, and market conditions affecting, current and future strategic partners;

our ability to enter into partnership agreements for any of our programs on acceptable terms and conditions or in accordance with our planned timelines;

the availability of funds under our grant from the National Institute of Neurological Disorders and Stroke in future periods;

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.

Our actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including the factors described under Risk Factors beginning on page 4 of this prospectus and those incorporated herein by reference. These important factors include the factors that we identify in the documents that we incorporate by reference in this prospectus. If one or more of these factors materialize, or if any underlying assumptions prove incorrect, our actual results, performance or achievements may vary materially from any future results, performance or achievements expressed or implied by these forward-looking statements. You should consider these factors and the other cautionary statements made in this prospectus or the documents we incorporate by reference as being applicable to all related forward-looking statements wherever they appear in this prospectus or the documents incorporated by reference. We do not assume, and specifically disclaim, any obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise. Operating results reported are not necessarily indicative of results that may occur in future periods.

You should read this prospectus, the documents we have filed with the SEC that are incorporated by reference and any accompanying prospectus supplement in connection with this offering completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward- looking statements in the foregoing documents by these cautionary statements.

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You should rely only on the information contained in, or incorporated by reference into, this prospectus and in any accompanying prospectus supplement in connection with this offering. Neither we nor MLV have authorized any other person to provide you with different information. The securities offered under this prospectus are not being offered in any state where the offer is not permitted. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front of this prospectus, or that any information incorporated by reference into this prospectus is accurate as of any date other than the date of the document so incorporated by reference.

USE OF PROCEEDS

We currently intend to use the net proceeds, if any, from the sale of shares of our common stock for:

research and development, including clinical trials for our drug candidates; and

working capital and other general corporate purposes.

We cannot estimate precisely the allocation of the net proceeds from this offering among these uses. The amount that we actually expend for these purposes may vary significantly depending on numerous factors, such as the progress of our research and development efforts, technological advances and the competitive environment for our products. We may also use a portion of the net proceeds to acquire or invest in complementary businesses, products and technologies. Although we currently have no material agreements or commitments with respect to acquisitions, we evaluate acquisition opportunities and engage in related discussions from time to time.

Pending the application of the net proceeds, we intend to invest the net proceeds in a variety of capital preservation instruments, including direct or guaranteed obligations of the U.S. government, certificates of deposit and money market funds, in accordance with our investment policy.

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DILUTION

If you invest in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share and the as adjusted net tangible book value per share after giving effect to this offering. We calculate net tangible book value per share by dividing the net tangible book value, which is tangible assets less total liabilities, by the number of outstanding shares of our common stock. Dilution represents the difference between the amount per share paid by purchasers of shares in this offering and the as adjusted net tangible book value per share of our common stock immediately after giving effect to this offering. Our net tangible book value as of March 31, 2011 was approximately $59.6 million, or $0.89 per share.

After giving effect to the sale of our common stock in the aggregate amount of $17.0 million, which is based on the assumed sale of a number of shares equal to 19.9% of our common stock outstanding as of June 10, 2011 and an assumed offering price of $1.18 per share, the last reported sale price of our common stock on The NASDAQ Global Market on June 10, 2011, and after deducting estimated offering commissions and expenses payable by us, our net tangible book value as of March 31, 2011 would have been $76.0 million, or $0.93 per share of common stock. This represents an immediate increase in the net tangible book value of $0.04 per share to our existing stockholders and an immediate dilution in net tangible book value of $0.25 per share to new investors. The following table illustrates this per share dilution:

Assumed public offering price per share		$ 1.18
Net tangible book value per share as of March 31, 2011	$ 0.89	
Increase in net tangible book value per share attributable to this offering	$ 0.04	
As adjusted net tangible book value per share as of March 31, 2011, after giving effect to this offering		$ 0.93
Dilution per share to new investors purchasing shares in this offering		$ 0.25

The table above assumes for illustrative purposes that an aggregate of 14,383,670 shares of our common stock are sold at a price of $1.18 per share, the last reported sale price of our common stock on The NASDAQ Global Market on June 10, 2011, for aggregate gross proceeds of $17.0 million. The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of $0.10 per share in the price at which the shares are sold from the assumed offering price of $1.18 per share shown in the table above, assuming all of our common stock in the aggregate amount of $18.4 million is sold at that price, would increase our adjusted net tangible book value per share after the offering to $0.95 per share and would increase the dilution in net tangible book value per share to new investors in this offering to $0.33 per share, after deducting commissions and estimated aggregate offering expenses payable by us. A decrease of $0.10 per share in the price at which the shares are sold from the assumed offering price of $1.18 per share shown in the table above, assuming all of our common stock in the aggregate amount of $15.5 million is sold at that price, would decrease our adjusted net tangible book value per share after the offering to $0.92 per share and would decrease the dilution in net tangible book value per share to new investors in this offering to $0.16 per share, after deducting commissions and estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only.

The above discussion and table are based on 66,916,100 shares of our common stock issued and outstanding as of March 31, 2011 and excludes the following, all as of March 31, 2011:

- 10,074,867 shares of our common stock issuable upon exercise of outstanding stock options under our stock option plans, at a weighted average exercise price of $3.66;
- 4,027,300 shares of our common stock issuable upon exercise of outstanding warrants at a weighted average price of $3.44 per share; and

3,570,118 shares of our common stock reserved for future awards under our stock option plans and employee stock purchase plans.

The above discussion also excludes 5,300,000 shares of our common stock, 8,070 shares of our Series A Convertible Preferred Stock, and warrants to purchase 6,685,000 shares of our common stock, all of which were issued pursuant to that certain Securities Purchase Agreement, dated April 18, 2011, by and between the company and certain investors.

To the extent that options or warrants are exercised, or other shares are issued, including upon conversion of our outstanding Series A. Convertible Preferred Stock, investors purchasing shares in this offering could experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

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PLAN OF DISTRIBUTION

We have entered into an At the Market Issuance Sales Agreement with MLV, under which we may issue and sell shares of our common stock having aggregate sales proceeds of up to $20,000,000 from time to time through MLV acting as agent. MLV may sell the common stock by any method that is deemed to be an at-the-market equity offering as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, including sales made directly on or through NASDAQ or any other existing trading market for the common stock in the U.S. or to or through a market maker. MLV may also sell the common stock in privately negotiated transactions, subject to our prior approval.

Each time we wish to issue and sell common stock under the sales agreement, we will notify MLV of the number of shares to be issued, the dates on which such sales are anticipated to be made and any minimum price below which sales may not be made. Once we have so instructed MLV, unless MLV declines to accept the terms of this notice, MLV has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. MLV s obligations under the sales agreement to sell our common stock are subject to a number of conditions that we must meet.

The settlement between us and MLV is generally anticipated to occur on the third trading day following the date on which the sale was made. Sales of our common stock as contemplated in this prospectus will be settled through the facilities of The Depository Trust Company or by such other means as we and MLV may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will pay MLV a commission equal to an aggregate of 3.0% of the gross proceeds we receive from the sales of our common stock. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. In connection with the sale of the common stock on our behalf, MLV may, and will with respect to sales effected in an at-the-market-offering, be deemed to be an underwriter within the meaning of the Securities Act of 1933, as amended, and the compensation of MLV will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to MLV with respect to certain civil liabilities, including liabilities under the Securities Act. We estimate that the total expenses for the offering, excluding compensation payable to MLV under the terms of the sales agreement, will be approximately $84 thousand. The maximum compensation to be received by any broker/dealer or sales agent will not be greater than 8.0% for the sale of any securities being registered pursuant to Rule 415.

The offering of our common stock pursuant to the sales agreement will terminate upon the earlier of (i) the sale of all of our common stock provided for in this prospectus, or (ii) termination of the sales agreement as permitted therein. MLV may terminate the sales agreement at any time in certain circumstances, including the occurrence of a material adverse change with respect to us that, in MLV s sole judgment, makes it impracticable or inadvisable to market the shares, if there has occurred any material adverse change in the U.S. financial markets or international financial markets, which in MLV s sole judgment makes it impracticable to market the shares, if trading in the shares has been suspended or limited by the SEC or NASDAQ, or if trading generally has been suspended or limited by NASDAQ, if any suspension of trading of any of our shares on any exchange or over-the-counter market shall have occurred and be continuing, if there is a major disruption of securities settlements or clearance services in the U.S. which shall be continuing, or if a banking moratorium has been declared in the U.S. Federal or New York authorities. We and MLV may each terminate the sales agreement at any time upon 10 days prior notice.

This summary of the material provisions of the sales agreement does not purport to be a complete statement of its terms and conditions. A copy of the sales agreement is filed with the Securities and Exchange Commission and is incorporated by reference into the registration statement of which this prospectus is a part. See Where You Can Find More Information and Information Incorporated by Reference below.

To the extent required by Regulation M, MLV will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus.

DESCRIPTION OF CAPITAL STOCK

As of the date of this prospectus, our authorized capital stock consists of 180,000,000 shares. Those shares consist of 170,000,000 shares designated as common stock, $0.001 par value, and 10,000,000 shares designated as preferred stock, $0.001 par value, 8,070 shares of which have been designated as Series A Convertible Preferred Stock (the

Series A Preferred Stock). As of June 10, 2011, there were 72,216,100 shares of common stock issued and outstanding, and 8,070 shares of Series A Preferred Stock issued and outstanding, convertible into an aggregate of 8,070,000 shares of our Common Stock.

The following description summarizes the material terms of our capital stock. This summary is, however, subject to the provisions of our amended and restated certificate of incorporation and by the provisions of applicable law.

Common Stock

Holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders. Upon any liquidation, dissolution or winding up of our business, the holders of common stock are entitled to share equally in all assets available for distribution after payment of all liabilities and provision for liquidation preference of shares of preferred stock then outstanding. Holders of common stock have no preemptive rights or rights to convert their common stock into any other securities. There are no redemption or sinking fund provisions applicable to the common stock. Holders of common stock are entitled to receive dividends declared by the board of directors, out of funds legally available for the payment of dividends, subject to the rights of holders of preferred stock. Currently, we are not paying dividends.

Our common stock is listed on The NASDAQ Global Market under the symbol CYTK. The transfer agent and registrar for our common stock is Mellon Investor Services LLC, doing business as BNY Mellon Shareowner Services. Mellon s address is 525 Market Street, 35 Floor, San Francisco, California 94105.

All outstanding shares of common stock are fully paid and non-assessable, and all shares of common stock offered by this prospectus, or issuable upon conversion or exercise of securities, will, when issued, be validly issued and fully paid and non-assessable.

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Preferred Stock

Each share of Series A Preferred Stock is convertible into 1,000 shares of our common stock at any time at the option of the holder, provided that the holder will be prohibited from converting Series A Preferred Stock into shares of our common stock if, as a result of such conversion, the holder, together with its affiliates, would own more than 9.98% of the total number of shares of our common stock then issued and outstanding. In the event of our liquidation, dissolution, or winding up, holders of our Series A Preferred Stock will receive a payment equal to $0.001 per share of Series A Preferred Stock before any proceeds are distributed to the holders of our common stock. Shares of Series A Preferred Stock will generally have no voting rights, except as required by law and except that the consent of holders of a majority of the outstanding Series A Preferred Stock will be required to amend the terms of the Series A Preferred Stock.

Our Series A Preferred Stock is not listed on an exchange or any trading system and we do not expect that a trading market for our Series A Preferred Stock will develop.

Anti-Takeover Effects of Some Provisions of Delaware Law

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

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

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

- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding those shares owned (a) by persons who are directors and also officers, and (b) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- at or subsequent to such time the stockholder become an interested stockholder, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

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

Anti-Takeover Effects of Provisions of Our Charter Documents

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

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

Under Delaware law, a special meeting of stockholders may be called by the board of directors or by any other person authorized to do so in the amended and restated certificate of incorporation or the amended bylaws. Our amended bylaws authorize a majority of our board of directors, the chairperson of the board, the chief executive officer or the president to call a special meeting of stockholders.

Because our stockholders do not have the right to call a special meeting, a stockholder could not force stockholder consideration of a proposal over the opposition of the board of directors by calling a special meeting of stockholders prior to such time as a majority of the board of directors believed or the chief executive officer believed the matter should be considered or until the next annual meeting provided that the requestor met the notice requirements. The restriction on the ability of stockholders to call a special meeting means that a proposal to replace the board also could be delayed until the next annual meeting.

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

LEGAL MATTERS

Cooley LLP, Palo Alto, California, will pass upon the validity of the securities offered by this prospectus. LeClairRyan, P.C., New York, New York, is counsel for MLV in connection with this offering.

EXPERTS

The financial statements and management s assessment of the effectiveness of internal control over financial reporting (which is included in Management s Report on Internal Control over Financial Reporting) incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2010 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a Registration Statement on Form S-3 under the Securities Act with respect to the shares of common stock we are offering under this prospectus. This prospectus does not contain all of the information set forth in the Registration Statement and the exhibits to the Registration Statement. For further information with respect to us and the securities we are offering under this prospectus, we refer you to the Registration Statement and the exhibits and schedules filed as a part of the Registration Statement. You may read and copy the Registration Statement, as well as our reports, proxy statements and other

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information, at the SEC s public reference room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549-0102. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. You may obtain further information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Our SEC filings are also available on the SEC Internet site at www.sec.gov, which contains periodic reports and other information regarding issuers that file electronically.

We also maintain a website at www.cytokinetics.com, through which you can access our filings with the SEC. The information contained in, or accessible through, our website is not a part of this prospectus.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference information into this prospectus, which means that we can disclose important information to you by referring you to other documents that we have filed or will file with the SEC. We are incorporating by reference in this prospectus the information or documents below that we have filed with the SEC (Commission File No. 000-50633):

our Annual Report on Form 10-K for the fiscal year ended December 31, 2010, which was filed on March 11, 2011;

our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2011, which was filed on May 6, 2011;

our Current Reports on Form 8-K filed on January 4, 2011; February 9, 2011; February 10, 2011; February 14, 2011 (as to information therein explicitly filed with the SEC only); March 1, 2011; March 18, 2011; April 18, 2011; April 18, 2011; April 19, 2011 (as amended on April 20, 2011); April 27, 2011; May 20, 2011; and June 2, 2011;

the information specifically incorporated by reference into our 2010 Annual Report on Form 10-K referred to above from our definitive proxy statement relating to our 2011 annual meeting of stockholders, which was filed on March 28, 2011; and

the description of our common stock contained in our Registration Statement on Form 8-A, filed with the SEC on March 12, 2004, including any amendment or reports filed for the purpose of updating such description.

All future documents that we file with the SEC pursuant to Section 13(a), 13(c) or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of such registration statement, until the termination or completion of this offering of common stock shall be deemed to be incorporated by reference in this prospectus and to be a part of it from the filing dates of such documents (except in each case the information contained in such documents to the extent furnished and not filed). Certain statements in and portions of this prospectus update and replace information in the above listed documents incorporated by reference. Likewise, statements in or portions of a future document incorporated by reference in this prospectus may update and replace statements in and portions of this prospectus or the above listed documents. To the extent there is a conflict between the information contained in this prospectus, on the one hand, and the information contained in any document incorporated by reference into this prospectus that was filed with the SEC before the date of this prospectus, on the other hand, you should rely on the information in this prospectus. If any statement in one of these documents is inconsistent with a statement in another document having a later date, the statement in the document having the later date modifies or supersedes the earlier statement.

We will provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request of any such person, a copy of any or all of the documents that are incorporated herein by reference. Requests should be directed to:

Cytokinetics, Incorporated
280 East Grand Avenue
South San Francisco, California 94080
United States of America
Attn: Investor Relations

(650) 624-3000
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$20,000,000 Shares of Common Stock
Prospectus
, 2011

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PART II
INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The aggregate estimated expenses to be paid by the registrant in connection with this offering are as follows:

Securities and Exchange Commission registration fee	$ 2,322
Accounting fees and expenses	15,000
Legal fees and expenses	50,000
Printing Fees	8,000
Miscellaneous	9,000
Total	$ 84,322

Item 15. Indemnification of Directors and Officers

Under Section 145 of the Delaware General Corporation Law, we can indemnify any person who is, or is threatened to be made, a party to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative or investigative other than action by us or on our behalf, by reason of the fact that such person is or was one of our officers or directors, or is or was serving at our request as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses including attorneys fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided that such officer or director acted in good faith and in a manner he or she reasonably believed to be in or not opposed to our best interests, and, for criminal proceedings, had no reasonable cause to believe his or her conduct was illegal. Under Delaware law, we may also indemnify officers and directors in an action by us or on our behalf under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to us in the performance of his or her duty. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, we must indemnify him or her against the expenses which such officer or director actually and reasonably incurred.

Our amended and restated certificate of incorporation contains a provision to limit the personal liability of our directors for violations of their fiduciary duty. This provision eliminates each director s liability to us or our stockholders for monetary damages to the fullest extent permitted by Delaware law. The effect of this provision is to eliminate the personal liability of directors for monetary damages for actions involving a breach of their fiduciary duty of care, including actions involving gross negligence.

Our amended and restated bylaws provide for indemnification of our officers and directors to the fullest extent permitted by applicable law.

We have also entered into indemnification agreements with our directors and officers. The indemnification agreements provide indemnification to our directors and officers under certain circumstances for acts or omissions which may not be covered by directors and officers liability insurance. We have also obtained directors and officers liability insurance, which insures against liabilities that our directors or officers may incur in these capacities.

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Item 16. Exhibits

The following exhibits are filed herewith or incorporated by reference herein:

Exhibit Number	Description of Document
3.1	Amended and Restated Certificate of Incorporation.
3.2 (1)	Amended and Restated Bylaws.
3.3 (2)	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock.
4.1 (3)	Specimen Common Stock Certificate.
4.2 (4)	Registration Rights Agreement, dated as of December 29, 2006, by and between Company and Amgen Inc.
4.3 (5)	Form of Warrant to Purchase Common Stock of Cytokinetics, Inc.
5.1	Opinion of Cooley LLP.
10.67 (5)	Securities Purchase Agreement, dated April 18, 2011, by and between the Company and Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., Deerfield Special Situations Funds, L.P., and Deerfield Special Situations Fund International Limited.
10.68 (6)	At the Market Issuance Sales Agreement, dated June 10, 2011, by and between the Company and McNicoll, Lewis & Vlak LLC
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.
23.2	Consent of Cooley LLP (included in Exhibit 5.1).
24.1	Power of Attorney of certain directors and officers of Cytokinetics, Incorporated (included on the signature page hereof).

(1) Incorporated by reference from our registration statement on Form S-1, registration number 333-112261, declared effective by the Securities and Exchange Commission on April 29, 2004.

(2) Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 18, 2011.

(3) Incorporated by reference from our Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on May 9, 2007.

(4) Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 3, 2007.

(5) Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 18, 2011.

(6) Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on the date hereof.

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Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) shall not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

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

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract or sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract or sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of a registrant under the Securities Act to any purchaser in the initial distribution of the securities:

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The undersigned registrant undertakes that in a primary offering of securities of an undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

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

(c) The undersigned registrant hereby undertakes that:

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

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

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on the 13th day of June, 2011.

CYTOKINETICS, INCORPORATED

By: /s/ Robert I. Blum
Robert I. Blum
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Robert I. Blum and Sharon A. Barbari acting singly, true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution for him and in his name, place and stead, in any and all capacities to sign any and all amendments including post-effective amendments to this registration statement, and any additional related registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended (including post-effective amendments to this registration statement and any such related registration statements), and to file the same, with all exhibits thereto, and any other documents in connection therewith, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Robert I. Blum Robert I. Blum	President, Chief Executive Officer and Director *(Principal Executive Officer)*	June 13, 2011
/s/ Sharon A. Barbari Sharon A. Barbari	Executive Vice President, Finance and Chief Financial Officer *(Principal Financial and Accounting Officer)*	June 13, 2011
/s/ L. Patrick Gage, Ph.D. L. Patrick Gage, Ph.D	Chairman of the Board of Directors	June 13, 2011
/s/ Santo J. Costa Santo J. Costa	Director	June 13, 2011
/s/ Stephen Dow Stephen Dow	Director	June 13, 2011

/s/ Denise M. Gilbert, Ph.D. Denise M. Gilbert, Ph.D.	Director	June 13, 2011
/s/ John T. Henderson, M.B. Ch.B. John Henderson, M.B. Ch.B.	Director	June 13, 2011
/s/ James A. Spudich, Ph.D. James A. Spudich, Ph.D.	Director	June 13, 2011
/s/ Wendell Wierenga, Ph.D. Wendell Wierenga, Ph.D.	Director	June 13, 2011

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