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

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2009

or

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

Commission file number: 000-50633

CYTOKINETICS, INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 94-3291317 (I.R.S. Employer Identification Number)

280 East Grand Avenue South San Francisco, California (Address of principal executive offices)

94080 (Zip Code)

Registrant's telephone number, including area code: (650) 624-3000

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (222.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).* Yes \square No \square

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

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

Large accelerated filer 🗖	Accelerated filer	Non-accelerated filer □	Smaller reporting company \Box	
		(Do not check if a smaller reporting company)		
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes 🛛 No 🗹				

Number of shares of common stock, \$0.001 par value, outstanding as of April 30, 2009: 53,591,008.

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

CYTOKINETICS, INCORPORATED (A Development Stage Enterprise) CONDENSED BALANCE SHEETS (In thousands, except share and per share data)

(Unaudited)

	March 31, 2009	December 31, 2008
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 48,489	\$ 41,819
Short-term investments	15,607	15,048
Related party accounts receivable	7	221
Related party notes receivable — short-term portion	40	40
Prepaid and other current assets	1,189	1,782
Total current assets	65,332	58,910
Investments in auction rate securities	17,306	16,636
Investment in put option	2,719	3,389
Property and equipment, net	4,714	5,087
Assets held-for-sale	283	325
Related party notes receivable — long-term portion	9	9
Restricted cash	2,232	2,750
Other assets	327	348
Total assets	\$ 92,922	\$ 87,454
LIABILITIES and STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,256	\$ 1,382
Accrued liabilities	6,569	7,174
Related party payables and accrued liabilities	15	
Short-term portion of equipment financing lines	1,925	2,025
Short-term portion of deferred revenue	12,297	12,296
Total current liabilities	22,062	22,877
Long-term portion of equipment financing lines	2,187	2,615
Long-term portion of deferred revenue	9,122	12,196
Loan with UBS	12,355	
Total liabilities	45,726	37,688
Stockholders' equity:		
Common stock, \$0.001 par value:		
Authorized: 170,000,000 shares; Issued and outstanding:		
53,560,417 shares at March 31, 2009 and 49,939,069 shares at December 31, 2008	54	50
Additional paid-in capital	393,730	385,605
Accumulated other comprehensive income	4	18
Deficit accumulated during the development stage	(346,592)	(335,907
Total stockholders' equity	47,196	49,766
Total liabilities and stockholders' equity	\$ 92,922	\$ 87,454
	* ,2,,22	\$ 57,151

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

CYTOKINETICS, INCORPORATED (A Development Stage Enterprise) CONDENSED STATEMENTS OF OPERATIONS (In thousands, except per share data)

(Unaudited)

	Three Mont	ke Ended	Period from August 5, 1997
	March 31, 2009	March 31, 2008	(date of inception) to March 31, 2009
Revenues:			
Research and development revenues from related parties	\$ 20	\$ 11	\$ 40,459
Research and development, grant and other revenues	—	—	2,955
License revenues from related parties	3,058	3,058	41,626
Total revenues	3,078	3,069	85,040
Operating expenses:			
Research and development (1)	9,959	14,102	347,397
General and administrative (1)	4,020	4,157	104,556
Restructuring charges	(58)	—	2,416
Total operating expenses	13,921	18,259	454,369
Operating loss	(10,843)	(15,190)	(369,329)
Interest and other, net	158	1,295	22,737
Net loss	\$(10,685)	\$(13,895)	\$ (346,592)
Net loss per common share — basic and diluted	\$ (0.21)	\$ (0.28)	
Weighted-average number of shares used in computing net loss per common share — basic and			
diluted	51,582	49,294	
(1) Includes the following stock-based compensation charges:			
Research and development	\$ 613	\$ 86	5 \$11,719
General and administrative	636	66	2 9,883
The accomposition notes are an integral part of these fine			

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

CYTOKINETICS, INCORPORATED (A Development Stage Enterprise) CONDENSED STATEMENTS OF CASH FLOWS (In thousands) (Unaudited)

	Three Months Ended March 31, March 31,		Period from August 5, 1997	
			(date of inception) to March 31,	
	2009	2008	2009	
Cash flows from operating activities:				
Net loss	\$(10,685)	\$ (13,895)	\$ (346,592)	
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization of property and equipment	515	639	23,960	
(Gain) loss on disposal of property and equipment	(32)		319	
Non-cash restructuring expenses and reversal	(37)		439	
Non-cash interest expense	—	23	504	
Non-cash forgiveness of loan to officer	—		415	
Stock-based compensation	1,249	1,527	21,602	
Other non-cash expenses	—		182	
Changes in operating assets and liabilities:				
Related party accounts receivable	214	29	(358)	
Prepaid and other assets	614	291	(1,545)	
Accounts payable	8	970	1,396	
Accrued liabilities	(575)	(348)	6,407	
Related party payables and accrued liabilities	15	—	15	
Deferred revenue	(3,074)	(3,058)	21,419	
Net cash used in operating activities	(11,788)	(13,822)	(271,837)	
Cash flows from investing activities:				
Purchases of investments	(15,631)	(9,400)	(684,996)	
Proceeds from sales and maturities of investments	15,059	12,571	649,452	
Purchases of property and equipment	(219)	(379)	(29,769)	
Proceeds from sale of property and equipment	24	_	74	
(Increase) decrease in restricted cash	518	1,020	(2,232)	
Issuance of related party notes receivable	_		(1,146)	
Proceeds from payments of related party notes receivable			829	
Net cash provided by (used in) investing activities	(249)	3,812	(67,788)	
Cash flows from financing activities:	()			
Proceeds from initial public offering, sale of common stock to related party, and public				
offerings, net of issuance costs			193,934	
Proceeds from draw down of Committed Equity Financing Facility, net of issuance costs	6,850	_	38,896	
Proceeds from other issuances of common stock	30	22	6,187	
Proceeds from issuance of preferred stock, net of issuance costs			133,172	
Repurchase of common stock			(68)	
Proceeds from loan with UBS	12,441		12,441	
Repayment of loan with UBS	(86)		(86)	
Proceeds from equipment financing lines	(00)		23,696	
Repayment of equipment financing lines	(528)	(1,036)	(20,058)	
Net cash provided by (used in) financing activities	18,707	(1,014)	388,114	
	6,670			
Net increase (decrease) in cash and cash equivalents		(11,024)	48,489	
Cash and cash equivalents, beginning of period	41,819	116,564		
Cash and cash equivalents, end of period	\$ 48,489	\$ 105,540	\$ 48,489	

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

CYTOKINETICS, INCORPORATED

(A DEVELOPMENT STAGE ENTERPRISE) NOTES TO UNAUDITED CONDENSED FINANCIAL STATEMENTS

Note 1. Organization and Summary of Significant Accounting Policies

Overview

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

On April 26, 2004 the Company effected a one-for-two reverse stock split. All share and per share amounts for all periods presented in the accompanying financial statements have been retroactively adjusted to give effect to the reverse stock split. The Company's registration statement for its initial public offering ("IPO") was declared effective by the Securities and Exchange Commission ("SEC") on April 29, 2004. The Company's common stock commenced trading on the NASDAQ National Market, now the NASDAQ Global Market, on April 29, 2004 under the trading symbol "CYTK".

The Company's consolidated financial statements contemplate the conduct of the Company's operations in the normal course of business. The Company has incurred net losses since inception and there can be no assurance that the Company will attain profitability. The Company had a net loss of \$10.7 million and net cash outflows from operations of \$11.8 million for the quarter ended March 31, 2009 and an accumulated deficit of approximately \$346.6 million as of March 31, 2009. Cash, cash equivalents and short-term investments increased from \$56.9 million at December 31, 2008 to \$64.1 million at March 31, 2009. If the Company's losses and net cash outflows continue, and sufficient additional capital is not available on terms acceptable to the Company, its liquidity will be impaired.

The Company has funded its operations primarily through sales of common stock and convertible preferred stock, contract payments under its collaboration agreements, debt financing arrangements, government grants and interest income. Until it achieves profitable operations, the Company intends to continue to fund operations through the additional sale of equity securities, payments from strategic collaborations and debt financing. Based on the current status of its development plans, the Company believes that its existing cash, cash equivalents and short-term investments at March 31, 2009 will be sufficient to fund its cash requirements for at least the next 12 months. If, at any time, the Company's prospects for financing its research and development programs decline, the Company may decide to reduce research and development expenses by delaying, discontinuing or reducing its funding of development of one or more of its drug candidates or potential drug candidates. Alternatively, the Company might raise funds through public or private financings, strategic relationships or other arrangements. Such funding, if needed, may not be available on favorable terms, or at all.

Basis of Presentation

The accompanying unaudited condensed financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. The financial statements include all adjustments (consisting only of normal recurring adjustments) that management believes are necessary for the fair statement of the balances and results for the periods presented. These interim financial statement results are not necessarily indicative of results to be expected for the full fiscal year or any future interim period.

The balance sheet at December 31, 2008 has been derived from the audited financial statements at that date. The financial statements and related disclosures have been prepared with the presumption that users of the interim financial statements have read or have access to the audited financial statements for the preceding fiscal year. Accordingly, these financial statements should be read in conjunction with the audited financial statements and notes thereto contained in the Company's Form 10-K for the year ended December 31, 2008.



Comprehensive Income (Loss)

Comprehensive loss consists of the net loss and other comprehensive income (loss). Other comprehensive income (loss) includes certain changes in stockholders' equity that are excluded from net loss. Comprehensive loss and its components for the three months ended March 31, 2009 and 2008 were as follows (in thousands):

	Three Mo	Three Months Ended	
	March 31,	March 31,	
	2009	2008	
Net loss	\$(10,685)	\$(13,895)	
Change in unrealized gain (loss) on investments	(14)	(947)	
Comprehensive loss	\$(10,699)	\$ (14,842)	

Restricted Cash

In accordance with the terms of the Company's line of credit agreements with General Electric Capital Corporation ("GE Capital"), the Company is obligated to maintain a certificate of deposit with the lender. The balance of the certificate of deposit was \$2.2 million at March 31, 2009 and \$2.8 million at December 31, 2008, and was classified as restricted cash.

Fair Value of Financial Instruments

The carrying amount of the Company's cash and cash equivalents, accounts receivable and accounts payable approximates the fair value due to the shortterm nature of these instruments. The Company bases the fair value of short-term investments on current market prices and the fair value of noncurrent investments using discounted cash flow models (Note 5). In connection with the failed auctions of the Company's auction rate securities ("ARS"), which were marketed and sold by UBS AG and its affiliates, in October 2008, the Company accepted a settlement with UBS AG pursuant to which UBS AG has issued to the Company Series C-2 Auction Rate Securities Rights (the "ARS Rights"). The carrying value of the put option resulting from the ARS Rights (Note 5) is based on the Black-Scholes option pricing model, which approximates the difference in value between the par value and the fair value of the associated ARS. As permitted under Statement of Financial Accounting Standards ("SFAS") No. 159, *"The Fair Value Option for Financial Assets and Financial Liabilities Including an amendment of FASB Statement No. 115"* ("SFAS 159"), the Company may elect fair value measurement for certain financial assets on a case by case basis. The Company has elected to use fair value measurement under SFAS 159 for the put option resulting from the ARS Rights.

Stock-Based Compensation

The Company applies SFAS No. 123R, "Share-Based Payment," which establishes accounting for share-based payment awards made to employees and directors, including employee stock options and employee stock purchases. Under SFAS No. 123R, stock-based compensation cost is measured at the grant date based on the calculated fair value of the award, and is recognized as an expense on a straight-line basis over the employee's requisite service period, generally the vesting period of the award.

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

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

	Three Mont	hs Ended
	March 31, 2009	March 31, 2008
Risk-free interest rate	2.70%	2.90%
Volatility	76%	63%
Expected life (in years)	6.07	6.08
Expected dividend yield	0.00%	0.00%

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

	Three Mo	nths Ended
	March 31, 2009	March 31, 2008
Risk-free interest rate	2.15%	3.86%
Volatility	68%	77%
Expected life (in years)	1.25	1.25
Expected dividend yield	0.00%	0.00%

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

Under Staff Accounting Bulletin ("SAB") No. 107, "*Share-Based Payments*," the Company used the simplified method of estimating the expected term for stock-based compensation from January 1, 2006, the date it adopted SFAS No. 123R, through December 31, 2007. Starting January 1, 2008, the Company ceased to use the simplified method, and now uses its own historical exercise activity and extrapolates the life cycle of options outstanding to arrive at its estimated expected term for new option grants.

From January 1, 2006, the date it adopted SFAS No. 123R, through December 31, 2007, the Company estimated the volatility of its common stock by using an average of historical stock price volatility of comparable companies due to the limited length of trading history. Starting January 1, 2008, the Company has used its own volatility history based on its stock's trading history for the period subsequent to the Company's IPO in April 2004. Because its outstanding options have an expected term of approximately six years, the Company supplements its own volatility history by using comparable companies' volatility history for the relevant period preceding the Company's IPO.

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

Note 2. Net Loss Per Common Share

Basic net loss per common share is computed by dividing the net loss by the weighted-average number of vested common shares outstanding during the period. Diluted net loss per common share is computed by giving effect to all potentially dilutive common shares, including outstanding options, unvested restricted stock, warrants and shares issuable under the ESPP. The following is a reconciliation of the numerator and denominator used in the calculation of basic and diluted net loss per common share (in thousands):

	Three Mon	ths Ended
	March 31,	March 31,
	2009	2008
Numerator — net loss	\$(10,685)	<u>\$(13,895</u>)
Denominator:		
Weighted-average common shares outstanding	51,976	49,294
Less: Restricted stock subject to repurchase	(394)	<u> ()</u>
Weighted-average shares used in computing basic and diluted net loss per common share	51,582	49,294

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

	As of M	Iarch 31
	2009	2008
Options to purchase common stock	7,544	6,514
Unvested restricted common stock	394	
Warrants to purchase common stock	474	474
Shares issuable related to the ESPP	103	90
Total shares	8,515	7,078

Note 3. Supplemental Cash Flow Data

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

	Three Mo	nths Ended	Period from August 5, 1997 (date of inception)
	March 31, 2009	March 31, 2008	to March 31, 2009
Significant non-cash investing and financing activities:			
Deferred stock-based compensation	\$ —	\$ —	\$ 6,940
Purchases of property and equipment through accounts payable	4	92	4
Purchases of property and equipment through trade in value of disposed property and			
equipment	8	_	266
Penalty on restructuring of equipment financing lines		_	475
Conversion of convertible preferred stock to common stock			133,172

Note 4. Related Party Agreements

Research and Development Arrangements

<u>GlaxoSmithKline ("GSK")</u>. Pursuant to the collaboration and license agreement between the Company and GSK (the "GSK Agreement"), the Company recognized patent expense reimbursements from GSK of \$4,000 and \$11,000 for the three months ended March 31, 2009 and 2008, respectively, which were recorded as research and development revenues from related party. Related party receivables from GSK were \$5,000 and \$0.1 million at March 31, 2009 and December 31, 2008, respectively.

Amgen Inc. ("Amgen"). Pursuant to the collaboration and option agreement between the Company and Amgen (the "Amgen Agreement"), the Company recognized license revenue of \$3.1 million in each of the three months ended March 31, 2009 and March 31, 2008. The Company also recognized \$16,000 of research and development revenues from Amgen in the three months ended March 31, 2009. Deferred revenue related to the Amgen Agreement and the related common stock purchase agreement between the Company and Amgen was \$21.4 million at March 31, 2009 and \$24.5 million at December 31, 2008.

Board Members

James H. Sabry, M.D., Ph.D. is the Chairman of the Company's Board of Directors and a consultant to the Company. The Company incurred consulting fees earned by Dr. Sabry of \$15,000 and zero for the three months ended March 31, 2009 and 2008, respectively. Related party payables and accrued liabilities included \$5,000 and zero payable to Dr. Sabry at March 31, 2009 and December 31, 2008, respectively.

James Spudich, Ph.D. is a member of the Company's Board of Directors and a consultant to the Company. The Company incurred consulting fees earned by Dr. Spudich of \$10,000 and \$13,000 for the three months ended March 31, 2009 and 2008, respectively. Related party payables and accrued liabilities included \$10,000 and zero payable to Dr. Spudich at March 31, 2009 and December 31, 2008, respectively.

Note 5. Cash Equivalents, Investments and Fair Value Measurements

Cash Equivalents and Investments

The amortized cost and fair value of cash equivalents, short-term investments, long-term investments and the investment put option at March 31, 2009 and December 31, 2008 was as follows (in thousands):

	March 31, 2009				
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Maturity Dates
Cash equivalents — money market funds	\$45,250			\$45,250	
Cash equivalents — U.S. Treasury securities	\$ 2,007			2,007	4/2009
Short-term investments — U.S. Treasury securities	\$15,603	\$ 4	\$ —	\$15,607	5/2009 — 7/2009
Investments in auction rate securities	\$ 20,025	\$	\$ 2,719	\$ 17,306	6/2036-8/2045
Investment put option	\$ —	\$ 2,719	\$ —	\$ 2,719	6/30/2010-7/2/2012

			December 3	1, 2008	
	Amortized	Unrealized	Unrealized	Fair	Maturity
	Cost	Gains	Losses	Value	Dates
Cash equivalents — money market funds	\$ 41,224			\$ 41,224	
Short-term investments - U.S. Treasury securities	\$ 15,030	\$ 18	\$	\$ 15,048	1/2009 — 3/2009
Investments in auction rate securities	\$ 20,025	<u>\$ </u>	\$ 3,389	\$16,636	6/2036-8/2045
Investment put option	\$ —	\$ 3,389	\$	\$ 3,389	6/30/2010-7/2/2012

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

Interest income was \$0.3 million and \$1.4 million for the quarters ended March 31, 2009 and 2008, respectively, and \$27.8 million for the period August 5, 1997 (inception) through March 31, 2009.

The Company's long-term investments in ARS as of March 31, 2009 and December 31, 2008 refer to securities that are structured with short-term interest reset dates every 28 days but with maturities generally greater than 10 years. At the end of each reset period, investors can attempt to sell the securities through an auction process or continue to hold the securities. The Company has classified its ARS holdings as long-term investments as of March 31, 2009 and December 31, 2008 based on their stated maturity dates.

At March 31, 2009, the Company held approximately \$20.0 million in par value of ARS classified as long-term investments. The assets underlying these ARS are student loans that are substantially backed by the federal government. In February 2008, auctions began to fail for these securities and each auction since then has failed. Consequently, the investments are not currently liquid and the Company will not be able to access these funds until a future auction of these investments is successful, a buyer is found outside of the auction process, they are redeemed by the issuer or the investments mature. Historically, the fair value of ARS investments approximated par value due to the frequent interest rate resets associated with the auction process. However, there is not a current active market for these securities, and therefore they do not have a readily determinable market value. Accordingly, the estimated fair value of the ARS no longer approximates par value. The ARS continue to pay interest according to their stated terms.

In the fourth quarter of 2008, based on valuation models of the individual securities, the Company recognized in the Statement of Operations a loss of approximately \$3.4 million on ARS in Interest and Other, net, for which the Company concluded that an other-than-temporary impairment existed. The fair value of the Company's investment in ARS as of March 31, 2009 and December 31, 2008 was determined to be \$17.3 million and \$16.6 million, respectively. Changes in the fair value of the ARS are recognized in current period earnings in Interest and Other, net. Therefore, the Company recognized \$0.7 million of unrealized gain on the ARS in the first quarter of 2009 to record the change in fair value.

In connection with the failed auctions of the Company's ARS, which were marketed and sold by UBS AG and its affiliates, in October 2008, the Company accepted a settlement with UBS AG pursuant to which UBS AG issued to the Company the ARS Rights. The ARS Rights provide the Company the right to receive the par value of its ARS, i.e., the liquidation preference of the ARS plus accrued but unpaid interest. Pursuant to the ARS Rights, the Company may require UBS to purchase its ARS at par value at any time between June 30, 2010 and July 2, 2012. In addition, UBS or its affiliates may sell or otherwise dispose of some or all of the ARS at its discretion at any time prior to expiration of the ARS Rights, subject to the obligation to pay the Company the par value of such ARS. The ARS Rights are not transferable, tradable or marginable, and will not be listed or quoted on any securities exchange or any electronic communications network. As consideration for the ARS Rights, the Company agreed to release UBS AG, UBS Securities LLC and UBS Financial Services, Inc., and/or their affiliates, directors, and officers from any claims directly or indirectly relating to the marketing and sale of the ARS, other than for consequential damages. UBS's obligations in connection with the ARS Rights are not secured by its assets and UBS is not required to obtain any financing to support these obligations. UBS has disclaimed any assurance that it will have sufficient financial resources to satisfy its obligations in connection with the ARS Rights and the auction process continues to fail, the Company may incur further losses on the carrying value of the ARS.

The ARS Rights represent a firm agreement in accordance with SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS 133"), which defines a firm agreement as an agreement with an unrelated party, binding on both parties and usually legally enforceable, with the following characteristics: a) the agreement specifies all significant terms, including the quantity to be exchanged, the fixed price and the timing of the transaction; and b) the agreement includes a disincentive for nonperformance that is sufficiently large to make performance probable. The enforceability of the ARS Rights results in a put option that is recognized as a separate freestanding instrument that is accounted for separately from the ARS investment. As of December 31, 2008, the Company recorded \$3.4 million as fair value of the put option assets, classified as long-term assets on the Balance Sheet, with a corresponding credit to Interest and Other, net in the Statement of Operations for the year ended December 31, 2008. The put

option does not meet the definition of a derivative instrument under SFAS 133. Therefore, the Company elected to measure the ARS Rights at fair value under SFAS 159 to mitigate volatility in reported earnings due to their linkage to the ARS. The Company valued the put option using a Black-Scholes option pricing model that included estimates of interest rates, based on data available, and was adjusted for any bearer risk associated with UBS's financial ability to repurchase the ARS beginning June 30, 2010. Any change in these assumptions and market conditions would affect the value of this ARS Rights.

The Company records the ARS Rights in accordance with SFAS 159. Changes in the fair value of the ARS Rights are recognized in current period earnings in Interest and Other, net. Accordingly, the Company recognized \$0.7 million of unrealized loss in the first quarter of 2009. The Company anticipates that any future changes in the fair value of the ARS Rights will be offset by the changes in the fair value of the related ARS with no material net impact to the Statement of Operations, subject to UBS's continued performance of its obligations in connection with the ARS Rights. The ARS Rights will continue to be measured at fair value under SFAS 159 until the earlier of the Company's exercise of the ARS Rights, UBS's purchase of the ARS in connection with the ARS Rights, or the maturity of the ARS underlying the ARS Rights.

The Company continues to monitor the market for ARS and consider its impact (if any) on the fair market value of its investments. If the market conditions deteriorate further, the Company may be required to record additional unrealized losses in earnings, offset by corresponding increases in the put option.

Fair Value Measurements

The Company has adopted the methods of fair value described in SFAS No. 157, "*Fair Value Measurements*" ("SFAS 157"), to value its financial assets and liabilities. As defined in SFAS 157, fair value is the price that would be received for assets when sold or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). The Company utilizes market data or assumptions that the Company believes market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs can be readily observable, market corroborated or generally unobservable.

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

The Company classifies the determined fair value based on the observability of those inputs. SFAS 157 establishes a fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurement) and the lowest priority to unobservable inputs (Level 3 measurement). The three levels of the fair value hierarchy defined by SFAS 157 are as followed:

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

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

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

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

	Fair	Using	Assets	
	Level 1	Level 2	Level 3	At Fair Value
Money market funds	\$45,250	\$ —	\$ —	\$ 45,250
U.S. Treasury securities	17,614	—	—	17,614
Investments in ARS			17,306	17,306
Investment put option related to ARS Rights			2,719	2,719
Total	\$62,864	\$	\$ 20,025	\$ 82,889
Amounts included in:				
Cash and cash equivalents	\$47,257	\$ —	\$ —	\$ 47,257
Short-term investments	15,607		_	15,607
Investments in ARS			17,306	17,306
Investment put option		—	2,719	2,719
Total	\$62,864	\$	\$ 20,025	\$ 82,889

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

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

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

At March 31, 2009, the Company held approximately \$17.3 million in fair value of ARS classified as long-term investments. The assets underlying the ARS are student loans which are substantially backed by the federal government. The fair values of these securities as of March 31, 2009 were estimated utilizing a discounted cash flow ("DCF") analysis. In the first quarter of fiscal year 2008, the Company reclassified its ARS to the Level 3 category, as some of the inputs used in the DCF model include unobservable inputs. The valuation of the Company's ARS investment portfolio is subject to uncertainties that are difficult to predict. The assumptions used in preparing the DCF model include estimates of interest rates, timing and amount of cash flows, credit and liquidity premiums and expected holding periods of the ARS, based on data available as of March 31, 2009. These assumptions are volatile and subject to change as the underlying sources of these assumptions and market conditions change, which could result in significant changes to the fair value of the ARS. The significant assumptions of the DCF model are discount margins that are based on industry recognized student loan sector indices, an additional liquidity discount and an estimated term to liquidity. Other items that this analysis considers are the collateralization underlying the security investments, the creditworthiness of the counterparty and the timing of expected future cash flows. The ARS were also compared, when possible, to other observable market data for securities with similar characteristics as the Company's ARS.

Due to the change of the fair value of the Company's ARS and the ARS Rights, unrecognized gains of \$0.7 million on the ARS and unrecognized loss of \$0.7 million on the put option related to the ARS Rights were included in Interest and Other, net in the accompanying Statements of Operations for three months ended March 31, 2009. The ARS investments continue to pay interest according to their stated terms.

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

As of March 31, 2009, the Company's financial assets measured at fair value on a recurring basis using significant Level 3 inputs consisted solely of the ARS and the ARS Rights. The following table provides a reconciliation for all assets measured at fair value using significant Level 3 inputs for the three months ended March 31, 2009 (in thousands):

	ARS	Investm	ent put option
Balance as of December 31, 2008	\$16,636	\$	3,389
Unrealized gain on ARS, included in Interest and Other, net	670		_
Unrealized loss on the ARS Rights, included in Interest and Other, net			(670)
Balance as of March 31, 2009	\$ 17,306	\$	2,719

The total amount of assets measured using valuation methodologies based on Level 3 inputs represented approximately 24% of the Company's total assets that were measured at fair value as of March 31, 2009.

Note 6. Loan with UBS

In connection with the settlement with UBS AG relating to the Company's ARS, the Company entered into a loan agreement with UBS Bank USA and UBS Financial Services Inc. On January 5, 2009, the Company borrowed approximately \$12.4 million under the loan agreement, with its ARS held in accounts with UBS and its affiliates as collateral. The loan amount was based on 75% of the fair value of the ARS as assessed by UBS at the time of the loan. The Company has drawn down the full amount available under the loan agreement. In general, the amount of interest payable under the loan agreement is intended to equal the amount of interest the Company would otherwise receive with respect to its ARS. During the three months ended March 31, 2009, the interest rate due on the loan with UBS was lower than the interest rate earned from the ARS. In addition, the principal balance of the loan and received \$124,000 in interest income from the ARS. In accordance with the loan agreement, the Company applied the net interest received of \$86,000 to the principal of the loan.

The borrowings under the loan agreement are payable upon demand. However, upon such demand, UBS Financial Services Inc. or its affiliates will be required to arrange alternative financing for the Company on terms and conditions substantially the same as those under the loan agreement, unless the demand right was exercised as a result of certain specified events or the customer relationship between UBS and the Company is terminated for cause by UBS. If such alternative financing cannot be established, then a UBS affiliate will purchase the pledged ARS at par value. Proceeds of sales of the ARS will first be applied to repayment of the loan with the balance, if any, for the Company's account.

Note 7. Restructuring

In September 2008, the Company announced a restructuring plan to realign its workforce and operations in line with a strategic reassessment of its research and development activities and corporate objectives. As a result, the Company has focused its research activities to its muscle contractility programs while continuing to advance its ongoing clinical trials in heart failure and cancer and has discontinued early research activities directed to oncology. The Company communicated to affected employees a plan of organizational restructuring through involuntary terminations. Pursuant to SFAS No. 146, "*Accounting for Costs Associated with Exit or Disposal Activities*," the Company recorded a charge of approximately \$2.5 million in 2008. To implement this plan, the Company reduced its workforce by approximately 29%, or 45 employees. The affected employees were provided with severance and related benefits payments and outplacement assistance.

The Company has completed substantially all restructuring activities and recognized all anticipated restructuring charges. All severance payments were made as of December 31, 2008. The Company expects to record only immaterial cash payments associated with the accrued restructuring costs during the remainder of 2009, primarily related to employee benefits and outplacement services.

As a result of the restructuring plan, in the year ended December 31, 2008, the Company recorded restructuring charges of \$2.2 million for employee severance and benefit related costs and \$0.3 million related to the impairment of lab equipment that is held-for-sale. In the three months ended March 31, 2009, the Company recorded a decrease in restructuring expenses of \$0.1 million, which primarily consisted of the reduction of accrued employee benefit related restructuring costs and gain on disposal of held-for-sale equipment. The Company expects to sell the held-for-sale equipment by September 2009.

The following table summarizes the accrual balances and utilization by cost type for the restructuring plan (in thousands):

		e Severance ited Benefit		nent of Fixed Assets	Т	Fotal
Restructuring liability at December 31, 2008	\$	193	\$		\$	193
Reversals of charges	Ψ	(33)	Ψ	(25)	Ψ	(58)
Cash payments		(124)		21		(103)
Non-cash settlement		_		4		4
Restructuring liability at March 31, 2009	\$	36	\$		\$	36

Note 8. Stockholders' Equity

Common Stock

In October 2007, the Company entered into a committed equity financing facility (the "2007 CEFF") with Kingsbridge Capital Limited ("Kingsbridge"), pursuant to which Kingsbridge committed to finance up to \$75.0 million of capital for a three-year period. Subject to certain conditions and limitations, including a minimum volume-weighted average price of \$2.00 for the Company's common stock, from time to time under this facility, at the Company's election, Kingsbridge is committed to purchase newly-issued shares of the Company's common stock at a price between 90% and 94% of the volume weighted average price on each trading day during an eight day, forward-looking pricing period. The maximum number of shares the Company may issue in any pricing period is the lesser of 2.5% of its market capitalization immediately prior to the commencement of the pricing period or \$15.0 million. As part of the 2007 CEFF arrangement, the Company issued a warrant to Kingsbridge to purchase 230,000 shares of the Company's common stock at a price of \$7.99 per share, which represents a premium over the closing price of the common stock on the date the Company entered into this facility. This warrant is exercisable beginning six months after the date of grant and for a period of three years thereafter. The Company may sell a maximum of 9,779,411 shares (exclusive of the shares underlying the warrant) under the 2007 CEFF. Under the rules of the NASDAQ Stock Market LLC, this is approximately the maximum number of shares the Company may sell to Kingsbridge without approval of its stockholders. This limitation may further limit the amount of proceeds the Company is able to obtain from the 2007 CEFF. The Company is not obligated to sell any of the \$75.0 million of common stock available under the 2007 CEFF and there are no minimum commitments or minimum use penalties. The 2007 CEFF does not contain any restrictions on the Company's operating activities, any automatic pricing resets or any minimum market volume restrictions. For the three months ended March 31, 2009, under the 2007 CEFF, the Company sold 3,596,728 shares of its common stock to Kingsbridge and received gross proceeds of \$6.9 million, before issuance costs of \$98,000. 6,182,683 shares remain available to the Company for sale under the 2007 CEFF as of March 31, 2009.

Stock Option Plans

Stock option activity for the three months ended March 31, 2009 under the 2004 Equity Incentive Plan and the 1997 Stock Option/Stock Issuance Plan was as follows:

	Shares			
	Available for		W	eighted
	Grant of		Averag	ge Exercise
	Options	Stock Options	Price	per Share
	or Awards	Outstanding	Stock	Coptions
Balance at December 31, 2008	3,590,118	5,975,216	\$	5.18
Options granted	(1,616,008)	1,616,008	\$	1.89
Options exercised	—	(27,500)	\$	1.08
Options forfeited	19,261	(19,261)	\$	6.17
Restricted stock awards forfeited	2,880			
Balance at March 31, 2009	1,996,251	7,544,463	\$	4.49

The weighted average fair value of options granted in the three months ended March 31, 2009 was \$1.28 per share.

Restricted stock award activity for the three months ended March 31, 2009 was as follows:

	Shares Available for Grant of Options or Awards	Average	Veighted e Award Date Ilue per Share
Restricted stock awards outstanding at December 31, 2008	396,460	\$	2.37
Awards granted			
Awards forfeited	(2,880)	\$	2.37
Restricted stock awards outstanding at March 31, 2009	393,580	\$	2.37

Note 9. Interest and Other, net

Components of Interest and Other, net are as follows:

		Three Mon	ths Ended		Aug (Inc	riod from ust 5, 1997 Date of ception) to arch 31,
	Marc	March 31, 2009 March 31, 2008			2009	
		(In the	ousands, e	ccept per share	data)	
Unrealized loss on put option (Note 5)	\$	(670)	\$		\$	2,719
Unrealized gain on ARS (Note 5)		670				(2,719)
Interest income and other income		258		1,440		28,197
Interest expense and other expense		(100)		(145)		(5,460)
Interest and Other, net	\$	158	\$	1,295	\$	22,737

Investments that the Company designates as trading securities are reported at fair value, with gains or losses resulting from changes in fair value recognized in earnings and are included in Interest and Other, net. The Company classified its investments in ARS as trading securities as of March 31, 2009.

The Company elected to measure the ARS Rights at fair value under SFAS 159 to mitigate volatility in reported earnings due to its linkage to the ARS. The Company recorded \$2.7 million as the fair value of the put option assets as of March 31, 2009, classified as long-term asset on the balance sheet with a corresponding credit to Interest and Other, net. Changes in the fair value of the ARS are recognized in current period earnings in Interest and Other, net.

Interest income and other income consists primarily of interest income generated from the Company's cash, cash equivalents and investments. Interest expense and other expense primarily consists of interest expense on borrowings under the Company's equipment financing lines, and, for the quarter ended March 31, 2009, interest expense on its loan agreement with UBS Bank USA and UBS Financial Services Inc.

Note 10. Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

The Company adopted EITF Issue No. 07-01, "Accounting for Collaboration Arrangements Related to the Development and Commercialization of Intellectual Property." EITF Issue No. 07-01 describes how the parties to a collaborative agreement should account for costs incurred and revenue generated on sales to third parties and how shared payments pursuant to a collaboration agreement should be presented in the income statement, and addresses certain related disclosure questions. EITF Issue No. 07-01 is to be applied retrospectively for collaboration arrangements entered into after the adoption date. The Company's adoption of EITF Issue No. 07-1 in the quarter ended March 31, 2009 did not have a material impact on its financial position or results of operations.

The Company adopted FASB Staff Position ("FSP") 157-1, "*Application of FASB Statement No. 157 to FASB Statement No. 13 and Other Accounting Pronouncements That Address Fair Value Measurements for Purposes of Lease Classification or Measurement under Statement 13"" and FSP 157-2, "<i>Effective Date of FASB Statement No. 157.*" FSP 157-1 amends SFAS 157 to remove certain leasing transactions from its scope, and became effective upon the adoption of SFAS 157. FSP 157-2 delayed the effective date of SFAS 157 for all non-financial assets and non-financial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually), until the beginning of the first quarter of 2009. The Company's adoption of SFAS 157 in the quarter ended March 31, 2009, as applied to non-financial assets and non-financial liabilities that are not measured at fair value on a recurring basis, did not have a material impact on the Company's financial statements.

Accounting Pronouncements Not Yet Adopted

In April 2009, the FASB issued FSP FAS 157-4, "Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly." FSP FAS 157-4 provides additional guidance on determining fair values when there is no active market or where the price inputs represent distressed sales. It reaffirms

the guidance in FAS 157 that fair value is the amount for which an asset would be sold in an orderly transaction (as opposed to a forced liquidation or distressed sale) at the date of the financial statements under current market conditions. FSP FAS 157-4 amends the disclosure provisions of FAS 157 to require entities to disclose the valuation inputs and techniques in interim and annual financial statements, and to disclose FAS 157 hierarchies and the Level 3 rollforward by major security types. The Company will adopt FSP FAS 157-4 in the second quarter of 2009, and does not expect that the adoption will have a material impact on its financial position or results of operations.

In April 2009, the FASB issued FSP FAS 107-1 and APB 28-1, "*Interim Disclosures about Fair Value of Financial Instruments*." FSP FAS 107-1 and APB 28-1 amends FAS 107, "*Disclosure about Fair Value of Financial Instruments*," to require public companies to provide disclosures about the fair value of financial instruments in interim and annual financial statements. The Company will adopt FSP FAS 107-1 and APB 28-1 in the second quarter of 2009, and does not expect that the adoption will have a material impact on its financial position or results of operations.

In April 2009, the FASB issued FSP FAS 115-2 and FAS 124-2, "*Recognition and Presentation of Other-Than-Temporary Impairments*." This FSP provides additional guidance for determining the credit and non-credit components of other-than-temporary impairments of debt securities. It also increases and clarifies the disclosure requirements of FAS 115, and extends the disclosure frequency to interim and annual periods. The Company will adopt FSP FAS 115-2 and FAS 124-2 in the second quarter of 2009, and is currently evaluating the impact that this FSP may have on its financial statements.

Note 11. Subsequent Events

ESPP share issuance

On May 1, 2009, the Company issued 75,531 shares of common stock pursuant to the ESPP at an average price of \$1.66 per share.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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

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

- guidance concerning revenues, research and development expenses and general and administrative expenses for 2009;
- 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 results from the clinical trials that we have conducted with CK-1827452, the significance of such results and whether such results may result in Amgen Inc. ("Amgen") exercising its option with respect to CK-1827452;
- the initiation, design, progress, timing and scope of clinical trials and development activities for our drug candidates and potential drug candidates by ourselves or our partners, including the anticipated timing for initiation of clinical trials and anticipated dates of data becoming available or being announced from clinical trials;
- the advancement of potential drug candidates into preclinical studies and clinical trials;
- our and our partners' plans or ability for the continued research and development of our drug candidates and potential drug candidates, such as CK-1827452, ispinesib, SB-743921, GSK-923295 and CK-2017357;
- our expected roles in research, development or commercialization under our strategic alliances, such as with Amgen and GlaxoSmithKline ("GSK");

- the properties and potential benefits of, and the potential market opportunities for, our drug candidates and potential drug candidates;
- the focus, scope and size of our research and development activities and programs;
- the sufficiency of the clinical trials conducted with our drug candidates to demonstrate that they are safe and efficacious;
- our plans or ability to commercialize drugs with or without a partner, including our intention to develop sales and marketing capabilities;
- our receipt of milestone payments, royalties and other funds from our partners under strategic alliances, such as with Amgen and GSK;
- the issuance of shares of our common stock under our committed equity financing facility entered into with Kingsbridge Capital Limited ("Kingsbridge") in 2007;
- our ability to protect our intellectual property and to avoid infringing the intellectual property rights of others;
- expected future sources of revenue and capital;
- losses, costs, expenses and expenditures;
- future payments under lease obligations and equipment financing lines;
- potential competitors and competitive products;
- increasing the number of our employees and recruiting additional key personnel;
- expected future amortization of employee stock-based compensation; and
- our ability to sell equipment held for sale and the timing of such sales.

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

- our ability to obtain additional financing;
- our receipt of funds under our strategic alliances, including those funds dependent upon Amgen's potential exercise of its option with respect to CK-1827452;
- Amgen's decision as to whether to exercise its option to CK-1827452 and, if it does exercise its option, its decisions with respect to the timing, design and conduct of development activities for CK-1827452;
- difficulties or delays in the development, testing, production or commercialization of our drug candidates, including decisions by GSK to postpone
 or discontinue research or development activities relating to GSK-923295;
- difficulties or delays in or slower than anticipated patient enrollment in our or our partners' clinical trials;
- unexpected adverse side effects or inadequate therapeutic efficacy of our drug candidates that could slow or prevent product approval (including the
 risk that current and past results of preclinical studies or clinical trials may not be indicative of future clinical trials results);
- the possibility that the U.S. Food and Drug Administration ("FDA") or foreign regulatory agencies may delay or limit our or our partners' ability to conduct clinical trials or may delay or withhold approvals for the manufacture and sale of our products;
- activities and decisions of, and market conditions affecting, current and future strategic partners;

- the conditions in our 2007 committed equity financing facility with Kingsbridge that must be fulfilled before we can require Kingsbridge to purchase our common stock, including the minimum volume-weighted average share price;
- our ability to maintain the effectiveness of our registration statement permitting resale of securities to be issued to Kingsbridge by us under, and in connection with, our 2007 committed equity financing facility;
- changing standards of care and the introduction of products by competitors or alternative therapies for the treatment of indications we target that may
 make our drug candidates commercially unviable;
- the uncertainty of protection for our intellectual property, whether in the form of patents, trade secrets or otherwise; and
- potential infringement by us of the intellectual property rights or trade secrets of third parties.

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

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

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

Overview

We are a clinical-stage biopharmaceutical company focused on the discovery and development of novel small molecule therapeutics that modulate muscle function for the potential treatment of serious diseases and medical conditions. Our research and development activities are founded on our knowledge and expertise regarding the cytoskeleton, a complex biological infrastructure that plays a fundamental role within every human cell. These activities initially focused on inhibitors of cell division, and are now directed to the biology of muscle function, and in particular, to small molecule modulators of the contractility of cardiac, smooth and skeletal muscle. We intend to leverage our experience in muscle contractility in order to expand our current pipeline into new therapeutic areas, and expect to continue to be able to identify additional potential drug candidates that may be suitable for clinical development.

We have four drug candidates currently in human clinical trials: CK-1827452 is in Phase IIa clinical trials for the potential treatment of heart failure; ispinesib is the subject of a Phase I/II clinical trial in breast cancer patients; SB-743921 is the subject of a Phase I/II clinical trial in patients with Hodgkin or non-Hodgkin lymphoma; and GSK-923295 is the subject of Phase I clinical trial in patients with advanced, refractory solid tumors. In mid-2009, we plan to initiate a Phase I, first-in-humans clinical trial of CK-2017357, a fast skeletal muscle troponin activator, which may be developed for diseases or medical conditions associated with muscle weakness or wasting. We also have two potential drug candidates currently in preclinical development: a back-up development compound for CK-2017357 and an inhibitor of smooth muscle myosin intended for inhaled delivery that may be useful as a potential treatment of diseases such as pulmonary arterial hypertension, asthma or chronic obstructive pulmonary disease.

Muscle Contractility Programs

Cardiac Muscle Contractility

Our lead drug candidate, CK-1827452, a novel cardiac muscle myosin activator for the potential treatment of heart failure, is currently in Phase IIa clinical development to evaluate the safety, tolerability, pharmacodynamics and pharmacokinetic profile of this drug candidate in both an intravenous and oral formulation.

In March 2009, at the 2009 Annual American College of Cardiology Meeting, we presented final data from our Phase IIa clinical trial evaluating CK-1827452 administered intravenously to patients with stable heart failure. The final results showed that CK-1827452 increased systolic ejection time, stroke volume, cardiac output, fractional shortening and ejection fraction in a concentration dependent manner. In addition, these results demonstrated that CK-1827452 decreased left ventricular end-systolic volume and left ventricular end-diastolic volume in a concentration dependent manner. Decreases in ventricular volumes observed in response to treatment with other therapies have been associated with improved outcomes in heart failure. Increases in indices of ventricular systolic function and decreases in ventricular volumes observed with CK-1827452 in this trial were associated with decreases in heart rate. CK-1827452 appeared to be generally well-tolerated in stable heart failure patients over a range of plasma concentrations during continuous intravenous administration. We anticipate presenting data from this clinical trial as a Late-Breaking Clinical Trial at the 2009 Heart Failure Congress of the European Society of Cardiology to be held May 30 through June 2, 2009.

In April 2009, we initiated an additional Phase IIa clinical trial of CK-1827452. This clinical trial is an open-label, multi-center, multiple-dose trial designed to evaluate and compare the oral pharmacokinetics of a modified release and an immediate release formulation of CK-1827452 under fed conditions in patients with stable heart failure. The clinical trial is currently planned to enroll at least three cohorts of between 6 and 12 patients.

In December 2008, we announced top-line results from a Phase IIa clinical trial evaluating the safety of CK-1827452 in patients with ischemic cardiomyopathy and angina. The primary safety endpoint was defined as stopping an exercise test during double-blind treatment with CK-1827452 or placebo due to unacceptable angina at an earlier exercise stage than at baseline. This endpoint was observed in one patient receiving placebo and did not occur in any patient receiving CK-1827452. We anticipate presenting final data from this clinical trial at the 2009 Heart Failure Congress of the European Society of Cardiology.

We are continuing to conduct an open-label, non-randomized Phase IIa clinical trial designed to evaluate an intravenous formulation of CK-1827452 administered to patients with stable heart failure undergoing clinically indicated coronary angiography. In addition, we have conducted five Phase I clinical trials of CK-1827452 in healthy subjects: a first-time-in-humans study evaluating an intravenous formulation, an oral bioavailability study evaluating both intravenous and oral formulations, and three studies of oral formulations: a drug-drug interaction study, a dose-proportionality study and a study evaluating modified-release formulations.

We believe the safety data from our Phase IIa clinical trial evaluating the safety and tolerability of CK-1827452 in patients with ischemic cardiomyopathy and angina, together with the improvements in systolic function observed in our Phase IIa clinical trial evaluating CK-1827452 in stable heart failure patients, support the progression of CK-1827452 into Phase IIb clinical development. In mid-2009, we plan to initiate a Phase IIb clinical trial of CK-1827452 in chronic heart failure outpatients at increased risk for death and rehospitalization for heart failure.

In December 2006, we entered into a collaboration and option agreement with Amgen Inc. to discover, develop and commercialize novel small-molecule therapeutics that activate cardiac muscle contractility for potential applications in the treatment of heart failure, including CK-1827452. The agreement provides Amgen with a non-exclusive license and access to certain technology. The agreement also granted Amgen an option to obtain an exclusive license world-wide, except Japan, to develop and commercialize CK-1827452 and other drug candidates arising from the collaboration. Amgen's option is exercisable during a defined period, the ending of which is dependent upon the satisfaction of certain conditions, primarily our delivery of certain Phase I and Phase IIa clinical trials data for CK-1827452 in accordance with an agreed development plan, the results of which may reasonably support its progression into Phase IIb clinical development. In February 2009, we believe we delivered to Amgen the contractually defined data package to inform its option decision with respect to CK-1827452. Prior to the exercise or expiration of Amgen's option, we are responsible for conducting all development activities for CK-1827452, at our own expense.

To exercise its option, Amgen would pay an exercise fee of \$50.0 million and thereafter would be responsible for the development and commercialization of CK-1827452 and related compounds, at its expense, subject to Cytokinetics' development and commercialization participation rights. Following exercise of the option, the agreement provides for potential pre-commercialization and commercialization milestone payments of up to \$600.0 million in the aggregate on CK-1827452 and other potential products arising from research under the collaboration, and royalties that escalate based on increasing levels of annual net sales of products commercialized under the agreement. The agreement also provides for us to receive increased royalties by co-funding Phase III development costs of drug candidates under the collaboration. If we elect to co-fund such costs, we would be entitled to co-promote CK-1827452 in North America and participate in agreed commercialization activities in institutional care settings, at Amgen's expense. If Amgen elects not to exercise its option to CK-1827452, we may then independently proceed to develop and commercialize CK-1827452, ourselves or with another partner.

The clinical trials program for CK-1827452 may proceed for several years, and we will not be in a position to generate any revenues or material net cash flows from sales of this drug candidate until the program is successfully completed, regulatory approval is achieved, and a drug is commercialized. CK-1827452 is at too early a stage of development for us to predict when or if this may occur. We currently fund all research and development costs associated with this program. We recorded research and development expenses for activities relating to our cardiac muscle contractility program of approximately \$3.8 million and \$5.3 million in the quarters ended March 31, 2009 and 2008, respectively. We anticipate that our expenditures relating to the research and development of compounds in our cardiac muscle contractility program will increase significantly as we advance CK-1827452 through clinical

development. Our expenditures will also increase if Amgen does not exercise its option and we elect to develop CK-1827452 or related compounds independently, or if we elect to co-fund later-stage development of CK-1827452 or other compounds in our cardiac muscle contractility program under our collaboration and option agreement with Amgen following Amgen's exercise of its option.

Skeletal Muscle Contractility

In April 2008, we announced that we had selected CK-2017357, a fast skeletal muscle troponin activator, as the lead potential drug candidate from this program. We intend to initiate a Phase I, first-in-humans clinical trial of CK-2017357 in healthy volunteers under an U.S. investigational new drug application ("IND") in mid-2009. In January 2009, we announced that we had selected another compound from this program as a backup development compound to CK-2017357. CK-2017357 and its backup development compound are structurally distinct small molecule activators of the skeletal sarcomere. These potential drug candidates act on fast skeletal muscle troponin. Activation of troponin increases its sensitivity to calcium, leading to an increase in skeletal muscle contractility. This mechanism of action has demonstrated encouraging pharmacological activity in preclinical models. We are evaluating the potential indications for which CK-2017357 may be useful. These may include diseases and medical conditions associated with skeletal muscle weakness or wasting, such as amyotrophic lateral sclerosis, also known as ALS or Lou Gehrig's disease, cachexia in connection with heart failure or cancer, sarcopenia and general frailty associated with aging.

CK-2017357 is at too early a stage of development for us to predict if or when we will be in a position to generate any revenues or material net cash flows from its commercialization. We currently fund all research and development costs associated with this program. We recorded research and development expenses for activities relating to our skeletal muscle contractility program of approximately \$2.6 million and \$1.9 million in the quarters ended March 31, 2009 and 2008, respectively. We anticipate that our expenditures relating to the research and development of compounds in our skeletal muscle contractility program will increase significantly if and as we advance CK-2017357, its back-up compound or other compounds from this program through clinical development.

Smooth Muscle Contractility

In January 2009, we announced that we had selected a lead potential drug candidate from this program for advancement. This compound is a small molecule direct inhibitor of smooth muscle myosin. By inhibiting the function of the myosin motor central to the contraction of smooth muscle, this small molecule directly leads to the relaxation of contracted smooth muscle. Specifically intended for inhaled delivery applications, this potential drug candidate has demonstrated encouraging pharmacological activity in preclinical models as a novel mechanism vasodilator and bronchodilator. This data suggests that it may be useful as a potential treatment of diseases such as pulmonary arterial hypertension, asthma or chronic obstructive pulmonary disease. This potential drug candidate is at too early a stage of development for us to predict if or when we will be in a position to generate any revenues or material net cash flows from its commercialization. We currently fund all research and development costs associated with this program. We recorded research and development expenses for activities relating to our smooth muscle contractility program of approximately \$1.7 million and \$2.4 million in the quarters ended March 31, 2009 and 2008, respectively. We anticipate that our expenditures relating to the research and development of compounds in our smooth muscle contractility program will increase significantly if and as we advance this smooth muscle myosin inhibitor or other compounds from this program through clinical development.

Oncology Program: Mitotic Kinesin Inhibitors

We currently have three drug candidates in clinical trials for the potential treatment of cancer: ispinesib, SB-743921 and GSK-923295. All of these arose from our earlier research activities directed to the role of the cytoskeleton in cell division and have been progressed under our strategic alliance with GSK. This strategic alliance was established in 2001 to discover, develop and commercialize novel small molecule therapeutics targeting mitotic kinesins for applications in the treatment of cancer and other diseases. Mitotic kinesins are a family of cytoskeletal motor proteins involved in the process of cell division, or mitosis. Under that strategic alliance, we have focused primarily on two mitotic kinesins: kinesin spindle protein ("KSP") and centromere-associated protein E ("CENP-E"). In November 2006, we amended the agreement and assumed responsibility, at our expense, for the continued research, development and commercialization of inhibitors of KSP, including ispinesib and SB-743921, and other mitotic kinesins, other than CENP-E. GSK retained an option to resume responsibility for the development and commercialization of either or both of ispinesib and SB-743921. This option expired at the end of 2008. Accordingly, we retain all rights to both ispinesib and SB-743921, subject to certain royalty obligations to GSK. In each of June 2006, 2007 and 2008, we amended the agreement to extend the research term of the GSK strategic alliance for an additional year to continue joint translational research directed to CENP-E.

Ispinesib

A broad Phase II clinical trials program has been conducted for ispinesib across multiple tumor types. To date, we believe clinical activity for ispinesib has been observed in non-small cell lung, ovarian and breast cancers, with the most robust clinical activity observed in a Phase II clinical trial evaluating ispinesib in the treatment of patients with locally advanced or metastatic breast cancer that had failed treatment with taxanes and anthracyclines. In addition, preclinical and Phase Ib clinical data relating to ispinesib indicate that it may have an additive effect when combined with certain existing chemotherapeutic agents.

We are now conducting a Phase I/II clinical trial for ispinesib to further define its clinical activity profile in chemotherapy-naïve locally advanced or metastatic breast cancer patients. This clinical trial is using a more dose-dense schedule than was previously evaluated to determine if the overall response to ispinesib can be increased while maintaining its existing safety profile. We anticipate presenting data from the Phase I portion of this clinical trial in May 2009 at the annual meeting of the American Society of Clinical Oncology. We intend to complete the Phase I portion of this trial and to seek a strategic partner for the future development and commercialization of ispinesib.

SB-743921

We continue to enroll and dose-escalate patients in the Phase I portion of a Phase I/II clinical trial evaluating SB-743921's safety, tolerability and pharmacokinetics in patients with Hodgkin or non-Hodgkin lymphoma. This clinical trial is using a more dose-dense schedule than was previously evaluated to determine if the overall response to SB-743921 can be increased while maintaining its existing safety profile. We anticipate presenting data from the Phase I portion of this clinical trial in May 2009 at the annual meeting of the American Society of Clinical Oncology. We intend to complete the Phase I portion of this trial and to seek a strategic partner for the future development and commercialization of SB-743921.

GSK-923295

Under our strategic alliance, GSK is responsible, at its expense, for the development of and commercialization of GSK-923295. GSK continues to enroll and dose-escalate patients in a Phase I first-in-humans clinical trial evaluating GSK-923295 in patients with advanced, refractory solid tumors. We anticipate that GSK will present data from this clinical trial in May 2009 at the annual meeting of the American Society of Clinical Oncology. We anticipate that GSK will initiate a Phase II clinical trial of GSK-923295 in 2010.

In April 2009, at the American Association of Cancer Research Annual Meeting, GSK presented two abstracts containing non-clinical data relating to GSK-923295.

We will receive royalties from GSK's sales of any drugs developed under the strategic alliance. For those drug candidates that GSK develops under the strategic alliance, we can elect to co-fund certain later-stage development activities which would increase our potential royalty rates on sales of resulting drugs and provide us with the option to secure co-promotion rights in North America. If we elect to co-fund later-stage development, we expect that the royalties to be paid on future sales of GSK-923295 could potentially increase based on increasing product sales and our anticipated level of co-funding. If we exercise our co-promotion option, then we are entitled to receive reimbursement from GSK for certain sales force costs we incur in support of our commercialization activities.

The clinical trials program for each of ispinesib, SB-743921 and GSK-923295 may proceed for several years, and we will not be in a position to generate any revenues or material net cash flows from sales of any of these drug candidates until its clinical trials program is successfully completed, regulatory approval is achieved and a drug is commercialized. Each of these drug candidates is at too early a stage of development for us to predict when or if this may occur. We currently fund all research and development costs associated with ispinesib and SB-743921. If we continue to conduct our Phase I/II clinical trials for either or both of ispinesib and SB-743921, our expenditures relating to research and development of these drug candidate will increase significantly. We recorded research and development expenses for activities relating to our mitotic kinesin inhibitors program of approximately \$1.2 million and \$2.0 million for the three months ended March 31, 2009 and 2008, respectively. We received and recognized as revenue reimbursements from GSK of FTE and other expenses related to our mitotic kinesin inhibitors program of \$4,000 and \$11,000 for the quarters ended March 31, 2009 and 2008, respectively.

Development Risks

Whether any of our drug candidates will successfully complete development and be approved for commercial sale is highly uncertain. Moreover, we cannot estimate with certainty or know the exact nature, timing and costs of the activities necessary to complete the development of any of our drug candidates or the date of completion of these development activities due to numerous risks and uncertainties, including, but not limited to:

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

If we fail to complete the development of any of our drug candidates in a timely manner, it could have a material adverse effect on our operations, financial position and liquidity. In addition, any failure by us or our partners to obtain, or any delay in obtaining, regulatory approvals for our drug candidates could have a material adverse effect on our results of operations. A further discussion of the risks and uncertainties associated with completing our programs on schedule, or at all, and certain consequences of failing to do so are discussed further in the risk factors entitled "We have never generated, and may never generate, revenues from commercial sales of our drugs and we may not have drugs to market for at least several years, if ever," "Clinical trials may fail to demonstrate the desired safety and efficacy of our drug candidates, which could prevent or significantly delay completion of clinical development and regulatory approval" and "Clinical trials are expensive, time-consuming and subject to delay," and other risk factors.

Revenues

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

Under our collaboration and option agreement with Amgen, we received an upfront, non-refundable license and technology access fee of \$42.0 million. In connection with entering into the agreement, we also entered into a common stock purchase agreement with Amgen. In January 2007, we issued 3,484,806 shares of our common stock to Amgen for net proceeds of \$32.9 million, of which the \$6.9 million purchase premium was recorded as deferred revenue. We are amortizing the upfront fee and stock premium to license revenue ratably over the maximum term of the non-exclusive license, which is four years. We may receive additional payments from Amgen upon achieving certain precommercialization and commercialization milestones. Milestone payments are non-refundable and are recognized as revenue when earned, as evidenced by achievement of the specified milestones and the absence of ongoing performance obligations.

We may also be eligible to receive reimbursement for contract development activities subsequent to Amgen's option exercise, which we will record as revenue if and when the related expenses are incurred. We record amounts received in advance of performance as deferred revenue.



Revenues from GSK in 2006 were based on negotiated rates intended to approximate the costs for our full-time employee equivalents ("FTEs") performing research under the strategic alliance and our out-of-pocket expenses, which we recorded as the related expenses were incurred. GSK paid us an upfront licensing fee, which we recognized ratably over the strategic alliance's initial five-year research term, which ended in June 2006. In 2007, we received a \$1.0 million milestone payment from GSK relating to its initiation of a Phase I clinical trial of GSK-923295. We may receive additional payments from GSK upon achievement of certain precommercialization milestones. Milestone payments are non-refundable and are recognized as revenue when earned, as evidenced by achievement of the specified milestones and the absence of ongoing performance obligations. We record amounts received in advance of performance as deferred revenue. The revenues recognized to date are non-refundable, even if the relevant research effort is not successful. In December 2008, GSK's option to license ispinesib and SB-743291 expired and all rights to these drug candidates remain with us under the collaboration and license agreement, subject to our royalty obligations to GSK. GSK continues to conduct the development of GSK-923295 under the agreement.

Because a substantial portion of our revenues for the foreseeable future will depend on achieving development and other precommercialization milestones under our strategic alliances with GSK and, if Amgen exercises its option, Amgen, our results of operations may vary substantially from year to year.

We expect that our future revenues will most likely be derived from royalties on sales from drugs licensed to GSK or Amgen under our strategic alliances and from those licensed to future partners, and from direct sales of our drugs. If Amgen exercises its option, we will retain a product-by-product option to cofund certain later-stage development activities under our strategic alliance with Amgen, thereby potentially increasing our royalties and affording us copromotion rights in North America. For products developed by GSK under our strategic alliance, we also retain a product-by-product option to co-fund certain later-stage development activities, thereby potentially increasing our royalties and affording us copromotion rights under either strategic alliance, we are entitled to receive reimbursement for certain sales force costs we incur in support of our commercial activities.

Research and Development

We incur research and development expenses associated with both partnered and unpartnered research activities. Research and development expenses related to our strategic alliance with GSK consisted primarily of costs related to research and screening, lead optimization and other activities relating to the identification of compounds for development as mitotic kinesin inhibitors for the treatment of cancer. Prior to June 2006, certain of these costs were reimbursed by GSK on an FTE basis. From 2001 through November 2006, GSK funded the majority of the costs related to the clinical development of ispinesib and SB-743921. Under our amended collaboration and license agreement with GSK, we assumed responsibility for the continued research, development and commercialization of inhibitors of KSP, including ispinesib and SB-743921, and other mitotic kinesins other than CENP-E, at our sole expense. We also have the option to co-fund certain later-stage development activities for GSK-923295. Our conduct of the development expenses. We expect to incur research and development expenses in the continued conduct of preclinical studies and clinical trials for: CK-1827452 for the potential treatment of heart failure; CK-2017357 and other skeletal sarcomere activators for the potential treatment of diseases and medical conditions associated with muscle weakness or wasting; our smooth muscle myosin inhibitor potential drug candidate and other smooth muscle myosin inhibitor compounds for the potential treatment of pulmonary arterial hypertension and diseases and medical conditions associated with bronchoconstriction; ispinesib for the potential treatment of breast cancer; SB-743921 for the potential treatment of Hodgkin and non-Hodgkin lymphoma; and in connection with our research programs in other disease areas.

Research and development expenses related to any development and commercialization activities we elect to fund would consist primarily of employee compensation, supplies and materials, costs for consultants and contract research, facilities costs and depreciation of equipment. From our inception through March 31, 2009, we incurred costs of approximately \$123.7 million for research and development activities relating to our cardiac muscle contractility program, \$21.0 million for our skeletal muscle contractility program, \$28.1 million for our smooth muscle contractility program, \$68.4 million for our mitotic kinesin inhibitors, \$52.9 million for our proprietary technologies and \$53.3 million for other research programs.

General and Administrative Expenses

General and administrative expenses consist primarily of compensation for employees in executive and administrative functions, including, but not limited to, finance, human resources, legal, business and commercial development and strategic planning. Other significant costs include facilities costs and professional fees for accounting and legal services, including legal services associated with obtaining and maintaining patents and regulatory compliance. We expect that general and administrative expenses will increase in 2009.

Restructuring

In September 2008, we announced a restructuring plan to realign our workforce and operations in line with a strategic reassessment of our research and development activities and corporate objectives. As a result, we have focused our research activities to our muscle contractility programs while continuing our ongoing clinical trials in heart failure and cancer and have discontinued early research activities directed to oncology. To implement this plan, we reduced our workforce by approximately 29%, or 45 employees, to 112 employees. The affected employees were provided with severance and related benefits payments and outplacement assistance.

We have completed substantially all restructuring activities and recognized all anticipated restructuring charges. All severance payments were made as of December 31, 2008. We expect to record only immaterial cash payments associated with the accrued restructuring costs during the remainder of 2009, primarily related to employee benefits and outplacement services.

As a result of the restructuring plan, in 2008 we recorded total restructuring charges of \$2.2 million for employee severance and benefit related costs and a \$0.3 million charge related to the impairment of lab equipment that is held for sale. In the first quarter of 2009, we recorded a reduction in restructuring charges of \$0.1 million, representing primarily the reversal of employee benefit related accruals and gain on disposal of held-for-sale equipment. We expect to sell the held-for-sale equipment by September 2009.

Stock Compensation

The following table summarizes stock-based compensation related to employee stock options, restricted stock awards and employee stock purchases for the three months ended March 31, 2009 and March 31, 2008, which was allocated as follows (in thousands):

	Three Mo	onths Ended	
	March 30,	March 31,	
	2009	2008	
Research and development	\$ 613	\$ 865	
General and administrative	636	662	
Stock-based compensation included in operating expenses	\$ 1,249	\$ 1,527	

As of March 31, 2009, there was \$8.8 million of total unrecognized compensation cost related to non-vested stock-based compensation arrangements granted under our stock option plans. That cost is expected to be recognized over a weighted-average period of 2.8 years. The total unrecognized compensation expense related to restricted stock awards as of March 31, 2009 was \$0.7 million and is expected to be recognized over a weighted-average period of 1.4 years. In addition, through 2008, we continued to amortize deferred stock-based compensation recorded prior to adoption of Statement of Financial Accounting Standards ("SFAS") No. 123R, "*Accounting for Stock-Based Compensation*," for stock options granted prior to our initial public offering. The remaining balance became fully amortized in the fourth quarter of 2008.

Income Taxes

We account for income taxes in accordance with SFAS No. 109, "*Accounting for Income Taxes*," which is the asset and liability method for accounting and reporting for income taxes. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized. We did not record an income tax provision in the quarters ended March 31, 2009 or March 31, 2008 because we had a net taxable loss in each of those periods. Given that we have a history of recurring losses, we have recorded a full valuation allowance against our net deferred tax assets.

We also follow the provisions of Financial Accounting Standards Board ("FASB") Interpretation No. 48, "*Accounting for Uncertainty in Income Taxes*, *an Interpretation of SFAS 109*" ("FIN 48"). This standard defines the threshold for recognizing the benefits of tax return positions in the financial statements as "more-likely-than-not" to be sustained by the taxing authorities based solely on the technical merits of the position. If the recognition threshold is met, the tax benefit is measured and recognized as the largest amount of tax benefit that, in our judgment, is greater than 50% likely to be realized. We are currently not undergoing any income tax examinations. In general, the statute of limitations for tax liabilities for these years remains open for the purpose of adjusting the amounts of the losses and credits carried forward from those years.

Interest and penalties were zero for the quarters ended March 31, 2009 and March 31, 2008. We account for interest and penalties by classifying both as income tax expense in the financial statements. We do not expect our unrecognized tax benefits to change materially over the next 12 months.



Results of Operations

Revenues

We recorded total revenues of \$3.1 million in the first quarter of both 2009 and 2008.

Research and development revenues from related parties refer to revenues from our strategic alliances with Amgen and GSK. Research and development revenues from GSK were \$4,000 and \$11,000 in the first quarter 2009 and 2008, respectively, and represented patent expense reimbursements. Research and development revenues from Amgen were \$16,000 and zero in the first quarter of 2009 and 2008, respectively, and represented sales of clinical material.

License revenues from related parties refer to license revenues from our strategic alliances with Amgen and GSK. License revenues were \$3.1 million for the first quarters of both 2009 and 2008, and represented recognition of the upfront license fee and the premium paid on the common stock purchase by Amgen. As of March 31, 2009, the remaining balance of deferred revenue relating to the upfront license fee and stock purchase premium paid by Amgen was \$21.4 million. We are amortizing the Amgen deferred revenue on a straight-line basis over the maximum term of the non-exclusive license granted to Amgen under the collaboration and option agreement, which is four years.

Research and Development Expenses

Research and development expenses were \$10.0 million in the first quarter of 2009, down from \$14.1 million in the first quarter of 2008. The \$4.1 million decrease in the first quarter of 2009, compared to the same period in 2008, was primarily due to decreases of \$1.9 million for clinical outsourcing costs related to our cardiac muscle contractility and mitotic kinesin inhibitors clinical trial programs and preclinical outsourcing costs, \$1.2 million for personnel related costs, and \$0.8 million for laboratory and facility related costs.

From a program perspective, the changes in spending in the first quarter of 2009, compared to the first quarter of 2008, were due to decreases of \$1.5 million for our cardiac contractility program, \$0.7 million for our smooth muscle contractility program, \$0.8 million for our mitotic kinesin inhibitors program, \$0.5 million for our proprietary technologies and \$1.3 million for our other research and preclinical programs, partially offset by an increase of \$0.7 million for our skeletal muscle contractility program.

Research and development expenses incurred related to the following programs (in millions):

	Three M	onths Ended
	March 31,	March 31,
	2009	2008
Cardiac muscle contractility	\$ 3.8	\$ 5.3
Skeletal muscle contractility	2.6	1.9
Smooth muscle contractility	1.7	2.4
Mitotic kinesin inhibitors	1.2	2.0
Proprietary technologies	0.2	0.7
All other research and preclinical programs	0.5	1.8
Total research and development expenses	\$ 10.0	\$ 14.1

GSK reimbursed costs of \$4,000 and \$11,000 for the first quarter of 2009 and 2008, respectively, for patent expenses related to mitotic kinesin inhibitors. We recorded these reimbursements as related party revenue.

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

We expect our research and development expenditures to decrease for the full year 2009, as a result of our restructuring in September 2008. We expect to continue development of our drug candidate CK-1827452 for the potential treatment of heart failure,

our drug candidate CK-2017357 for the potential treatment of diseases and medical conditions associated with muscle weakness or wasting, and our smooth muscle myosin inhibitor for the potential treatment of pulmonary arterial hypertension and diseases and medical conditions associated with bronchoconstriction. We also expect to continue our Phase I clinical development of our drug candidates ispinesib and SB-743921 for the potential treatment of cancer. For the year ending December 31, 2009, we anticipate research and development expenses to be in the range of \$42.5 million to \$46.5 million. Non-cash expenses such as stock-based compensation and depreciation of approximately \$4.5 million are included in the 2009 research and development expenses.

General and Administrative Expenses

General and administrative expenses were \$4.0 million in the first quarter of 2009, compared with \$4.2 million in the first quarter of 2008. The decrease in the first quarter of 2009 was primarily due to decreases in general corporate legal expenses of \$0.2 million.

We expect that general and administrative expenses will increase in 2009 from 2008 levels. For the year ending December 31, 2009, we anticipate general and administrative expenses to be in the range of \$17.0 million to \$18.0 million. Non-cash expenses such as stock-based compensation and depreciation of approximately \$3.0 million are included in the 2009 general and administrative expenses.

Restructuring Expenses

Restructuring expenses were (\$0.1) million in the first quarter of 2009, which primarily consisted of the reduction of accrued employee benefit related accrued restructuring costs and gain on disposal of held-for-sale equipment. In September 2008, we announced a restructuring plan to realign our workforce and operations in line with a strategic reassessment of our research and development activities and corporate objectives. As a result of the restructuring plan, in the year ended December 31, 2008, we recorded total restructuring charges of \$2.2 million for employee severance and benefit related costs and a \$0.3 million charge related to the impairment of lab equipment that is held for sale. We expect to sell the held-for-sale equipment by September 2009.

Interest and Other, net

Components of Interest and Other, net are as follows:

	Three Mo	nths Ended
	March 31,	March 31,
	2009	2008
Unrealized loss on put option	\$ (0.7)	\$ —
Unrealized gain on trading securities	0.7	_
Interest income and other income	0.3	1.4
Interest expense and other expense	(0.1)	(0.1)
Interest and Other, net	\$ 0.2	\$ 1.3

Interest income and other income decreased to \$0.3 million in the first quarter of 2009 from \$1.4 million in the first quarter of 2008, due to lower market interest rates earned on our investments and lower average balances of cash, cash equivalents and investments.

Interest expense and other expense was \$0.1 million in first quarter of both 2009 and 2008, and primarily consisted of interest expense on our equipment financing line of credit, and, for the first quarter of 2009, interest expense on our loan with UBS Bank USA.

Critical Accounting Policies

The accounting policies that we consider to be our most critical (i.e., those that are most important to the portrayal of our financial condition and results of operations and that require our most difficult, subjective or complex judgments), the effects of those accounting policies applied and the judgments made in their application are summarized in "*Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates*" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2008.

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

We adopted EITF Issue No. 07-01, "Accounting for Collaboration Arrangements Related to the Development and Commercialization of Intellectual Property." EITF Issue No. 07-01 describes how the parties to a collaborative agreement should account for costs incurred and revenue generated on sales to third parties and how shared payments pursuant to a collaboration agreement should be presented in the income statement, and addresses certain related disclosure questions. EITF Issue No. 07-01 is to be applied retrospectively for collaboration arrangements entered into after the adoption date. Our adoption of EITF Issue No. 07-1 in the quarter ended March 31, 2009 did not have a material impact on our financial position or results of operations.

We adopted FASB Staff Position ("FSP") 157-1, "*Application of FASB Statement No. 157 to FASB Statement No. 13 and Other Accounting Pronouncements That Address Fair Value Measurements for Purposes of Lease Classification or Measurement under Statement 13*" and FSP 157-2, " *Effective Date of FASB Statement No. 157.*" FSP 157-1 amends SFAS 157 to remove certain leasing transactions from its scope, and became effective upon the adoption of SFAS 157. FSP 157-2 delayed the effective date of SFAS 157 for all non-financial assets and non-financial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually), until the beginning of the first quarter of 2009. We adoption of SFAS 157 in the quarter ended March 31, 2009, as applied to non-financial assets and non-financial liabilities that are not measured at fair value on a recurring basis, did not have a material impact on our financial statements.

Accounting Pronouncements Not Yet Adopted

In April 2009, the FASB issued FSP FAS 157-4, "Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly." FSP FAS 157-4 provides additional guidance on determining fair values when there is no active market or where the price inputs represent distressed sales. It reaffirms the guidance in FAS 157 that fair value is the amount an asset would be sold for in an orderly transaction (as opposed to a forced liquidation or distressed sale) at the date of the financial statements under current market conditions. FSP FAS 157-4 amends the disclosure provisions of FAS 157 to require entities to disclose the valuation inputs and techniques in interim and annual financial statements, and to disclose FAS 157 hierarchies and the Level 3 rollforward by major security types. We will adopt FSP FAS 157-4 in the second quarter of 2009, and do not expect that the adoption will have a material impact on our financial position or results of operations.

In April 2009, the FASB issued FSP FAS 107-1 and APB 28-1, "*Interim Disclosures about Fair Value of Financial Instruments.*" FSP FAS 107-1 and APB 28-1 amends FAS 107, "Disclosure about Fair Value of Financial Instruments," to require public companies to provide disclosures about the fair value of financial instruments in interim and annual financial statements. We will adopt FSP FAS 107-1 and APB 28-1 in the second quarter of 2009, and do not expect that the adoption will have a material impact on our financial position or results of operations.

In April 2009, the FASB issued FSP FAS 115-2 and FAS 124-2, "*Recognition and Presentation of Other-Than-Temporary Impairments*." This FSP provides additional guidance for determining the credit and non-credit components of other-than-temporary impairments of debt securities. It also increases and clarifies the disclosure requirements of FAS 115, and extends the disclosure frequency to interim and annual periods. We will adopt FSP FAS 115-2 and FAS 124-2 in the second quarter of 2009, and are currently evaluating the impact that this FSP may have on our financial statements.

Liquidity and Capital Resources

From August 5, 1997, our date of inception, through March 31, 2009, we funded our operations through the sale of equity securities, equipment financings, non-equity payments from collaborators, government grants and interest income.

Our cash, cash equivalents and investments, excluding restricted cash, totaled \$81.4 million at March 31, 2009, up from \$73.5 million at December 31, 2008. The increase was primarily due to cash proceeds of \$12.4 from the loan from UBS Bank USA and \$6.8 million, net, from the 2007 committed equity financing facility with Kingsbridge. These proceeds were partially offset by the use of \$11.8 million of cash to fund operations.

We have received net proceeds from the sale of equity securities of \$322.3 million from August 5, 1997, the date of our inception, through March 31, 2009, excluding sales of equity to GSK and Amgen. Included in these proceeds are \$94.0 million received upon closing of the initial public offering of our common stock in May 2004. In connection with execution of our collaboration and license agreement in 2001, GSK made a \$14.0 million equity investment in Cytokinetics. GSK made additional equity investments in Cytokinetics in 2003 and 2004 of \$3.0 million and \$7.0 million, respectively.



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

In October 2007, we entered into a new committed equity financing facility with Kingsbridge (the "2007 CEFF"), pursuant to which Kingsbridge committed to finance up to \$75.0 million of capital for a three-year period. Subject to certain conditions and limitations, which include a minimum volume-weighted average price of \$2.00 for our common stock, from time to time under this facility, at our election, Kingsbridge is committed to purchase newly-issued shares of our common stock at a price between 90% and 94% of the volume weighted average price on each trading day during an eight day, forward-looking pricing period. The maximum number of shares we may issue in any pricing period is the lesser of 2.5% of our market capitalization immediately prior to the commencement of the pricing period or \$15.0 million. As part of the 2007 CEFF arrangement, we issued a warrant to Kingsbridge to purchase 230,000 shares of our common stock at a price of \$7.99 per share, which represents a premium over the closing price of our common stock on the date we entered into this facility. This warrant is exercisable beginning six months after October 2007 and for a period of three years thereafter. We may sell a maximum 9,779,411 shares under the 2007 CEFF (exclusive of the shares underlying the warrant). Under the rules of the NASDAQ Stock Market LLC, this is approximately the maximum number of shares we may sell to Kingsbridge without approval of our stockholders. This limitation may further limit the amount of proceeds we are able to obtain from the 2007 CEFF. We are not obligated to sell any of the \$75.0 million of common stock available under this committed equity financing facility and there are no minimum market volume restrictions. As of May 6, 2009, we have received gross proceeds of \$6.9 million by selling 3,596,728 shares of our common stock to Kingsbridge under the 2007 CEFF, before offering costs of \$0.1 million. 6,182,683 shares remain available to the Company for sale under the 2007 CEFF as of March 31, 2009.

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

In December 2006, we entered into stock purchase agreements with selected institutional investors relating to the issuance and sale of 5,285,715 shares of our common stock at a price of \$7.00 per share, for gross offering proceeds of \$37.0 million. In connection with this offering, we paid placement agent fees to three registered broker-dealers totaling \$1.9 million. After deducting the placement agent fees and the offering costs, we received net proceeds of approximately \$34.9 million from the offering.

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

As of March 31, 2009, we have received \$54.5 million in non-equity payments from GSK and \$42.1 million in non-equity payments from Amgen.

Under equipment financing arrangements, we received \$23.7 million from August 5, 1997, the date of our inception, through March 31, 2009. Interest earned on investments, excluding non-cash amortization/accretion of purchase premiums/discounts was \$.03 million in the first quarter of 2009, and \$26.7 million from August 5, 1997, the date of our inception, through March 31, 2009.

Net cash used by operating activities was \$11.8 million in the first quarter of 2009 and primarily resulted from our net loss of \$10.7 million. Deferred revenue decreased \$3.1 million to \$21.4 at March 31, 2009 from \$24.5 million at December 31, 2008. The decrease was primarily due to the \$3.1 million amortization of deferred Amgen license revenue. Net cash used in operating activities was \$13.8 million in first quarter of 2008 and primarily resulted from the net loss of \$13.9 million.

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Net cash used in investing activities was \$0.2 million in the first quarter of 2009 and primarily represented cash used to purchase investments, net of proceeds from the maturity of investments, of \$0.6 million. Restricted cash totaled \$2.2 million at March 31, 2009, down from \$2.8 million at December 31, 2008, with the decrease due to the contractual semi-annual reduction in the amount of security deposit required by our lender. Net cash provided by investing activities was \$3.8 million in the first quarter of 2008 and primarily represented proceeds from the maturity of investments, net of investment purchases, of \$3.2 million, partly offset by funds used to purchase property and equipment of \$0.4 million.

Net cash provided by financing activities was \$18.7 million in the first quarter of 2009 and primarily represented proceeds from our loan from UBS Bank USA of \$12.4 million and drawdowns under our 2007 committed equity financing facility with Kingsbridge of \$6.9 million, net of issuance costs. Net cash used in financing activities was \$1.0 million for the first quarter of 2008 and primarily represented principal payments on our lines of credit with General Electric Capital Corporation ("GE Capital").

Auction Rate Securities ("ARS"). Our long-term investments at March 31, 2009 included (at par value) \$20.0 million of ARS. These ARS were intended to provide liquidity via an auction process that resets the applicable interest rate at predetermined calendar intervals, allowing investors to either roll over their holdings or gain immediate liquidity by selling such interests. With the liquidity issues experienced in global credit and capital markets, these ARS have experienced multiple failed auctions since February 2008, as the amount of securities submitted for sale has exceeded the amount of purchase orders. As a result, these securities are currently not liquid.

All of our ARS are secured by student loans. Up to approximately 93% of the value of these student loans are backed by the full faith and credit of the federal government. As of March 31, 2009, our ARS with par values totaling \$15.3 million had the a credit rating of AAA, and our ARS with par values totaling \$4.7 million had a credit rating of A3. All of these securities continue to pay interest according to their stated terms (generally 120 basis points over the ninety-one day U.S. Treasury bill rate) with interest rates resetting every 28 days. These ARS are scheduled to ultimately mature between 2036 and 2045, although we do not intend to hold them until maturity.

The valuation of our ARS investment portfolio is subject to uncertainties that are difficult to predict. The fair values of these ARS as of March 31, 2009 were estimated utilizing a discounted cash flow analysis. The assumptions used in preparing the discounted cash flow model include estimates of interest rates, timing and amount of cash flows, credit and liquidity premiums and expected holding periods of the ARS, based on data available. These assumptions are volatile and subject to change as the underlying sources of these assumptions and market conditions change, which could result in significant changes to the fair value of the ARS. The significant assumptions of this discounted cash flow model are discount margins which are based on industry recognized student loan sector indices, an additional liquidity discount and an estimated term to liquidity. Other items this analysis considers are the collateralization underlying the security investments, the creditworthiness of the counterparty and the timing of expected future cash flows. These ARS were also compared, when possible, to other observable market data with similar characteristics as the securities held by us. The fair value of our investment in ARS as of March 31, 2009 and December 31, 2008 was determined to be \$17.3 million and \$16.6 million, respectively. Changes in the fair value of the ARS are recognized in current period earnings in Interest and Other, net. Accordingly, we recognized \$0.7 million of unrealized gain in the first quarter of 2009.

In connection with the failed auctions of our ARS, which were marketed and sold by UBS AG and its affiliates, in October 2008, we accepted a settlement with UBS AG pursuant to which UBS AG issued to us Series C-2 Auction Rate Securities Rights (the "ARS Rights"). The ARS Rights provide us the right to receive the par value of our ARS, i.e., the liquidation preference of the ARS plus accrued but unpaid interest. Pursuant to the ARS Rights, we may require UBS to purchase our ARS at par value at any time between June 30, 2010 and July 2, 2012. In addition, UBS or its affiliates may sell or otherwise dispose of some or all of the ARS at its discretion at any time prior to expiration of the ARS Rights, subject to the obligation to pay us the par value of such ARS. The ARS Rights are not transferable, tradable or marginable, and will not be listed or quoted on any securities exchange or any electronic communications network. As consideration for ARS Rights, we agreed to release UBS AG, UBS Securities LLC and UBS Financial Services, Inc., and/or their affiliates, directors, and officers from any claims directly or indirectly relating to the marketing and sale of the ARS, other than for consequential damages. UBS's obligations in connection with the ARS Rights are not secured by its assets and UBS is not required to obtain any financing to support these obligations. UBS has disclaimed any assurance that it will have sufficient financial resources to satisfy its obligations in connection with the ARS Rights. If UBS has insufficient funding to buy back the ARS and the auction process continues to fail, we may incur further losses on the carrying value of the ARS.

The ARS Rights represent a firm agreement in accordance with Statement of Financial Accounting Standards ("SFAS") No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS 133"), which defines a firm agreement as an agreement with an unrelated party, binding on both parties and usually legally enforceable, with the following characteristics: a) the agreement specifies all significant terms, including the quantity to be exchanged, the fixed price and the timing of the transaction; and b) the agreement includes a disincentive for nonperformance that is sufficiently large to make performance probable. The enforceability of



the ARS Rights results in a put option, which we recognized as a separate freestanding instrument that is accounted for separately from the ARS investment. As of March 31, 2009, we recorded \$2.7 million as fair value of the put option assets, classified as long-term assets on the Balance Sheet. The put option does not meet the definition of a derivative instrument under SFAS 133. Therefore, we elected to measure the ARS Rights at fair value under SFAS 159 to mitigate volatility in reported earnings due to their linkage to the ARS. We valued the put option using a Black-Scholes option pricing model that included estimates of interest rates, based on data available, and was adjusted for any bearer risk associated with UBS's financial ability to repurchase the ARS beginning June 30, 2010. Any change in the assumptions on which these estimates are based or market conditions would affect the fair value of the ARS Rights. We anticipate that any future changes in the fair value of the ARS Rights will be offset by the changes in the fair value of the related ARS with no material net impact to the Statement of Operations, subject to UBS's continued performance of its obligations under the agreement. The ARS Rights will continue to be measured at fair value under SFAS 159 until the earlier of our exercise of the ARS Rights, UBS's purchase of the ARS in connection with the ARS Rights or the maturity of the ARS underlying the ARS Rights.

In connection with the settlement with UBS AG relating to our ARS, we entered into a loan agreement with UBS Bank USA and UBS Financial Services Inc. On January 5, 2009, we borrowed approximately \$12.4 million under the loan agreement, with our ARS held in accounts with UBS and its affiliates as collateral. The loan amount was based on 75% of the fair value as assessed by UBS at the time of the loan. We have drawn down the full amount available under the loan agreement. In general, the amount of interest payable under the loan agreement is intended to equal the amount of interest we would otherwise receive with respect to our ARS. During the three months ended March 31, 2009, the interest rate due on the loan with UBS was lower than the interest rate earned from the ARS. In addition, the principal balance of the loan was lower than the par value of the ARS. During the three months ended March 31, 2009, we paid \$38,000 of interest expenses associated with the loan and received \$124,000 in interest income from the ARS. In accordance with the loan agreement, we applied the net interest received of \$86,000 to the principal of the loan. The borrowings under the loan agreement are payable upon demand. However, UBS Financial Services Inc. or its affiliates will be required to arrange alternative financing for us on terms and conditions substantially the same as those under the loan agreement, unless the demand right was exercised as a result of certain specified events or the customer relationship between UBS and us is terminated for cause by UBS. If such alternative financing cannot be established, then a UBS affiliate will purchase the pledged ARS at par value. Proceeds of sales of the ARS will first be applied to repayment of the loan with the balance, if any, for our account.

We continue to monitor the market for ARS and consider its impact (if any) on the fair market value of our investments. If the market conditions deteriorate further, we may be required to record additional unrealized losses in earnings, offset by corresponding increases in the put option. At present, if we need to access the funds that are in an illiquid state, we may not be able to do so without the possible loss of principal until a future auction for these investments is successful, another secondary market evolves for these securities, they are redeemed by the issuer or they mature. If we are unable to sell these securities in the market or they are not redeemed, we could be required to hold them to maturity. We will continue to monitor and evaluate these investments for impairment on an ongoing basis.

Shelf Registration Statement. In November 2008, we filed a shelf registration statement with the SEC, which was declared effective in November 2008. The shelf registration statement allows us to issue shares of our common stock from time to time for an aggregate initial offering amount of up to \$100 million. The specific terms of offerings, if any, under the shelf registration statement would be established at the time of such offerings.

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

	Within One Year	One to Three Years	Three to Five Years	After Five Years	Total
	One Year	Three Years	Five rears	Five Years	Total
Operating leases (1)	\$ 3,011	\$ 5,481	\$ 2,876	\$ —	\$11,368
Equipment financing line	1,925	2,152	35	_	4,112
Loan with UBS (2)	_	12,355	_	_	12,355
Total	\$ 4,936	\$ 19,988	\$ 2,911	\$	\$27,835

(1) Our long-term commitments under operating leases relate to payments under our two facility leases in South San Francisco, California, which expire in 2011 and 2013.

(2) The loan with UBS is considered long-term given that UBS Financial Services Inc. or its affiliates will be required to arrange alternative financing upon demand of the note, except under certain circumstances. See Note 6 in the Notes to Unaudited Condensed Financial Statements for further details regarding the maturity date of the loan with UBS Bank USA.

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In future periods, we expect to incur substantial costs as we continue to expand our research programs and related research and development activities. We also plan to continue to conduct clinical development of our cardiac muscle myosin activator CK-1827452 for the potential treatment of heart failure, of ispinesib for the potential treatment of breast cancer and of SB-743921 for the potential treatment of Hodgkin and non-Hodgkin lymphoma. We plan to initiate a Phase I, first-in-humans clinical trial of our fast skeletal muscle troponin activator, CK-2017357, under an U.S. IND and to progress our smooth muscle myosin inhibitor through IND-enabling studies and clinical development. We expect to incur significant research and development expenses as we advance the research and development of our other muscle contractility programs through research to candidate selection.

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

- the initiation, progress, timing, scope and completion of preclinical research, development and clinical trials for our drug candidates and potential drug candidates;
- the time and costs involved in obtaining regulatory approvals;
- delays that may be caused by requirements of regulatory agencies;
- Amgen's decision with respect to its option for CK-1827452, and if Amgen exercises its option, Amgen's decisions with regard to funding of development and commercialization of CK-1827452 or other cardiac muscle myosin activators for the treatment of heart failure under our collaboration;
- GSK's decisions with regard to future funding of development of our drug GSK-923295;
- our level of funding for the development of current or future drug candidates;
- the number of drug candidates we pursue;
- the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims;
- our ability to establish and maintain selected strategic alliances required for the development and commercialization of our potential drugs;
- our plans or ability to expand our drug development capabilities, including our capabilities to conduct clinical trials for our drug candidates;
- our plans or ability to establish sales, marketing or manufacturing capabilities and to achieve market acceptance for potential drugs;
- the expansion and advancement of our research programs;
- the hiring of additional employees and consultants;
- the expansion of our facilities;
- the acquisition of technologies, products and other business opportunities that require financial commitments; and
- our revenues, if any, from successful development of our drug candidates and commercialization of potential drugs.

We believe that our existing cash and cash equivalents, short-term investments, interest earned on investments, proceeds from our loan with UBS Bank USA, and proceeds already received from the 2007 Kingsbridge committed equity financing facility will be sufficient to meet our projected operating requirements for at least the next 12 months.

While Amgen may choose to exercise its option for an exclusive license to develop and commercialize CK-1827452, there is no certainty this will occur.

If, at any time, our prospects for internally financing our research and development programs decline, we may decide to reduce research and development expenses by delaying, discontinuing or reducing our funding of development of one or more of our drug candidates or potential drug candidates or of other research and development programs. Alternatively, we might raise funds through

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public or private financings, strategic relationships or other arrangements. There can be no assurance that funding, if needed, will be available on attractive terms, or at all. Furthermore, any additional equity financing may be dilutive to stockholders and debt financing, if available, may involve restrictive covenants. Similarly, financing obtained through future strategic alliances may require us to forego certain commercialization and other rights to our drug candidates. Our failure to raise capital as and when needed could have a negative impact on our financial condition and our ability to pursue our business strategy.

Off-balance Sheet Arrangements

As of March 31, 2009, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. In addition, we do not engage in trading activities involving non-exchange traded contracts. Therefore, we are not materially exposed to financing, liquidity, market or credit risk that could arise if we had engaged in these relationships. We do not have relationships or transactions with persons or entities that derive benefits from their non-independent relationship with us or our related parties.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our exposure to market risk has not changed materially subsequent to our disclosures in Item 7A, "Quantitative and Qualitative Disclosures About Market Risk" in our Annual Report on Form 10-K for the year ended December 31, 2008.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of disclosure controls and procedures

Our management evaluated, with the participation and under the supervision of our Chief Executive Officer and our Chief Financial Officer, the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded, subject to the limitations described below, that our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosures.

(b) Changes in internal control over financial reporting

There was no change in our internal control over financial reporting that occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

(c) Limitations on the Effectiveness of Controls

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the controls are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

None.

ITEM 1A. RISK FACTORS

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

Risks Related To Our Business

We will need substantial additional capital in the future to sufficiently fund our operations.

We have consumed substantial amounts of capital to date, and our operating expenditures will increase over the next several years if we expand our research and development activities We have funded all of our operations and capital expenditures with proceeds from private and public sales of our equity securities, strategic alliances with GSK, Amgen and others, equipment financings, interest on investments and government grants. We believe that our existing cash and cash equivalents, short-term investments, interest earned on investments, proceeds from our loan with UBS Bank USA and proceeds already received from our 2007 committed equity financing facility with Kingsbridge should be sufficient to meet our projected operating requirements for at least the next 12 months. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with the development of our drug candidates and other research and development activities, including risks and uncertainties that could impact the rate of progress of our development activities, we are unable to estimate with certainty the amounts of capital outlays and operating expenditures associated with these activities.

For the foreseeable future, our operations will require significant additional funding, in large part due to our research and development expenses and the absence of any revenues from product sales. Until we can generate a sufficient amount of product revenue, we expect to raise future capital through public or private equity offerings, debt financings and strategic alliance and licensing arrangements. We do not currently have any commitments for future funding other than milestone and royalty payments that we may receive under our collaboration and license agreement with GSK and, if Amgen exercises its option with respect to CK-1827452, option fees and milestone and royalty payments that we may receive under our collaboration and option agreement with Amgen. We may not receive any further funds under either of these agreements. Our ability to raise funds may be adversely impacted by current economic conditions, including the effects of the recent disruptions to the credit and financial markets in the United States and worldwide. In particular, the pool of third-party capital that in the past has been available to development-stage companies such as ours has decreased significantly in recent months, and such decreased availability may continue for a prolonged period. As a result of these and other factors, we do not know whether additional financing will be available when needed, or that, if available, such financing would be on terms favorable to our stockholders or us.

To the extent that we raise additional funds by issuing equity securities, our stockholders will experience additional dilution. To the extent that we raise additional funds through strategic alliance and licensing arrangements, we will likely have to relinquish valuable rights to our technologies, research programs or drug candidates, or grant licenses on terms that may not be favorable to us. To the extent that we raise additional funds through debt financing, the financing may involve covenants that restrict our business activities. In addition, such funding, if needed, may not be available to us on favorable terms, or at all.

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

We have a history of significant losses and may not achieve or sustain profitability and, as a result, you may lose all or part of your investment.

We have incurred operating losses in each year since our inception in 1997 due to costs incurred in connection with our research and development activities and general and administrative costs associated with our operations. Our drug candidates are in the early stages of clinical testing, and we must conduct significant additional clinical trials before we can seek the regulatory approvals necessary to begin commercial sales of our drugs. We expect to incur increasing losses for at least several more years, as we continue our research activities and conduct development of, and seek regulatory approvals for, our drug candidates, and commercialize any approved drugs. If our drug candidates fail or are significantly delayed in clinical trials or do not gain regulatory approval, or if our drugs do not achieve market acceptance, we will not be profitable. If we fail to become and remain profitable, or if we are unable to fund our continuing losses, you could lose all or part of your investment.

If Amgen does not exercise its option for CK-1827452, we will have to reduce, delay or discontinue our development of CK-1827452 or increase our expenditures.

Our collaboration and option agreement with Amgen grants it an option to obtain an exclusive license for the development and commercialization rights for CK-1827452 world-wide, except Japan. Amgen's option is exercisable during a defined period, the ending of which is dependent upon the satisfaction of certain conditions, primarily the delivery of certain Phase I and Phase IIa

clinical trials data for CK-1827452 in accordance with an agreed development plan, the results of which reasonably support its progression into Phase IIb clinical development. We believe we have completed delivery of this data to Amgen, which can exercise its option by paying us a specified option fee within the pre-defined option exercise period.

Amgen may elect not to exercise its option, irrespective of the data that we have provided, may dispute whether we have provided sufficient information and data to require it to decide whether to exercise its option, or may seek to require us to conduct additional clinical trial activities prior to deciding whether to exercise its option. If Amgen elects not to exercise its option for CK-1827452, we would have to seek an alternative strategic partner for the CK-1827452 development program. However, we may not be able to negotiate and enter into such a strategic alliance on acceptable terms, if at all. Without a strategic partner, we would have to limit the size or scope of, or delay or discontinue, development of CK-1827452 or undertake and fund that development ourselves. If we elect to continue to conduct development on our own, we will need to obtain additional capital, which may not be available to us on acceptable terms or at all. Further, a decision by Amgen not to exercise its option could negatively affect our stock price.

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

We currently have no drugs for sale and we cannot guarantee that we will ever develop or obtain approval to market any drugs. To receive marketing approval for any drug candidate, we must demonstrate that the drug candidate satisfies rigorous standards of safety and efficacy to the FDA in the United States and other regulatory authorities abroad. We and our partners will need to conduct significant additional research and preclinical and clinical testing before we or our partners can file applications with the FDA or other regulatory authorities for approval of any of our drug candidates. In addition, to compete effectively, our drugs must be easy to use, cost-effective and economical to manufacture on a commercial scale, compared to other therapies available for the treatment of the same conditions. We may not achieve any of these objectives. CK-1827452, our drug candidate for the potential treatment of heart failure, and ispinesib, SB-743921 and GSK-923295, our drug candidates for the potential treatment of cancer, are currently our only drug candidates in clinical trials. We cannot be certain that the clinical development of these or any future drug candidate will be successful, that they will receive the regulatory approvals required to commercialize them, or that any of our other research programs will yield a drug candidate suitable for several years, if at all. The development of any one or all of these drug candidates may be discontinued at any stage of our clinical trials programs and we may not generate revenue from any of these drug candidates.

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

Prior to receiving approval to commercialize any of our drug candidates, we must adequately demonstrate to the FDA and foreign regulatory authorities that the drug candidate is sufficiently safe and effective with substantial evidence from well-controlled clinical trials. In clinical trials we will need to demonstrate efficacy for the treatment of specific indications and monitor safety throughout the clinical development process and possibly following approval. None of our drug candidates have yet been demonstrated to be safe and effective in clinical trials and they may never be. In addition, for each of our current preclinical compounds, we must adequately demonstrate satisfactory chemistry, formulation, stability and toxicity in order to submit an IND to the FDA, or an equivalent application in foreign jurisdictions, that would allow us to advance that compound into clinical trials. If our current or future preclinical studies or clinical trials are unsuccessful, our business will be significantly harmed and our stock price could be negatively affected.

All of our drug candidates are prone to the risks of failure inherent in drug development. Preclinical studies may not yield results that would adequately support the filing of an IND (or a foreign equivalent) with respect to our potential drug candidates. Even if these applications are or have been filed with respect to our drug candidates, the results of preclinical studies do not necessarily predict the results of clinical trials. For example, although preclinical testing indicated that ispinesib causes tumor regression in a variety of tumor types, to date, Phase II clinical trials of ispinesib have not shown clinical activity in all of these tumor types. Similarly, for any of our drug candidates, the results from Phase I clinical trials in healthy volunteers and clinical results from Phase I and II trials in patients are not necessarily indicative of the results of larger Phase III clinical trials that are necessary to establish whether the drug candidate is safe and effective for the applicable indication.

In addition, while the clinical trials of our drug candidates are designed based on the available relevant information, in view of the uncertainties inherent in drug development, such clinical trials may not be designed with focus on indications, tumor types, patient populations, dosing regimens, safety or efficacy parameters or other variables that will provide the necessary safety or efficacy data to support regulatory approval to commercialize the resulting drugs. For example, in a number of two-stage Phase II clinical trials designed to evaluate the safety and efficacy of ispinesib as monotherapy in the first- or second-line treatment of patients with different

forms of cancer, ispinesib did not satisfy the criteria for advancement to Stage 2. Also, the methods we select to assess particular safety or efficacy parameters may not yield the same statistical precision in estimating our drug candidates' effects as may other alternative methodologies. Even if we believe the data collected from clinical trials of our drug candidates are promising, these data may not be sufficient to support approval by the FDA or foreign regulatory authorities. Preclinical and clinical data can be interpreted in different ways. Accordingly, the FDA or foreign regulatory authorities could interpret these data in different ways than we or our partners do, which could delay, limit or prevent regulatory approval.

Administering any of our drug candidates or potential drug candidates may produce undesirable side effects, also known as adverse effects. Toxicities and adverse effects observed in preclinical studies for some compounds in a particular research and development program may also occur in preclinical studies or clinical trials of other compounds from the same program. Potential toxicity issues may arise from the effects of the active pharmaceutical ingredient itself or from impurities or degradants that are present in the active pharmaceutical ingredient or could form over time in the formulated drug candidate or the active pharmaceutical ingredient. These toxicities or adverse effects could delay or prevent the filing of an IND (or a foreign equivalent) with respect to our drug candidates or potential drug candidates or cause us to cease clinical trials with respect to any drug candidate. If these or other adverse effects are severe or frequent enough to outweigh the potential efficacy of a drug candidate, the FDA or other regulatory authorities could deny approval of that drug candidates at any time. Even if one or more of our drug candidates were approved for sale as drugs, the occurrence of even a limited number of toxicities or adverse effects when used in large populations may cause the FDA to impose restrictions on, or stop, the further marketing of those drugs. Indications of potential adverse effects or toxicities which do not seem significant during the course of clinical trials may later turn out to actually constitute serious adverse effects or toxicities when a drug is used in large populations or for extended periods of time.

We have observed certain adverse effects in the clinical trials conducted with our drug candidates. For example, in clinical trials of CK-1827452, intolerable doses were associated with complaints of chest discomfort, palpitations, dizziness and feeling hot, increases in heart rate, declines in blood pressure, electrocardiographic changes consistent with acute myocardial ischemia and transient rises in the MB fraction of creatine kinase and cardiac troponins I and T, which are indicative of myocardial infarction. In clinical trials of ispinesib, the most commonly observed dose-limiting toxicity was neutropenia, a decrease in the number of a certain type of white blood cell that results in an increase in susceptibility to infection. In a Phase I clinical trial of SB-743921, the dose-limiting toxicities observed were: prolonged neutropenia, with or without fever and with or without infection; elevated transaminases and hyperbilirubinemia, both of which are abnormalities of liver function; and hyponatremia, which is a low concentration of sodium in the blood.

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

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

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

- delays in obtaining, or inability to obtain, regulatory or other approvals to commence and conduct clinical trials in the manner we or our partners deem necessary for the appropriate and timely development of our drug candidates and commercialization of any resulting drugs;
- delays in identifying and reaching agreement, or inability to identify and reach agreement, on acceptable terms, with prospective clinical trial sites;
- delays or additional costs in developing, or inability to develop, appropriate formulations of our drug candidates for clinical trial use, including an
 appropriate modified release formulation for CK-1827452;
- slower than expected rates of patient recruitment and enrollment, including as a result of competition for patients with other clinical trials; limited
 numbers of patients that meet the enrollment criteria; patients', investigators' or trial sites' reluctance to agree to the requirements of a protocol; or the
 introduction of alternative therapies or drugs by others;

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- for those drug candidates that are the subject of a strategic alliance, delays in reaching agreement with our partner as to appropriate development strategies;
- an investigational review board ("IRB") or its foreign equivalent may require changes to a protocol that then require approval from regulatory agencies and other IRBs and their foreign equivalents, or regulatory authorities may require changes to a protocol that then require approval from the IRBs or their foreign equivalents;
- for clinical trials conducted in foreign countries, the time and resources required to identify, interpret and comply with foreign regulatory requirements or changes in those requirements, and political instability or natural disasters occurring in those countries;
- lack of effectiveness of our drug candidates during clinical trials;
- unforeseen safety issues;
- inadequate supply of clinical trial materials;
- uncertain dosing issues;
- introduction of new therapies or changes in standards of practice or regulatory guidance that render our clinical trial endpoints or the targeting of our proposed indications obsolete;
- failure by us, our clinical research organizations, investigators or site personnel to comply with good clinical practices and other applicable laws and regulations;
- inability to monitor patients adequately during or after treatment; and
- inability or unwillingness of investigators or their staffs to follow our clinical protocols.

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

We have limited capacity to carry out our own clinical trials in connection with the development of our drug candidates and, to the extent we elect to develop a drug candidate without a strategic partner, we will need to expand our development capabilities and will require additional funding.

The development of drug candidates is complicated and expensive, and we currently have limited financial and operational resources to carry out drug development. In order to expand our capability to conduct clinical development we will need to bring additional skills, technical expertise and resources into our organization, which will require significant additional funding.

Pursuant to our collaboration and option agreement with Amgen, we are responsible for conducting Phase IIa clinical development for our drug candidate CK-1827452. We cannot engage another strategic partner for CK-1827452, except in Japan, until Amgen elects not to exercise its option to conduct later-stage clinical development for CK-1827452 or its option expires, whichever occurs earlier. We intend to initiate a Phase IIb clinical trial for CK-1827452 regardless of whether Amgen exercises its option, which will require significant operational and financial resources.

We have retained all rights to develop and commercialize ispinesib and SB-743921. We currently do not have a strategic partner for these drug candidates. Currently, we are conducting the Phase I portion of a Phase I/II clinical trial for each of ispinesib in breast cancer and SB-743921 in Hodgkin and non-Hodgkin lymphoma. We intend to complete the Phase I portion of each of these clinical trials. We rely on GSK to conduct preclinical and clinical development for GSK-923295 in cancer. If GSK elects to terminate its development activities with respect to GSK-923295, we currently do not have an alternative strategic partner for this drug candidate.

We intend to seek strategic partners or other third party sources of funding for the future development and commercialization of ispinesib and SB-743921, for CK-1827452 if Amgen does not exercise its option and for GSK-923295 should GSK terminate its



development activities. We may be unable to enter into an agreement with a third party that would provide sufficient operational support and funding for the further clinical development of these drug candidates on acceptable terms, or at all. In that case, we would have to curtail or abandon development of one or more of these drug candidates.

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

Our strategy for developing, manufacturing and commercializing our drug candidates and potential drug candidates currently requires us to enter into and successfully maintain strategic alliances with pharmaceutical companies or other industry participants to advance our programs and reduce our expenditures on each program. We currently have strategic alliances with Amgen relating to CK-1827452 and with GSK relating to GSK-923295. Similarly, we expect to rely on one or more strategic partners to advance and develop each of ispinesib, SB-743921, CK-2017357 and our potential drug candidate directed towards smooth muscle contractility. However, we may not be able to negotiate and enter into such strategic alliances on acceptable terms, if at all. If we are not able to maintain our existing strategic alliances or establish and maintain additional strategic alliances, we will have to limit the size or scope of, or delay or discontinue, one or more of our drug development programs or research programs, or undertake and fund these programs ourselves. If we elect to continue to conduct any of these drug development programs or research programs on our own, we will need to obtain significant additional capital, which may not be available to us on acceptable terms or at all.

We depend on GSK for the conduct, completion and funding of the clinical development and commercialization of GSK-923295.

Under our strategic alliance, GSK is responsible for the clinical development and obtaining and maintaining regulatory approval of our drug candidate GSK-923295 for cancer and other indications. GSK is responsible for filing applications with the FDA or other regulatory authorities for approval of GSK-923295 and will be the owner of any marketing approvals issued by the FDA or other regulatory authorities for GSK-923295. If the FDA or other regulatory authorities approve GSK-923295, GSK will also be responsible for the marketing and sale of the resulting drug, subject to our right to co-promote GSK-923295 in North America if we exercise our option to co-fund certain later-stage development activities for GSK-923295. However, even if we do exercise our option to co-fund the development of GSK-923295, we cannot control whether GSK will devote sufficient attention and resources to the clinical trials program for GSK-923295 or will proceed in an expeditious manner. Even if the FDA or other regulatory agencies approve GSK-923295, GSK may elect not to proceed with the commercialization of the resulting drug. GSK generally has discretion to elect whether to pursue or abandon the development of GSK-923295 and may terminate our strategic alliance for any reason upon six months prior notice. These decisions are outside our control. We do not control the clinical trials, the analysis of data arising out of those clinical trials or the timing of release of data concerning those clinical trials, which may impact our ability to report on GSK's results.

If the initial results of one or more of its early clinical trials do not meet GSK's expectations, GSK may elect to terminate further development of GSK-923295 or certain of the potential clinical trials for GSK-923295, even if the actual number of patients treated at that time is relatively small. If GSK abandons GSK-923295, it would result in a delay in or could prevent us from commercializing GSK-923295, and would delay and could prevent us from obtaining revenues for this drug candidate. Disputes may arise between us and GSK, which may delay or cause the termination of any GSK-923295 clinical trials, result in significant litigation or arbitration, or cause GSK to act in a manner that is not in our best interest. If development of GSK-923295 does not progress for these or any other reasons, we would not receive further milestone payments or royalties on product sales from GSK with respect to GSK-923295. If GSK abandons development of GSK-923295 prior to regulatory approval or if it elects not to proceed with commercialization of the resulting drug following regulatory approval, we would have to seek a new partner for clinical development of GSK-923295 or commercialization, or the resulting drug ourselves. If we seek a new partner but are unable to do so on acceptable terms, or at all, or do not have sufficient funds to conduct the development or commercialization of GSK-923295 ourselves, we would have to curtail or abandon that development or commercialization, which could harm our business.

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

Our ability to commercialize drugs that we develop with our partners and that generate royalties from product sales depends on our partners' abilities to assist us in establishing the safety and efficacy of our drug candidates, obtaining and maintaining regulatory approvals and achieving market acceptance of the drugs once commercialized. Our partners may elect to delay or terminate development of one or more drug candidates, independently develop drugs that could compete with ours or fail to commit sufficient

resources to the marketing and distribution of drugs developed through their strategic alliances with us. Our partners may not proceed with the development and commercialization of our drug candidates with the same degree of urgency as we would because of other priorities they face. In particular, we are relying on GSK to conduct clinical development of GSK-923295. GSK may modify its plans to conduct that clinical development or may not proceed diligently with that clinical development. In addition, if Amgen exercises its option with respect to CK-1827452, it will then control and be responsible for the clinical development of CK-1827452. We do not control the clinical development of GSK-923295 being conducted by GSK or that may be conducted in the future by GSK for GSK-923295 or by Amgen for CK-1827452, including the timing of initiation, termination or completion of clinical trials, the analysis of data arising out of those clinical trials or the timing of release of data concerning those clinical trials, which may impact our ability to report on their results. If our partners fail to perform diligently, our potential for revenue from drugs developed through our strategic alliances, if any, could be dramatically reduced.

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

We utilize contract research organizations ("CROs") for our clinical trials of CK-1827452, ispinesib and SB-743921 within and outside of the United States. We do not have operational control over many aspects of our CROs' activities, and cannot fully control the amount, timing or quality of resources that they devote to our programs. CROs may not assign as high a priority to our programs or pursue them as diligently as we would if we were undertaking these programs ourselves. The activities conducted by our CROs therefore may not be completed on schedule or in a satisfactory manner. CROs may also give higher priority to relationships with our competitors and potential competitors than to their relationships with us. Outside of the United States, we are particularly dependent on our CROs' expertise in communicating with clinical trial sites and regulatory authorities and regulatory filings comply with applicable local laws. Our CROs' failure to carry out development activities on our behalf according to our requirements and the FDA's or other regulatory agencies' standards and in accordance with applicable U.S. and foreign laws, or our failure to properly coordinate and manage these activities, could increase the cost of our operations and delay or prevent the development, approval and commercialization of our drug candidates or if our CROs fail to perform as agreed, the commercialization of our drug candidates will be delayed or prevented.

We have no manufacturing capacity and depend on our strategic partners and contract manufacturers to produce our clinical trial drug supplies for each of our drug candidates and potential drug candidates, and anticipate continued reliance on contract manufacturers for the development and commercialization of our potential drugs.

We do not currently operate manufacturing facilities for clinical or commercial production of our drug candidates or potential drug candidates. We have limited experience in drug formulation and manufacturing, and we lack the resources and the capabilities to manufacture any of our drug candidates or potential drug candidates on a clinical or commercial scale. As a result, we rely on GSK to conduct these activities for the ongoing clinical development of GSK-923295. For CK-1827452, ispinesib, SB-743921 and our other drug candidates and potential drug candidates, we rely on a limited number of contract manufacturers, and, in particular, we rely on single-source contract manufacturers for the active pharmaceutical ingredient and the drug product supply for our clinical trials. We expect to rely on contract manufacturers to supply all future drug candidates for which we conduct clinical development. If any of our existing or future contract manufacturers fail to perform satisfactorily, it could delay clinical development or regulatory approval of our drug candidates or commercialization of our drugs, producing additional losses and depriving us of potential product revenues. In addition, if a contract manufacturer fails to perform as agreed, our ability to collect damages may be contractually limited.

Our drug candidates and potential drug candidates require precise high-quality manufacturing. The failure to achieve and maintain high manufacturing standards, including failure to detect or control anticipated or unanticipated manufacturing errors or the frequent occurrence of such errors, could result in patient injury or death, discontinuance or delay of ongoing or planned clinical trials, delays or failures in product testing or delivery, cost overruns, product recalls or withdrawals and other problems that could seriously hurt our business. Contract drug manufacturers often encounter difficulties involving production yields, quality control and quality assurance and shortages of qualified personnel. These manufacturers are subject to stringent regulatory requirements, including the FDA's current good manufacturing practices regulations and similar foreign laws and standards. Each contract manufacturer must pass a pre-approval inspection before we can obtain marketing approval for any of our drug candidates and following approval will be subject to ongoing periodic unannounced inspections by the FDA, the U.S. Drug Enforcement Agency and other regulatory agencies, to ensure strict compliance with current good manufacturers comply fully with all applicable regulations, laws and standards. However, we do not have control over our contract manufacturers' compliance with these regulations, laws and standards. If one of our contract manufacturers fails to pass its pre-approval inspection or maintain ongoing compliance at any time, the production of our drug candidates could be interrupted, resulting in delays or discontinuance of our clinical trials, additional costs and

potentially lost revenues. In addition, failure of any third party manufacturers or us to comply with applicable regulations, including pre-or post-approval inspections and the current good manufacturing practice requirements of the FDA or other comparable regulatory agencies, could result in sanctions being imposed on us. These sanctions could include fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approval of our products, delay, suspension or withdrawal of approvals, license revocation, product seizures or recalls, operational restrictions and criminal prosecutions, any of which could significantly and adversely affect our business.

In addition, our existing and future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to successfully produce, store and distribute our drug candidates. If a natural disaster, business failure, strike or other difficulty occurs, we may be unable to replace these contract manufacturers in a timely or cost-effective manner and the production of our drug candidates would be interrupted, resulting in delays and additional costs.

Switching manufacturers or manufacturing sites may be difficult and time-consuming because the number of potential manufacturers is limited. In addition, before a drug from any replacement manufacturer or manufacturing site can be commercialized, the FDA and, in some cases, foreign regulatory agencies, must approve that site. These approvals would require regulatory testing and compliance inspections. A new manufacturer or manufacturing site also would have to be educated in, or develop substantially equivalent processes for, production of our drugs and drug candidates. It may be difficult or impossible to transfer certain elements of a manufacturing process to a new manufacturer or for us to find a replacement manufacturer on acceptable terms quickly, or at all, either of which would delay or prevent our ability to develop drug candidates and commercialize any resulting drugs.

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

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

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

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

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

We own, or hold exclusive licenses to, a number of U.S. and foreign patents and patent applications directed to our drug candidates and research technologies. Our success depends on our ability to obtain patent protection both in the United States and in other countries for our drug candidates, their methods of manufacture and use, and our technologies. Our ability to protect our drug candidates and technologies from unauthorized or infringing use by third parties depends substantially on our ability to obtain and



enforce our patents. If our issued patents and patent applications, if granted, do not adequately describe, enable or otherwise provide coverage of our technologies and drug candidates, including CK-1827452, ispinesib, SB-743921 and GSK-923295, we would not be able to exclude others from developing or commercializing these drug candidates. Furthermore, the degree of future protection of our proprietary rights is uncertain because legal means may not adequately protect our rights or permit us to gain or keep our competitive advantage.

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

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

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

Under our license agreement with the University of California and Stanford University, we have obtained an exclusive license to certain issued U.S. and European patents relating to certain of our research activities. If we fail to fulfill our obligations under this license agreement, including certain diligence obligations, this agreement may be terminated, in which case we would no longer have a license to these patents or to future patents that may issue from the pending applications. This may impair our ability to continue to practice the research methods covered by the issued patents, which could harm our business. Alternatively, our license rights may become non-exclusive, which would allow the University of California and Stanford University to grant third parties the right to practice those patents.

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

Changes in either the patent laws or their interpretation in the United States or other countries may diminish the value of our intellectual property or our ability to obtain patents. For example, the U.S. Congress is currently considering bills that could change U.S. law regarding, among other things, post-grant review of issued patents and the calculation of damages once patent infringement has been determined by a court of law. If enacted into law, these provisions could severely weaken patent protection in the United States. In addition, the U.S. Patent and Trademark Office adopted new rules that were to become effective on November 1, 2007, regarding processes for obtaining patents in the United States. Due to a legal challenge to the new rules, they have not yet become effective and it is not clear if and when they will go into effect. The new rules are numerous and complex and, if made effective, generally are expected to make it more difficult for patent applicants to obtain patents, especially with regard to pharmaceutical products and processes. If these rules changes become effective, they would likely make it more difficult for us and others to obtain patent protection in the United States.

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

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

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

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

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

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

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

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

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

- infringement and other intellectual property claims that, even if meritless, can be costly and time-consuming to litigate, delay the regulatory approval process and divert management's attention from our core business operations;
- substantial damages for past infringement which we may have to pay if a court determines that our drugs or technologies infringe a third party's
 patent or other proprietary rights;
- a court prohibiting us from selling or licensing our drugs or technologies unless the holder licenses the patent or other proprietary rights to us, which it is not required to do; and
- if a license is available from a holder, we may have to pay substantial royalties or grant cross-licenses to our patents or other proprietary rights.

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

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

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

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

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

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



We compete with companies that have developed drugs or are developing drug candidates for cardiovascular diseases, cancer and other diseases for which our drug candidates may be useful treatments. For example, if CK-1827452 is approved for marketing by the FDA for heart failure, that drug candidate would compete against other drugs used for the treatment of heart failure. These include generic drugs, such as milrinone, dobutamine or digoxin and newer marketed drugs such as nesiritide. CK-1827452 could also potentially compete against other novel drug candidates in development, such as levosimendan, which is marketed by Abbott Laboratories in a number of countries outside of the United States; istaroxamine, which is being developed by Debiopharm Group; rolofylline, which is being developed by Merck & Co. Inc.; bucindolol, which is being developed by ARCA biopharma, Inc.; BG9928, which is being developed by Biogen Idec Inc.; relaxin, which is being developed by Cothera Inc.; and CD-NP, which is being developed by Nile Therapeutics, Inc. In addition, there are a number of medical devices being developed for the potential treatment of heart failure.

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

Our competitors may:

- develop drug candidates and market drugs that are less expensive or more effective than our future drugs;
- commercialize competing drugs before we or our partners can launch any drugs developed from our drug candidates;
- hold or obtain proprietary rights that could prevent us from commercializing our products;
- initiate or withstand substantial price competition more successfully than we can;
- more successfully recruit skilled scientific workers and management from the limited pool of available talent;
- more effectively negotiate third-party licenses and strategic alliances;
- take advantage of acquisition or other opportunities more readily than we can;
- develop drug candidates and market drugs that increase the levels of safety or efficacy that our drug candidates will need to show in order to obtain regulatory approval; or
- introduce therapies or market drugs that render the market opportunity for our potential drugs obsolete.

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

- developing drug candidates;
- undertaking preclinical testing and clinical trials;
- building relationships with key customers and opinion-leading physicians;
- obtaining and maintaining FDA and other regulatory approvals of drug candidates;
- · formulating and manufacturing drugs; and
- launching, marketing and selling drugs.

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

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

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

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

We currently have no sales, marketing or distribution capabilities. We plan to commercialize drugs that can be effectively marketed and sold in concentrated markets that do not require a large sales force to be competitive. To achieve this goal, we will need to establish our own specialized sales force and marketing organization with technical expertise and supporting distribution capabilities. Developing such an organization is expensive and time-consuming and could delay a product launch. In addition, we may not be able to develop this capacity efficiently, cost-effectively or at all, which could make us unable to commercialize our drugs. If we determine not to market on our drugs on our own, we will depend on strategic alliances with third parties, such as GSK and Amgen, which have established distribution systems and direct sales forces to commercialize them. If we are unable to enter into such arrangements on acceptable terms, we may not be able to successfully commercialize these drugs. To the extent that we are not successful in commercializing any drugs ourselves or through a strategic alliance, our product revenues and business will suffer and our stock price would decrease.

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

Our business depends on the performance of our senior management and key scientific and technical personnel. The loss of the services of any member of our senior management or key scientific or technical staff may significantly delay or prevent the achievement of drug development and other business objectives by diverting management's attention to transition matters and identifying suitable replacements. We also rely on consultants and advisors to assist us in formulating our research and development strategy. All of our consultants and advisors are either self-employed or employed by other organizations, and they may have conflicts of interest or other commitments, such as consulting or advisory contracts with other organizations, that may affect their ability to contribute to us. In addition, if and as our business grows, we will need to recruit additional executive management and scientific and technical personnel. There is currently intense competition for skilled executives and employees with relevant scientific and technical expertise, and this competition is likely to continue. Our inability to attract and retain sufficient scientific, technical and managerial personnel could limit or delay our product development activities, which would adversely affect the development of our drug candidates and commercialization of our potential drugs and growth of our business.

Our workforce reductions in September 2008 and any future workforce and expense reductions may have an adverse impact on our internal programs and our ability to hire and retain skilled personnel.

In September 2008, we reduced our workforce by approximately 29% in order to reduce expenses and to focus on research activities in our muscle contractility programs and advancing drug candidates in our clinical pipeline. These headcount reductions and the cost control measures we have implemented may negatively affect our productivity and limit our research and development activities. For example, as part of this strategic restructuring, we have discontinued our early research activities in oncology. Our future success will depend in large part upon our ability to attract and retain highly skilled personnel. We may have difficulty retaining

and attracting such personnel as a result of a perceived risk of future workforce reductions. In light of our continued need for funding and cost control, we may be required to implement future workforce and expense reductions, which could further limit our research and development activities. In addition, the implementation of any additional workforce or expense reduction programs may divert the efforts of our management team and other key employees, which could adversely affect our business.

Risks Related To Our Industry

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

The research, testing, manufacturing, selling and marketing of drugs are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, which regulations differ from country to country. Neither we nor our partners are permitted to market our potential drugs in the United States until we receive approval of a new drug application ("NDA") from the FDA. Neither we nor our partners have received marketing approval for any of Cytokinetics' drug candidates.

Obtaining NDA approval is a lengthy, expensive and uncertain process. In addition, failure to comply with FDA and other applicable foreign and U.S. regulatory requirements may subject us to administrative or judicially imposed sanctions. These include warning letters, civil and criminal penalties, injunctions, product seizure or detention, product recalls, total or partial suspension of production, and refusal to approve pending NDAs or supplements to approved NDAs.

Regulatory approval of an NDA or NDA supplement is never guaranteed, and the approval process typically takes several years and is extremely expensive. The FDA and foreign regulatory agencies also have substantial discretion in the drug approval process. Despite the time and efforts exerted, failure can occur at any stage, and we could encounter problems that cause us to abandon clinical trials or to repeat or perform additional preclinical testing and clinical trials. The number and focus of preclinical studies and clinical trials that will be required for approval by the FDA and foreign regulatory agencies varies depending on the drug candidate, the disease or condition that the drug candidate is designed to address, and the regulations applicable to any particular drug candidate. The FDA and foreign regulatory agencies can delay, limit or deny approval of a drug candidate for many reasons, including, but not limited to:

- they might determine that a drug candidate is not safe or effective;
- they might not find the data from preclinical testing and clinical trials sufficient;
- 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, such as continued safety reporting requirements, and may also be subject to additional post-marketing obligations, all of which may result in significant expense and limit commercialization of our potential drugs.

Any regulatory approvals that we or our partners receive for our drug candidates may be subject to limitations on the indicated uses for which the drug may be marketed or require potentially costly post-marketing follow-up studies. In addition, if the FDA or foreign regulatory agencies approves any of our drug candidates, the labeling, packaging, adverse event reporting, storage, advertising, promotion and record-keeping for the drug will be subject to extensive regulatory requirements. The subsequent discovery of previously unknown problems with the drug, including adverse events of unanticipated severity or frequency, or the discovery that adverse effects or toxicities observed in preclinical research or clinical trials that were believed to be minor actually constitute much more serious problems, may result in restrictions on the marketing of the drug or withdrawal of the drug from the market.

The FDA and foreign regulatory agencies may change their policies and additional government regulations may be enacted that could prevent or delay regulatory approval of our drug candidates. We cannot predict the likelihood, nature or extent of adverse



government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are not able to maintain regulatory compliance, we might not be permitted to market our drugs and our business would suffer.

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

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

- introduction of competitive drugs to the market;
- clinical safety and efficacy of alternative drugs or treatments;
- cost-effectiveness;
- availability of coverage and reimbursement from health maintenance organizations and other third-party payors;
- convenience and ease of administration;
- prevalence and severity of adverse side effects;
- other potential disadvantages relative to alternative treatment methods; or
- insufficient marketing and distribution support.

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

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

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

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

The use of our drug candidates in clinical trials may result in adverse effects. We cannot predict all the possible harms or adverse effects that may result from our clinical trials. We currently maintain limited product liability insurance. We may not have sufficient resources to pay for any liabilities resulting from a personal injury or other claim excluded from, or beyond the limit of, our insurance coverage. Our insurance does not cover third parties' negligence or malpractice, and our clinical investigators and sites may have inadequate insurance or none at all. In 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. There is also a risk that third parties that we have agreed to indemnify could incur liability, or that third parties that have agreed to indemnify us do not fulfill their obligations. 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. If product recalls occur, they 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.

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 for the treatment of a wide array of diseases is costly. As a result, to the extent we elect to fund the development of a drug candidate or the commercialization of a drug, we will need to raise additional capital to:

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

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

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

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

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 use or the use by third parties 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 localized extended outages of critical utilities or transportation systems occurs, we could experience a significant business interruption. Our partners and other third parties on which we rely may also be subject to business interruptions from such events. In addition, California from time to time has experienced shortages of water, electric power and natural gas. Future shortages and conservation measures could disrupt our operations and cause expense, thus adversely affecting our business and financial results.

Risks Related To an Investment in Our Securities

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

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

- results from, delays in, or discontinuation of, any of the clinical trials for our drug candidates, such as CK-1827452 for heart failure, ispinesib for breast cancer, SB-743921 for Hodgkin and non-Hodgkin lymphoma and GSK-923295 for cancer, including delays resulting from slower than expected or suspended patient enrollment or discontinuations resulting from a failure to meet pre-defined clinical end-points;
- announcements concerning our strategic alliances with Amgen, GSK or future strategic alliances, including, but not limited to, announcements concerning Amgen's option relating to CK-1827452;
- announcements concerning clinical trials for our drug candidates;
- failure or delays in entering additional drug candidates into clinical trials;
- failure or discontinuation of any of our research programs;
- issuance of new or changed securities analysts' reports or recommendations;
- failure or delay in establishing new strategic alliances, or the terms of those alliances;
- market conditions in the pharmaceutical, biotechnology and other healthcare-related sectors;
- actual or anticipated fluctuations in our quarterly financial and operating results;
- developments or disputes concerning our intellectual property or other proprietary rights;
- introduction of technological innovations or new products by us or our competitors;
- issues in manufacturing our drug candidates or drugs;
- market acceptance of our drugs;
- third-party healthcare coverage and reimbursement policies;
- FDA or other U.S. or foreign regulatory actions affecting us or our industry;
- litigation or public concern about the safety of our drug candidates or drugs;
- additions or departures of key personnel; or
- volatility in the stock prices of other companies in our industry or in the stock market generally.

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

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

As of April 30, 2009, our executive officers, directors and their affiliates beneficially owned or controlled approximately 25.2% of the outstanding shares of our common stock (after giving effect to the exercise of all outstanding vested and unvested options and warrants). Accordingly, these executive officers, directors and their affiliates, acting as a group, will have substantial influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets or any other significant corporate transactions. These stockholders may also delay or prevent a change of control of us, even if such a change of control would benefit our other stockholders. The significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors' perception that conflicts of interest may exist or arise.

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

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

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

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

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

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new Securities and Exchange Commission ("SEC") regulations and NASDAQ Stock Market LLC rules are creating uncertainty for public companies. We are presently evaluating and monitoring developments with respect to new and proposed rules and cannot predict or estimate the amount of the additional costs we may incur or the timing of these costs. For example, compliance with the internal control requirements of Section 404 of the Sarbanes-Oxley Act has to date required the commitment of significant resources to document and test the adequacy of our internal control over financial reporting. Our assessment, testing and evaluation of the design and operating effectiveness of our internal control over financial reporting resulted in our conclusion that, as of December 31, 2008, our internal control over financial reporting was effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosures. However, we can provide no assurance as to conclusions of management or by our independent registered public accounting firm with respect to the effectiveness of our internal control over financial reporting in the future. In addition, the SEC has adopted regulations that will require us to file corporate financial statement information in a new interactive data format known as XBRL beginning in 2011. We will incur significant costs and need to invest considerable resources to implement and to remain in compliance with these new requirements.

These new or changed laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and



governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We are committed to maintaining high standards of corporate governance and public disclosure. As a result, we intend to invest the resources necessary to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies, due to ambiguities related to practice or otherwise, regulatory authorities may initiate legal proceedings against us, which could be costly and time-consuming, and our reputation and business may be harmed.

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

We have paid no cash dividends on any of our classes of capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our businesses. In addition, the terms of existing or any future debts may preclude us from paying these dividends.

Risks Related To Our Financing Vehicles and Investments

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

In October 2007, we entered into a committed equity financing facility with Kingsbridge. This committed equity financing facility entitles us to sell and obligates Kingsbridge to purchase, from time to time over a period of three years, shares of our common stock for cash consideration up to an aggregate of \$75.0 million, subject to certain conditions and restrictions. To date, we have received \$6.9 million in gross proceeds under this committed equity financing facility. We may sell a maximum of 9,779,411 shares under this committed equity financing facility. This is approximately the maximum number of shares we may sell to Kingsbridge without approval of our stockholders under the rules of the NASDAQ Stock Market LLC. This limitation may further limit the amount of proceeds we are able to obtain from this committed equity financing facility.

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

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

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

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



We hold interest-bearing student loan auction rate securities ("ARS") that represent investments in pools of assets. These ARS were intended to provide liquidity via an auction process that resets the applicable interest rate at predetermined calendar intervals, allowing investors to either roll over their holdings or gain immediate liquidity by selling such interests at par value. The recent uncertainties in the credit markets have affected all of our holdings in ARS and auctions for our investments in these securities have failed to settle on their respective settlement dates. Consequently, these investments are not currently liquid and we will not be able to access these funds until a future auction of these investments is successful, the issuer redeems the outstanding securities, the securities mature or a buyer is found outside of the auction process. Maturity dates for these ARS range from 2036 to 2045. To date, we have recorded \$2.7 million of unrealized loss in Statement of Operations related to the ARS that we hold in our investment portfolio. However, if the current market conditions deteriorate further, or the anticipated recovery in market values does not occur, we may be required to record additional unrealized losses due to further declines in value in future quarters. This could adversely impact our results of operations and financial condition. Furthermore, in light of auction failures associated with our ARS, we re-classified our ARS as long-term investments due to the uncertainty associated with the timing of our ability to access the funds underlying these investments. We have entered into a settlement agreement with UBS AG relating to the failed auctions of our ARS through which UBS AG and its affiliates may provide us with additional funds based on these ARS. However, if we are unable to access the funds underlying or secured by these investments in a timely manner, we may need to find alternate sources of funding for certain of our operations, which may not be available on favorable terms,

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

We have entered into a settlement agreement with UBS AG relating to the failed auctions of our ARS through which UBS AG and its affiliates may provide us with additional funds based on these ARS. In accepting the settlement offer, we agreed to give up certain rights and accept certain risks. Under this settlement, UBS AG has issued to us Series C-2 Auction Rate Securities Rights (the "ARS Rights"). The ARS Rights entitle us to require UBS AG to purchase our ARS, through UBS Securities LLC and UBS Financial Services Inc. (the "UBS Entities") as agents for UBS AG, from June 30, 2010 through July 2, 2012 at par value, i.e., at a price equal to the liquidation preference of the ARS plus accrued but unpaid interest, if any. In connection with the ARS Rights, we granted to the UBS Entities the right to sell or otherwise dispose of, and/or enter orders in the auction process with respect to, our ARS on our behalf at its discretion, so long as we receive a payment of par value upon any sale or disposition. The ARS Rights are not transferable, tradable or marginable, and will not be listed or quoted on any securities exchange or any electronic communications network. If our ARS are sold through the UBS Entities, we will cease to receive interest on these ARS. We may not be able to reinvest the cash proceeds of any sale of these ARS at the same interest rate currently being paid to us with respect to our ARS.

In connection with the settlement, we entered into a loan agreement with UBS Bank USA and UBS Financial Services Inc., and on January 5, 2009 borrowed approximately \$12.4 million under the loan agreement. We have drawn down the full amount available under the loan agreement. The borrowings under the loan agreement are payable upon demand, subject to UBS Financial Services' obligations to arrange alternative financing for us under certain circumstances.

While we entered into the settlement in expectation that UBS AG will fulfill its obligations in connection with the ARS Rights, UBS AG may not have sufficient financial resources to satisfy these obligations. The United States and worldwide financial markets have recently experienced unprecedented volatility, particularly in the financial services sector. UBS AG may not be able to maintain the financial resources necessary to satisfy its obligations with respect to the ARS Rights in a timely manner or at all. UBS AG's obligations in connection with the ARS Rights are not secured by UBS AG's assets or otherwise, nor guaranteed by any other entity. UBS AG is not required to obtain any financing to support its obligations. If UBS AG is a Swiss bank and all or a substantial portion of its assets are located outside the United States. As a result, it may be difficult for us to serve legal process on UBS AG or its management or cause any of them to appear in a U.S. court. Judgments based solely on U.S. securities laws may not be enforceable in Switzerland. As a result, if UBS AG fails to fulfill its obligations, we may not be able to effectively seek recourse against it.

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

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The following table summarizes stock repurchase activity for the quarter ended March 31, 2009:

	Total Number of Shares		Total Number of Shares Purchased as Part of Publicly Announced Plans or	Maximum Number of Shares That May Yet Be Purchased Under the Plans
Period	Repurchased	Share	Programs	or Programs
January 1 to January 31, 2009	2,880	\$ —		_
February 1 to February 28, 2009	—			_
March 1 to March 31, 2009				
Total	2,880	\$		

The shares repurchased were unvested restricted stocks that we repurchased from employees upon termination of employment. As of March 31, 2009, 393,580 shares of common stock held by employees were subject to repurchase by us.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

None.

ITEM 5. OTHER INFORMATION

In May 2009, the Board of Directors of the Company appointed Board member John T. Henderson as a member of the Audit Committee, replacing Michael Schmertzler, and as a member of the Nominating and Governance Committee.

ITEM 6. EXHIBITS

Exhibit Number		Exhibit Description
3.1	(1)	Amended and Restated Certificate of Incorporation.
3.2	(1)	Amended and Restated Bylaws.
4.1	(2)	Specimen Common Stock Certificate.
4.2	(1)	Fourth Amended and Restated Investors Rights Agreement, dated March 21, 2003, by and among the Company and certain stockholders of the Registrant.
4.3	(1)	Master Security Agreement, dated February 2, 2001, by and between the Company and General Electric Capital Corporation.
4.4	(1)	Cross-Collateral and Cross-Default Agreement by and between the Company and General Electric Capital Corporation.
4.5	(3)	Warrant for the purchase of shares of common stock, dated October 28, 2005, issued by the Company to Kingsbridge Capital Limited.
4.6	(3)	Registration Rights Agreement, dated October 28, 2005, by and between the Company and Kingsbridge Capital Limited.
4.7	(4)	Registration Rights Agreement, dated as of December 29, 2006, by and between the Company and Amgen Inc.
4.8	(5)	Warrant for the purchase of shares of common stock, dated October 15, 2007, issued by the Company to Kingsbridge Capital Limited.
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Exhibit Number		Exhibit Description
4.9	(5)	Registration Rights Agreement, dated October 15, 2007, by and between the Company and Kingsbridge Capital Limited.
*10.67	(6)	Amendment No. 4, dated February 20, 2009, to the Collaboration and Option Agreement by and between the Company and Amgen Inc.
31.1		Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2		Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1		Certifications of the Chief Executive Officer and the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350).

 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 Quarterly Report on Form 10-Q, filed with the Security and Exchange Commission on May 9, 2007.

(3) Incorporated by reference from our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 20, 2006.

(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 October 15, 2007.

(6) Incorporated by reference from our Annual Report on Form 10-K, filed with the Security and Exchange Commission on March 12, 2009.

* Pursuant to a request for confidential treatment, portions of this Exhibit have been redacted from the publicly filed document and have been furnished separately to the Securities and Exchange Commission as required by Rule 406 under the Securities Act of 1933 or Rule 24b-2 under the Securities Exchange Act of 1934, as applicable.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: May 7, 2009

CYTOKINETICS, INCORPORATED (Registrant)

/s/ Robert I. Blum Robert I. Blum President and Chief Executive Officer (Principal Executive Officer)

/s/ Sharon A. Barbari

Sharon A. Barbari Senior Vice President, Finance and Chief Financial Officer (Principal Financial Officer)

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* Pursuant to a request for confidential treatment, portions of this Exhibit have been redacted from the publicly filed document and have been furnished separately to the Securities and Exchange Commission as required by Rule 406 under the Securities Act of 1933 or Rule 24b-2 under the Securities Exchange Act of 1934, as applicable.

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 (a) OF THE SARBANES-OXLEY ACT OF 2002

I, Robert I. Blum, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Cytokinetics, Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements and other financial information included in this report fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in the Exchange Act Rules 13a(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting that are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: May 7, 2009

By: /s/ Robert I. Blum

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

CERTIFICATION OF THE CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 (a) OF THE SARBANES-OXLEY ACT OF 2002

I, Sharon A. Barbari, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Cytokinetics, Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements and other financial information included in this report fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in the Exchange Act Rules 13a(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting that are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: May 7, 2009

By: /s/ Sharon A. Barbari

Sharon A. Barbari Senior Vice President, Finance and Chief Financial Officer (Principal Financial Officer)

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO 18. U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Cytokinetics, Incorporated on Form 10-Q for the quarterly period ended March 31, 2009 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-Q fairly presents in all material respects the financial condition and results of operations of Cytokinetics, Incorporated.

Dated: May 7, 2009

/s/ Robert I. Blum Robert I. Blum President and Chief Executive Officer (Principal Executive Officer)

/s/ Sharon A. Barbari

Sharon A. Barbari Senior Vice President, Finance and Chief Financial Officer (Principal Financial Officer)