

---

---

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, 2008

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  No

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

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

Number of shares of common stock, \$0.001 par value, outstanding as of April 30, 2008: 49,301,300

---

---

**CYTOKINETICS, INCORPORATED**  
**TABLE OF CONTENTS FOR FORM 10-Q**  
**FOR THE QUARTER ENDED MARCH 31, 2008**

	<u>Page</u>
<u>PART I. FINANCIAL INFORMATION</u>	3
<u>Item 1. Financial Statements</u>	3
<u>Unaudited Condensed Balance Sheets as of March 31, 2008 and December 31, 2007</u>	3
<u>Unaudited Condensed Statements of Operations for the three months ended March 31, 2008 and 2007, and the period from August 5, 1997 (date of inception) to March 31, 2008</u>	4
<u>Unaudited Condensed Statements of Cash Flows for the three months ended March 31, 2008 and 2007, and the period from August 5, 1997 (date of inception) to March 31, 2008</u>	5
<u>Notes to Unaudited Condensed Financial Statements</u>	6
<u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	14
<u>Item 3. Quantitative and Qualitative Disclosures About Market Risk</u>	31
<u>Item 4. Controls and Procedures</u>	31
<u>PART II. OTHER INFORMATION</u>	31
<u>Item 1. Legal Proceedings</u>	31
<u>Item 1A. Risk Factors</u>	32
<u>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</u>	49
<u>Item 3. Defaults Upon Senior Securities</u>	50
<u>Item 4. Submission of Matters to a Vote of Security Holders</u>	50
<u>Item 5. Other Information</u>	50
<u>Item 6. Exhibits</u>	50
<u>SIGNATURES</u>	52
<u>EXHIBIT INDEX</u>	53
<u>EXHIBIT 31.1</u>	
<u>EXHIBIT 31.2</u>	
<u>EXHIBIT 32.1</u>	

[Table of Contents](#)

## 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)

	<u>March 31,</u> <u>2008</u>	<u>December 31,</u> <u>2007 (1)</u>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 105,540	\$ 116,564
Short-term investments	—	3,175
Related party accounts receivable	58	87
Related party notes receivable — short-term portion	177	127
Prepaid and other current assets	1,735	2,063
Total current assets	107,510	122,016
Long-term investments	19,082	20,025
Property and equipment, net	7,201	7,728
Related party notes receivable — long-term portion	49	99
Restricted cash	4,147	5,167
Other assets	349	335
Total assets	<u>\$ 138,338</u>	<u>\$ 155,370</u>
<b>LIABILITIES and STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 2,306	\$ 1,584
Accrued liabilities	8,190	8,558
Related party payables and accrued liabilities	22	22
Short-term portion of equipment financing lines	3,542	4,050
Short-term portion of deferred revenue	12,234	12,234
Total current liabilities	26,294	26,448
Long-term portion of equipment financing lines	4,112	4,639
Long-term portion of deferred revenue	21,308	24,367
Total liabilities	<u>51,714</u>	<u>55,454</u>
Stockholders' equity:		
Common stock, \$0.001 par value: Authorized: 120,000,000 shares; Issued and outstanding: 49,301,300 shares in 2008 and 49,282,362 shares in 2007	49	49
Additional paid-in capital	381,137	379,730
Deferred stock-based compensation	(187)	(329)
Accumulated other comprehensive loss	(948)	(1)
Deficit accumulated during the development stage	(293,427)	(279,533)
Total stockholders' equity	<u>86,624</u>	<u>99,916</u>
Total liabilities and stockholders' equity	<u>\$ 138,338</u>	<u>\$ 155,370</u>

- (1) The condensed balance sheet at December 31, 2007 has been derived from the audited financial statements at that date but does not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete financial statements.

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)

	<u>Three Months Ended</u>		<u>Period from</u>
	<u>March 31,</u>	<u>March 31,</u>	<u>August 5, 1997</u>
	<u>2008</u>	<u>2007</u>	<u>(date of inception)</u>
			<u>to March 31,</u>
			<u>2008</u>
Revenues:			
Research and development revenues from related party	\$ 11	\$ 147	\$ 40,264
Research and development, grant and other revenues	—	—	2,955
License revenues from related parties	3,058	3,058	29,393
Total revenues	<u>3,069</u>	<u>3,205</u>	<u>72,612</u>
Operating expenses:			
Research and development (1)	14,102	12,486	297,590
General and administrative (1)	4,157	4,483	89,617
Total operating expenses	<u>18,259</u>	<u>16,969</u>	<u>387,207</u>
Operating loss	(15,190)	(13,764)	(314,595)
Interest and other income	1,440	2,241	26,183
Interest and other expense	(145)	(169)	(5,015)
Net loss	<u><u>\$ (13,895)</u></u>	<u><u>\$ (11,692)</u></u>	<u><u>\$ (293,427)</u></u>
Net loss per common share — basic and diluted	\$ (0.28)	\$ (0.25)	
Weighted-average number of shares used in computing net loss per common share — basic and diluted	49,294	46,761	
(1) Includes the following stock-based compensation charges:			
Research and development	\$ 865	\$ 644	\$ 9,177
General and administrative	662	516	7,097

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)

	<b>Three Months Ended</b>		<b>Period from</b>
	<b>March 31,</b>	<b>March 31,</b>	<b>August 5, 1997</b>
	<b>2008</b>	<b>2007</b>	<b>(date of inception)</b>
			<b>to March 31,</b>
			<b>2008</b>
<b>Cash flows from operating activities:</b>			
Net loss	\$ (13,895)	\$(11,692)	\$ (293,427)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation and amortization of property and equipment	639	755	21,628
Loss on disposal of property and equipment	—	3	348
Gain on sale of investments	—	—	(84)
Allowance for doubtful accounts	—	—	191
Non-cash expense related to warrants issued for equipment financing lines and facility lease	—	—	41
Non-cash interest expense	23	23	450
Non-cash forgiveness of loan to officer	—	—	364
Stock-based compensation	1,527	1,160	16,274
Other non-cash expenses	—	—	27
Changes in operating assets and liabilities:			
Related party accounts receivable	29	41,938	(398)
Prepaid and other assets	291	121	(2,060)
Accounts payable	970	(490)	2,364
Accrued liabilities	(348)	(916)	8,174
Related party payables and accrued liabilities	—	(49)	22
Deferred revenue	(3,058)	3,876	33,542
Net cash provided by (used in) operating activities	<u>(13,822)</u>	<u>34,729</u>	<u>(212,544)</u>
<b>Cash flows from investing activities:</b>			
Purchases of investments	(9,400)	(26,400)	(654,303)
Proceeds from sales and maturities of investments	12,571	31,077	634,357
Purchases of property and equipment	(379)	(1,655)	(29,270)
Proceeds from sale of property and equipment	—	—	50
(Increase) decrease in restricted cash	1,020	(91)	(4,147)
Issuance of related party notes receivable	—	—	(1,146)
Proceeds from payments of related party notes receivable	—	—	699
Net cash provided by (used in) investing activities	<u>3,812</u>	<u>2,931</u>	<u>(53,760)</u>
<b>Cash flows from financing activities:</b>			
Proceeds from initial public offering, sale of common stock to related party and public offerings, net of issuance costs	—	26,002	193,934
Proceeds from draw down of Committed Equity Financing Facility, net of issuance costs	—	—	32,046
Proceeds from other issuances of common stock	22	141	5,580
Proceeds from issuance of preferred stock, net of issuance costs	—	—	133,172
Repurchase of common stock	—	—	(68)
Proceeds from equipment financing lines	—	1,743	23,696
Repayment of equipment financing lines	(1,036)	(885)	(16,516)
Net cash provided by (used in) financing activities	<u>(1,014)</u>	<u>27,001</u>	<u>371,844</u>
Net increase (decrease) in cash and cash equivalents	(11,024)	64,661	105,540
Cash and cash equivalents, beginning of period	116,564	39,387	—
Cash and cash equivalents, end of period	<u>\$ 105,540</u>	<u>\$ 104,048</u>	<u>\$ 105,540</u>

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 focused on developing small molecule therapeutics for the treatment of cardiovascular disease, cancer and other diseases. The Company is a development stage enterprise and has been primarily engaged in conducting research, developing drug candidates and technologies, and raising capital.

The Company 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.

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.”

Until it achieves profitable operations, the Company intends to continue to fund operations through the additional sale of equity securities, payments from strategic collaborations, government grant awards and debt financing.

**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, 2007 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, 2007.

**Comprehensive Income (Loss)**

Comprehensive loss consists of the net loss and other comprehensive income (loss). Other comprehensive income (loss) (“OCI”) includes certain changes in stockholder’s equity that are excluded from net loss. Comprehensive loss and its components for the three-month periods ended March 31, 2008 and 2007 are as follows (in thousands):

	<b>Three Months Ended</b>	
	<b>March 31, 2008</b>	<b>March 31, 2007</b>
Net loss	\$ (13,895)	\$ (11,692)
Change in unrealized gain (loss) on investments	(947)	21
Comprehensive loss	\$ (14,842)	\$ (11,671)

### ***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, which is classified as restricted cash, was \$4.1 million at March 31, 2008 and \$5.2 million at December 31, 2007.

### ***Fair Value of Financial Instruments***

In September 2006, the Financial Statement Standard Board ("FASB") issued Statement of Financial Accounting Standard ("SFAS") No. 157, "Fair Value Measurements" ("SFAS No. 157"). SFAS No. 157 established a common definition for fair value, which is to be applied to U.S. generally accepted accounting principles ("GAAP") requiring use of fair value, and a framework for measuring fair value, and expanded disclosure about such fair value measurements. This pronouncement applies under the other accounting standards that require or permit fair value measurements. Accordingly, this statement does not require any new fair value measurement. SFAS No. 157 is effective for financial assets and financial liabilities for fiscal years beginning after November 15, 2007. In February 2008, the FASB released a FASB Staff Position ("FSP") 157-1, "Application of FASB Statement No. 157 to FASB Statement 13 and Other Accounting Pronouncements That Address Fair Value Measurements for Purposes of Lease Classification or Measurement under Statement 13." FSP 157-1 removed leasing transactions accounted for under FASB Statement 13 and related guidance from the scope of SFAS No. 157. FSP 157-2, "Partial Deferral of the Effective Date of Statement 157," deferred the effective date of SFAS No. 157 for all nonfinancial assets and nonfinancial liabilities, except those are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually) to fiscal years beginning after November 15, 2008. We are currently evaluating the impact of adopting the provisions of FSP 157-2.

The partial adoption of SFAS No. 157 for financial assets and financial liabilities, effective January 1, 2008, did not have a material impact on the Company's financial position, results of operations or cash flow. The Company is currently assessing the impact of a SFAS No. 157 for nonfinancial assets and nonfinancial liabilities on its financial position and results of operations. See Note 8, Fair Value Measurements.

SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities," became effective for the Company on January 1, 2008. SFAS No. 159 includes an amendment of FASB Statement No. 115, "Accounting for Certain Investments in Debt and Equity Securities," which permits an entity to measure certain financial assets and financial liabilities at fair value. The objective of SFAS No. 159 is to improve financial reporting by allowing entities to mitigate volatility in reported earnings caused by the measurement of related assets and liabilities using different attributes, without having to apply complex hedge accounting provisions. Under SFAS No. 159, entities that elect the fair value option (by instrument) will report unrealized gains and losses in earnings at each subsequent reporting date. The fair value option election is irrevocable, unless a new election date occurs. SFAS No. 159 establishes presentation and disclosure requirements to help financial statement users understand the effect of the entity's election on its earnings, but does not eliminate disclosure requirements of other accounting standards. Assets and liabilities that are measured at fair value must be displayed on the face of the balance sheet. The Company chose not to elect the fair value option for its financial assets and liabilities existing at January 1, 2008, and did not elect the fair value option on financial assets and liabilities transacted in the three months ended March 31, 2008.

### ***Stock-Based Compensation***

Effective January 1, 2006, the Company adopted the provisions of 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 the provisions of 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, consistent with the provisions of SFAS No. 123R. 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.

[Table of Contents](#)

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 Months Ended March 31, 2008		Three Months Ended March 31, 2007	
	Employee Stock Options	ESPP	Employee Stock Options	ESPP
Risk-free interest rate	2.90%	3.86%	4.49%	4.84%
Volatility	63%	77%	73%	71%
Expected life (in years)	6.08	1.25	6.02	1.25
Expected dividend yield	0.00%	0.00%	0.00%	0.00%

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

Under Staff Accounting Bulletin (“SAB”) No. 107, 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 as well as the expected disposition of all outstanding options by extrapolating the life cycle of those options as of March 31, 2008.

From January 1, 2006, the date of adopting 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 of nearly four years. Because its outstanding options have an expected term of nearly six years, the Company supplemented its own volatility history by using comparable companies’ volatility history for the two-year period preceding the Company’s IPO.

## Note 2. Net Loss Per 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, common stock subject to repurchase, 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 Months Ended	
	March 31, 2008	March 31, 2007
Numerator — net loss	<u>\$(13,895)</u>	<u>\$(11,692)</u>
Denominator:		
Weighted-average common shares outstanding	49,294	46,763
Less: Weighted-average shares subject to repurchase	(—)	(2)
Weighted-average shares used in computing basic and diluted net loss per common share	<u>49,294</u>	<u>46,761</u>

## [Table of Contents](#)

The following outstanding 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 March 31,	
	2008	2007
Options to purchase common stock	6,514	5,212
Warrants to purchase common stock	474	244
Shares issuable related to the ESPP	90	92
Total shares	<u>7,078</u>	<u>5,548</u>

### Note 3. Supplemental Cash Flow Data

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

	Three Months Ended		Period from August 5, 1997 (date of inception) to March 31, 2008
	March 31, 2008	March 31, 2007	
Significant non-cash investing and financing activities:			
Deferred stock-based compensation	\$ —	\$ —	\$ 6,940
Purchases of property and equipment through accounts payable	92	122	92
Purchases of property and equipment through trade in value of disposed property and equipment	—	—	258
Penalty on restructuring of equipment financing lines	—	—	475
Conversion of convertible preferred stock to common stock	—	—	133,172
Unrealized loss on auction rate securities	943	—	943

### Note 4. Related Party Agreements

#### *Research and Development Arrangements*

GlaxoSmithKline (“GSK”). Pursuant to the collaboration and license agreement between the Company and GSK (the “GSK Agreement”), the Company received and recorded as research and development revenues from related party, patent expense reimbursements from GSK of \$11,000 and \$147,000 in the three months ended March 31, 2008 and 2007, respectively. Related party accounts payable and accrued liabilities payable to GSK for outsourced services under the GSK Agreement were \$20,000 at each of March 31, 2008 and December 31, 2007.

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 both the three months ended March 31, 2008 and March 31, 2007. At March 31, 2008, deferred revenue related to the Amgen Agreement and its related common stock purchase agreement was \$33.5 million.

#### *Other*

Board member. Charles J. Homcy, M.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. Homcy of \$4,000 and \$6,000 in the three months ended March 31, 2008 and 2007, respectively.

Related Party Notes Receivable. Effective March 31, 2008, James Sabry voluntarily resigned from his position as Executive Chairman of the Board of Directors of the Company, and on April 1, 2008, assumed his new role as the non-employee Chairman of the Board of Directors, as well as Chairman of the Company’s Scientific Advisory Board and a consultant to the Company. In accordance with the terms of Dr. Sabry’s promissory note payable to the Company, the outstanding balance of \$100,000 of the note became due, and was repaid in full, on April 30, 2008. Accordingly, \$100,000 is classified as current and is included in related party notes receivable — short-term portion as of March 31, 2008.

**Note 5. Cash, cash equivalents, and investments**

The amortized cost and fair value of cash, cash equivalents, short- and long-term investments at March 31, 2008 and December 31, 2007 were as follows (in thousands):

	<b>March 31, 2008</b>				
	<u>Amortized Cost</u>	<u>Unrealized Gains</u>	<u>Unrealized Losses in accumulated OCI</u>	<u>Fair Value</u>	<u>Investment Maturity Dates</u>
Cash and cash equivalents	<u>\$ 105,545</u>	<u>—</u>	<u>\$ (5)</u>	<u>\$ 105,540</u>	
Long-term investments:					
Student loan auction rate securities (taxable)	<u>\$ 20,025</u>	<u>—</u>	<u>(943)</u>	<u>\$ 19,082</u>	6/2036 — 8/2045
Total long-term investments	<u>\$ 20,025</u>	<u>\$ —</u>	<u>\$ (943)</u>	<u>\$ 19,082</u>	
	<b>December 31, 2007</b>				
	<u>Amortized Cost</u>	<u>Unrealized Gains</u>	<u>Unrealized Losses in accumulated OCI</u>	<u>Fair Value</u>	<u>Investment Maturity Dates</u>
Cash and cash equivalents	<u>\$ 116,565</u>	<u>—</u>	<u>\$ (1)</u>	<u>\$ 116,564</u>	
Short-term investments:					
Student loan auction rate securities (taxable)	<u>\$ 3,175</u>	<u>—</u>	<u>—</u>	<u>\$ 3,175</u>	1/2008
Total short-term investments	<u>\$ 3,175</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 3,175</u>	
Long-term investments:					
Student loan auction rate securities (taxable)	<u>\$ 20,025</u>	<u>—</u>	<u>—</u>	<u>\$ 20,025</u>	6/2036 — 8/2045
Total long-term investments	<u>\$ 20,025</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 20,025</u>	

The Company's student loan auction rate securities ("ARS"), which had a fair value of \$19.1 million as of March 31, 2008 and \$23.2 million as of December 31, 2007, are securities that are structured with short-term interest reset dates of less than 30 days, but with maturities generally greater than 10 years. The Company classified \$19.1 million and \$20.0 million of these ARS as long-term investments as of March 31, 2008 and December 31, 2007, respectively, due to their illiquidity and the Company's inability to use them in its current operations.

These ARS are 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. As of December 31, 2007, there were no ARS in an unrealized loss position and there were no failed auctions associated with the Company's ARS through that date. The Company's ARS with auction reset dates prior to February 13, 2008 had successful auctions at which their interest rates were reset. In February 2008, the Company liquidated \$3.2 million of its ARS at par, which were classified as short-term investments as of December 31, 2007. The recent uncertainties in the credit markets have affected all of the Company's holdings in ARS investments and auctions for the Company's investments in these securities failed to settle on their respective settlement dates in February and March 2008. 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, 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. All of the ARS are AAA/Aaa rated and were in compliance with the Company's investment policy at the time of acquisition. As of March 31, 2008, the Company held ARS with a par value of \$20.0 million, which were classified as long-term investments because of the Company's inability to determine when its investments in these ARS would settle. Typically the fair value of ARS investments approximates par value due to the frequent resets through the auction process. While the Company continues to earn interest on its ARS at the contractual rate, these investments are not currently trading and therefore do not currently have a readily determinable market value. Accordingly, the estimated fair value of ARS no longer approximates par value. The Company recorded an unrealized loss of \$0.9 million associated with its ARS as a component of stockholders' equity as of March 31, 2008.

The Company used a discounted cash flow ("DCF") model to assess the estimated fair value of its investment in ARS as of March 31, 2008. See Footnote 8 for the assumptions used in preparing the DCF model. As of March 31, 2008, the Company determined there was a decline in the fair value of its ARS of \$0.9 million, and deemed the entire decline temporary. The Company reviews its impairments in accordance with SFAS No. 115, "Accounting for Certain Investments in Debt and Equity Securities," and FSP Nos. FASB 115-1 and FASB 124-1, "The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments," in order to determine the classification of the impairment as "temporary" or "other-than-temporary." A temporary impairment charge

## [Table of Contents](#)

results in an unrealized loss being recorded in the Other Comprehensive Income (Loss) component of stockholders' equity. Such an unrealized loss does not affect net income (loss) for the applicable accounting period. An other-than-temporary impairment charge is recorded as a realized loss in the condensed statement of operations and reduces net income (loss) for the applicable accounting period. In evaluating the impairment of any individual ARS, the Company classifies such impairment as temporary or other-than-temporary. The differentiating factors between temporary and other-than-temporary impairment are primarily the length of the time and the extent to which the market value has been less than cost, the financial condition and near-term prospects of the issuer and the Company's intent and ability to retain its investment in the issuer for a period of time sufficient to allow for any anticipated recovery in market value. As of March 31, 2008 and December 31, 2007, the Company had not incurred any losses that were other-than-temporary. The Company continues to monitor the ARS market and to consider the impact, if any, on the fair value of its ARS.

### **Note 6. Equipment Financing Lines**

In August 2007, the Company secured a new line of credit with GE Capital of up to \$3.0 million to finance certain equipment until September 30, 2008. The line of credit is subject to the Master Security Agreement between the Company and GE Capital, dated February 2001 and amended on March 24, 2005. As of March 31, 2008, the Company has not borrowed any funds under this line.

### **Note 7. Stockholders' Equity**

#### *Stock Option Plans*

In January 2004, the Board of Directors adopted the 2004 Equity Incentive Plan (the "2004 Plan") which was approved by the stockholders in February 2004. The 2004 Plan provides for the granting of incentive stock options, nonstatutory stock options, restricted stock purchase rights and stock bonuses to employees, directors and consultants. Under the 2004 Plan, the number of authorized shares automatically increases on an annual basis by a number of shares equal to the lesser of (i) 1,500,000 shares, (ii) 3.5% of the outstanding shares on such date, or (iii) an amount determined by the Board of Directors. Accordingly, on January 1, 2008, the number of shares of common stock authorized for issuance under the 2004 Plan was increased by 1,500,000 shares to a total of 2,997,296 shares.

Stock option activity for the three months ended March 31, 2008 under the 2004 Plan and the 1997 Stock Option/Stock Issuance Plan was as follows:

	Options Available for Grant	Options Outstanding	Weighted Average Exercise Price per Share
Balance at December 31, 2007	1,497,296	5,060,294	\$ 5.80
Increase in authorized shares	1,500,000	—	—
Options granted	(1,521,137)	1,521,137	\$ 3.36
Options exercised	—	(18,938)	\$ 1.17
Options cancelled	48,009	(48,009)	\$ 7.31
Balance at March 31, 2008	<u>1,524,168</u>	<u>6,514,484</u>	\$ 5.23

The weighted average fair value of options granted in the three months ended March 31, 2008 was \$2.02 per share.

### **Note 8 – Fair Value Measurements**

As stated in "—Note 1. Organization and Summary of Significant Accounting Policies," on January 1, 2008, the Company adopted the methods of fair value described in SFAS No. 157 to value its financial assets and liabilities. As defined in SFAS No. 157, fair value is the price that would be received for asset 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 available to it. 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.

[Table of Contents](#)

The Company classifies the determined fair value based on the observability of those inputs. SFAS No. 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 No. 157 are as follows:

- Level 1** Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide the most reliable pricing information and evidence of fair value on an ongoing basis.
- Level 2** Pricing inputs are other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reporting date. Level 2 includes those financial instruments that are valued using models or other valuation methodologies. These models are primarily industry-standard models that consider various assumptions, including quoted forward prices for commodities, time value, volatility factors, and current market and contractual prices for the underlying instruments, as well as other relevant economic measures. Substantially all of these assumptions are observable in the marketplace throughout the full term of the instrument, can be derived from observable data or are supported by observable levels at which transactions are executed in the marketplace.
- Level 3** Pricing inputs include significant inputs that are generally less observable from objective sources. These inputs may be used with internally developed methodologies that result in management's best estimate of fair value from the perspective of a market participant. Instruments subject to Level 3 measurements include those that may be more structured or otherwise tailored to customers' needs. At each balance sheet date, the Company performs an analysis of all instruments subject to SFAS No. 157 and includes in Level 3 all of those whose fair value is based on significant unobservable inputs.

Financial assets carried at fair value as of March 31, 2008 are classified in the table below in one of the three categories described above (in thousands):

	Fair Value Measurements Using			Assets At Fair Value
	Level 1	Level 2	Level 3	
Assets				
Cash equivalents — commercial paper	\$ —	\$ 21,973	\$ —	\$ 21,973
Long-term investments — ARS	—	—	19,082	19,082
Total assets	\$ —	\$ 21,973	\$ 19,082	\$ 41,055

The Company chose not to elect the fair value option as prescribed by SFAS No. 159 for its financial assets and liabilities that had not been previously carried at fair value. Therefore, financial assets and liabilities not carried at fair value, such as the Company's accounts receivable, notes receivable, short- and long-term equipment financing lines and accounts payable are still reported at their carrying values.

As of March 31, 2008, the Company applied Level 2 measurements to its holdings of commercial paper with maturity dates less than three months classified under cash equivalents. The Company's commercial paper with maturity dates less than three months are valued at the quoted market price from broker or dealer quotations.

*Impairment of Long-Term Student Loan Auction Rate Securities*

The Company's financial assets measured at fair value on a recurring basis using significant level 3 inputs as of March 31, 2008 consisted solely of ARS. The following table summarizes the Company's fair value measurements using Level 3 inputs, and changes therein, for the three-months period ended March 31, 2008 (in thousands):

	Long-term Investment
Beginning balance as of December 31, 2007	\$ —
Transfer-in of Level 3 hierarchy measurement from Level 1	20,025
Unrealized losses included in other comprehensive income	(943)
Ending balance as of March 31, 2008	\$ 19,082

## [Table of Contents](#)

The Company's ARS holdings as of March 31, 2008 and December 31, 2007 consisted entirely of student loan ARS. The unrealized loss of these ARS for the three months ended March 31, 2008 reflected a decrease of fair value of the Company's long-term investments and was reported in its OCI. The Company used a DCF model to determine the estimated fair value of its investment in ARS as of March 31, 2008. Due to the lack of observable market quotes on the Company's ARS portfolio, the Company utilized DCF valuation models that relied exclusively on Level 3 inputs including estimates for interest rates, timing and amount of cash flows, credit quality, expected holding periods of the ARS and percentage of portfolio guaranteed by the Federal Family and Education Loan Program. The valuation used estimates of observable market data including yields or spreads of trading instruments that the Company believed to be similar or comparable and assumptions that it believed to be reasonable non-observable inputs such as illiquidity premium and likelihood of redemption. The valuation of the Company's ARS is subject to uncertainties that are difficult to predict. Factors that may impact its valuation 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 and ongoing strength and quality of market credit and liquidity.

Based on this assessment of fair value, as of March 31, 2008, the Company determined there was a decline in the fair value of its ARS investment of \$943,000, and deemed the entire decline temporary. The unrealized losses are reported as a component of stockholders' equity, except for unrealized losses determined to be other than temporary which are recorded in the Statement of Operations, in accordance with the Company's policy and FSP No. FASB 115-1 and FASB 124-1, "The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments." As of March 31, 2008 and December 31, 2007, the Company had not incurred any losses that it deemed other-than-temporary. The Company continues to monitor the ARS market and consider its impact, if any, on the fair value of its ARS.

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 in other comprehensive income (loss) or impairment charges in future quarters.

### **Note 9. Recent Accounting Pronouncements**

#### *Recently Adopted Accounting Pronouncements*

The Company adopted certain requirements of SFAS No. 157 effective January 1, 2008. See Note 1, "Organization and Summary of Significant Accounting Policies — *Fair Value of Financial Instruments.*"

Effective January 1, 2008, the Company adopted SFAS No. 159. The Company chose not to elect the fair value option for its financial assets and liabilities existing at January 1, 2008, and did not elect the fair value option on financial assets and liabilities transacted in the three months ended March 31, 2008. Therefore, the adoption of SFAS No. 159 had no impact on the Company's financial position or results of operations. See Note 1, "Organization and Summary of Significant Accounting Policies — *Fair Value of Financial Instruments.*"

The Company adopted Emerging Issues Task Force ("EITF") Issue No. 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities," on a prospective basis for new contracts entered into on or after effective January 1, 2008. EITF Issue No. 07-3 states that nonrefundable advance payments for future research and development activities should be deferred and recognized as an expense as the goods are delivered or the related services are performed. Entities should then continue to evaluate whether they expect the goods to be delivered or services to be rendered and, if an entity does not expect the goods to be delivered or services to be rendered, the capitalized advance payment should be charged to expense. The adoption of EITF Issue No. 07-3 did not have a material effect on the Company's financial position or results of operations.

In December 2007, the SEC issued SAB No. 110, which addresses the continued use of the simplified method for estimating the expected term for stock based compensation. Previously, under SAB No. 107, the use of the simplified method was intended to be discontinued after December 31, 2007. Under SAB No. 110, companies may continue to use the simplified method in certain circumstances. 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 under SAB No. 107. Instead, the Company used its own exercise history and extrapolated the life cycle of options outstanding as of March 31, 2008 to arrive at its estimated expected term for new option grants.

*Accounting Pronouncements Not Yet Adopted*

In November 2007, the EITF issued a consensus on EITF Issue No. 07-01, "Accounting for Collaboration Arrangements Related to the Development and Commercialization of Intellectual Property," which is focused on how the parties to a collaborative agreement should account for costs incurred and revenue generated on sales to third parties, how sharing payments pursuant to a collaboration agreement should be presented in the income statement and certain related disclosure questions. EITF Issue No. 07-01 is to be applied retrospectively for collaboration arrangements in fiscal years beginning after December 15, 2008. The Company is currently evaluating the impact on its financial statements of adopting EITF Issue No. 07-1.

In March 2008, the FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities," as an amendment to SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." SFAS No. 161 requires that the objectives for using derivative instruments be disclosed in terms of underlying risk and accounting designation. The fair value of derivative instruments and their gains and losses will need to be presented in tabular format in order to present a more complete picture of the effects of using derivative instruments. SFAS No. 161 is effective for financial statements issued for fiscal years beginning after November 15, 2008. The Company is currently evaluating the impact of adopting this pronouncement.

**Note 10. Subsequent Event**

On May 1, 2008, the Company issued 94,858 shares of common stock pursuant to the ESPP at an average price of \$3.213 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:

- the initiation, progress, timing and scope of clinical trials and development for our drug candidates and potential drug candidates by ourselves, GlaxoSmithKline, or GSK, or the National Cancer Institute, or NCI, including the anticipated timing for initiation of clinical trials, and anticipated dates of data becoming available or being announced or presented from clinical trials;
- guidance concerning revenues, research and development expenses and general and administrative expenses for 2008;
- our and our partners' plans or ability for continued research and development of drug candidates, such as CK-1827452, ispinesib, SB-743921 and GSK-923295;
- our ability to generate clinical data sufficient to result in Amgen Inc., or Amgen, exercising its option with respect to CK-1827452 or GSK exercising its option with respect to either or both of ispinesib or SB-743921, or to provide such data within our expected timeframes.
- our expected roles in research, development or commercialization under our strategic alliances, such as with Amgen and GSK;
- the potential benefits of our drug candidates and potential drug candidates;
- the scope, conduct and results of our research and development activities and programs;
- the utility of our clinical trials programs for our drug candidates in informing future development activities;
- our plans or ability to commercialize drugs with or without a partner, including our intention to develop sales and marketing capabilities;

## Table of Contents

- receipt of milestone payments, royalties and other funds from our partners under strategic alliances, such as with Amgen and GSK;
- issuance of shares of our common stock under our committed equity financing facility, or CEFF, entered into with Kingsbridge Capital Limited, or Kingsbridge, in 2007;
- losses, costs, expenses and expenditures;
- the sufficiency of existing resources to fund our operations for at least the next 12 months;
- capital requirements and our needs for additional financing;
- future payments under lease obligations and equipment financing lines;
- expected future sources of revenue and capital;
- increasing the number of our employees and recruiting additional key personnel; and
- expected future amortization of employee stock-based compensation.

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

- difficulties or delays in development, testing, obtaining regulatory approval for, and undertaking production and marketing of our drug candidates, including decisions by the NCI to postpone or discontinue research or development activities for ispinesib, or by GSK to postpone or discontinue research or development activities relating to centromere-associated protein E, or CENP-E, or 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 clinical trials or preclinical studies are not indicative of future results of clinical trials);
- the possibility that the U.S. Food and Drug Administration, or FDA, or foreign regulatory agencies may delay or limit our or our partners' ability to conduct clinical trials;
- the receipt of funds by us under our strategic alliances, including those funds dependent upon Amgen's exercise of its option with respect to CK-1827452 and GSK's exercise of its option with respect to either or both of ispinesib and SB-743921;
- activities and decisions of, and market conditions affecting, current and future strategic partners;
- our ability to obtain additional financing if necessary;
- 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, the 2007 CEFF;
- changing standards of care and the introduction of products by competitors or alternative therapies for the treatment of indications we target;
- the uncertainty of our ability to obtain and maintain protection for our intellectual property, through patents, trade secrets or otherwise; and
- potential infringement of the intellectual property rights or trade secrets of third parties.

## [Table of Contents](#)

In addition such statements are subject to the risks and uncertainties discussed in the “Risk Factors” section and elsewhere in this document. Operating results 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, and CYTOMETRIX are registered service marks and trademarks of Cytokinetics. PUMA is a trademark 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 biopharmaceutical company, incorporated in Delaware in 1997, focused on developing small molecule therapeutics for the treatment of cardiovascular diseases, cancer and other diseases. Our current clinical development activities are primarily directed to advancing multiple drug candidates through clinical trials with the objective of determining the intended pharmacodynamic effect or effects in two principal diseases: heart failure and cancer. Our drug development pipeline consists of a drug candidate, CK-1827452, being developed in both an intravenous and oral formulation for the potential treatment of heart failure; three drug candidates, ispinesib, SB-743921 and GSK-923295, each being developed in an intravenous formulation for the potential treatment of cancer; and a potential drug candidate for the potential treatment of skeletal muscle weakness associated with neuromuscular diseases or other conditions. Our drug candidates and potential drug candidate are all novel small molecules that arose from our research activities and are directed toward the cytoskeleton. We believe our understanding of the cytoskeleton enables us to discover novel and potentially safer and more effective therapeutics.

Since our inception in August 1997, we have incurred significant net losses. As of March 31, 2008, we had an accumulated deficit of \$293.4 million. We expect to incur substantial and increasing losses for the next several years if and to the extent:

- we advance CK-1827452 through clinical development for the treatment of heart failure and Amgen does not exercise its option to conduct later-stage development and commercialization;
- we conduct continued Phase I, Phase II and later-stage development and commercialization of ispinesib, SB-743921 or GSK-923295 under our collaboration and license agreement with GSK, as amended;
- we advance ispinesib through clinical development for breast cancer and SB-743921 through clinical development for Hodgkin and non-Hodgkin lymphoma, and GSK does not exercise its option to conduct later-stage development and commercialization for either or both of these drug candidates;
- we exercise our option to co-fund the development of GSK-923295 or of any other drug candidate being developed by GSK under our strategic alliance;
- we exercise our option to co-promote any of the products for which we have elected co-fund development under our strategic alliance with GSK;
- we advance potential drug candidates through preclinical studies and into clinical trials;
- we expand our research programs and further develop our proprietary drug discovery technologies; or
- we elect to fund development or commercialization of any drug candidate.

We intend to pursue selective strategic alliances to enable us to maintain financial and operational flexibility.

## Cardiovascular

We have focused our cardiovascular research and development activities on heart failure, a disease most often characterized by compromised contractile function of the heart that impacts its ability to effectively pump blood throughout the body. We have discovered and optimized small molecules that have the potential to improve cardiac systolic performance by specifically binding to and activating cardiac myosin, a cytoskeletal protein essential for cardiac muscle contraction. This work gave rise to our drug candidate CK-1827452, a novel small molecule cardiac myosin activator. CK-1827452 entered clinical trials in 2006. Based on data from our first-time-in-humans Phase I clinical trial with this drug candidate, in April 2007, we initiated a clinical trials program for CK-1827452, comprised of Phase I and Phase IIa clinical trials designed to evaluate the safety, tolerability, pharmacodynamics and pharmacokinetic profile of both intravenous and oral formulations of this drug candidate in a diversity of patients, including patients with stable heart failure and patients with ischemic cardiomyopathy. Our goal is to develop CK-1827452 as a potential treatment across the continuum of care in heart failure, both in the hospital setting as an intravenous formulation for the treatment of acutely decompensated heart failure and in the outpatient setting as an oral formulation for the treatment of chronic heart failure.

In September 2006 and September 2007, we announced data from the first-time-in-humans Phase I clinical trial of CK-1827452 evaluating the safety, tolerability, pharmacodynamics and pharmacokinetic profile of a six-hour intravenous infusion of CK-1827452 in healthy volunteers. In this trial, CK-1827452 was well-tolerated and statistically significant and concentration-dependent increases in indices of left ventricular function were demonstrated. In addition, CK-1827452 exhibited generally linear, dose-proportional pharmacokinetics across the dose range studied. The adverse effects at intolerable doses in humans appeared similar to the adverse findings which occurred at similar plasma concentrations in the preclinical safety studies. These effects are believed to be related to an excess of the intended pharmacologic effect, resulting in excessive prolongation of the systolic ejection time, and resolved promptly with discontinuation of the infusions of CK-1827452. The activity of CK-1827452 in this trial was consistent with results from preclinical evaluations of CK-1827452 in normal dogs. Further clinical trials are necessary to determine whether similar results will also be seen in patients with heart failure. In December 2006 and September 2007, we announced results from a Phase I study designed to investigate the absolute bioavailability of two oral formulations (liquid and immediate-release solid) of CK-1827452 versus an intravenous dose in healthy volunteers. Pharmacokinetic data from this study demonstrated oral bioavailability of approximately 100% for each of the three conditions of oral administration (i.e., liquid fasted, solid fasted and solid fed). We believe that these data support our current activities to develop a modified release oral formulation of CK-1827452 to enable late-stage clinical development of a dosing schedule that may be suitable for the treatment of patients with chronic heart failure.

In December 2006, we entered into a collaboration and option agreement with Amgen, or the Amgen Agreement, to discover, develop and commercialize novel small-molecule therapeutics that activate cardiac muscle contractility for potential applications in the treatment of heart failure, including CK-1827452. The agreement provides Amgen with a non-exclusive license and access to certain technology, as well as an option to receive an exclusive license to develop and commercialize CK-1827452 and other drug candidates arising from the collaboration, subject to Cytokinetics' development and commercial participation rights. The option is for worldwide license rights, excluding 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 Phase I and Phase IIa clinical trials data for CK-1827452 in accordance with an agreed development plan, the results of which may be sufficient to support its progression into Phase IIb clinical development.

Currently ongoing and recently completed clinical trials of CK-1827452 are as follows:

### **CK-1827452 (intravenous)**

*Phase IIa stable heart failure (safety and tolerability):* In April 2007, we initiated a Phase IIa, multi-center, double-blind, randomized, placebo-controlled, dose-escalation clinical trial of CK-1827452 in patients with stable heart failure. The trial's primary objective is to evaluate the safety and tolerability of CK-1827452. Its secondary objectives are to establish a relationship between the plasma concentration and the pharmacodynamic effects of CK-1827452 and to determine its pharmacokinetics in stable heart failure patients. In addition to routine assessments of vital signs, blood samples and electrocardiographic monitoring, echocardiograms will be performed to evaluate cardiac function at various pre-defined time points. The clinical trial is planned to consist of at least five cohorts of eight patients with stable heart failure. The first three of these cohorts will each undergo four treatment periods; patients will receive three escalating active doses of CK-1827452 administered intravenously and one placebo treatment which will be randomized into the dose escalation sequence. In each cohort, patients will receive a one-hour loading infusion to rapidly achieve a target plasma concentration of CK-1827452, followed by a slower infusion intended to maintain that plasma concentration. These maintenance infusions are planned to be one hour in duration in the first two cohorts, and 23 hours in duration in the third cohort. In March 2008, Cytokinetics announced positive results from an analysis of the first two cohorts of this trial. The safety data from this

## [Table of Contents](#)

interim analysis suggest that the drug was well-tolerated with no serious adverse events reported in heart failure patients exposed to the intended range of doses and plasma concentrations. In addition, data from the first two cohorts demonstrated that, when compared to placebo, CK-1827452 produced statistically significant and clinically relevant increases in Doppler-derived stroke volume and fractional shortening in association with statistically significant prolongations of systolic ejection time. Statistically significant correlations were observed between the increases in each of these three indices of cardiac ventricular function and increases in the plasma concentration of CK-1827452. Left ventricular ejection fraction, a measurement with high variability in patients with ventricular disease, also increased with increasing plasma concentrations; however, this increase in left ventricular systolic function did not reach statistical significance in these initial cohorts. Across the plasma concentration levels evaluated, the pharmacokinetics of CK-1827452 were generally linear with respect to dose and similar to those observed in the healthy volunteers in the first-time-in-humans Phase I trial of CK-1827452. Heart rate decreased slightly at higher concentrations and blood pressure remained unchanged in the first two cohorts of the Phase IIa trial. Cytokinetics has completed enrollment and continues to dose patients in the third cohort of this Phase IIa clinical trial. We anticipate that final data will be available from this trial during the second half of 2008.

*Phase IIa stable heart failure (cardiac catheterization):* In April 2008, we opened enrollment in 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 a cardiac catheterization laboratory. We are currently recruiting patients for this trial. The primary objective of this trial is to evaluate the potential effects of CK-1827452 on myocardial efficiency, defined as the ratio of ventricular performance to myocardial oxygen consumption. The secondary objective of this trial is to measure the potential effects of CK-1827452 on ventricular performance, myocardial oxygen consumption, hemodynamics, pressure-volume relationships and systolic ejection time.

### **CK-1827452 (oral)**

*Phase I drug-drug interaction:* In April 2007, we announced the initiation of a single-center, open-label, sequential, parallel group, Phase I clinical trial of CK-1827452 designed to evaluate the effects of oral ketoconazole, a strong inhibitor of the metabolic enzyme cytochrome P450 (CYP) 3A4, on the pharmacokinetics of a single oral dose of CK-1827452 in up to 16 healthy male volunteers, 8 of whom have a normal genotype for CYP2D6, and up to 8 of whom have reduced CYP2D6 activity. There was a modest drug-drug interaction between ketoconazole, and CK-1827452 when the two were co-administered in subjects with a normal genotype for CYP2D6. In addition, the effects of diltiazem, a moderate CYP3A4 inhibitor, on the pharmacokinetics of CK-1827452 were assessed in eight additional volunteers who were normal metabolizers by way of CYP2D6. Diltiazem had no effect on plasma concentrations of CK-1827452 when the two were co-administered. We continue to enroll healthy subjects who are poor metabolizers with respect to CYP2D6 in order to examine the pharmacokinetics of CK-1827452. We anticipate that data from this trial will be available in the second half of 2008.

*Phase I oral multi-dose:* In July 2007, we announced the initiation of a single-center, Phase I clinical trial in healthy volunteers designed to evaluate the pharmacokinetics of an oral capsule formulation of CK-1827452 administered as both single and multiple doses of two different strength capsules. We completed treatment in this trial in December 2007. Recently, we conducted a preliminary evaluation of results from this Phase I clinical trial, which demonstrated dose-proportionality between the two dose levels, both after a single dose and after multiple doses to steady state. We anticipate that final data from this trial will be available in the first half of 2008.

*Phase I modified release:* In December 2007, we initiated a single-center, two-part, open-label, Phase I clinical trial of up to twelve healthy male volunteers. The primary objective of this trial is to assess the pharmacokinetics and relative bioavailability of three different oral modified release prototypes of CK-1827452. The secondary objective of the trial is to determine whether there is an effect of food on the pharmacokinetics of one of these oral modified release prototypes of CK-1827452. During the first quarter of 2008, we completed enrollment. We anticipate that final data from this trial will be available in the first half of 2008. Based on a preliminary data analysis, one of the prototype modified release oral formulations of CK-1827452 evaluated in this trial has been selected to proceed forward into further clinical testing.

### **CK-1827452 (intravenous to oral)**

In April 2008, we initiated a double-blind, randomized, placebo-controlled Phase IIa clinical trial designed to evaluate both an intravenous and an oral formulation of CK-1827452 in patients with ischemic cardiomyopathy and angina. We are currently recruiting patients into this trial. The primary objective of this trial is to assess the effect of intravenous CK-1827452 on symptom-limited treadmill exercise tolerance. The secondary objectives of this trial are to assess the tolerability of CK-1827452 administered as an oral formulation, and to evaluate the resulting plasma concentrations.

### ***CK-1827452 (preclinical)***

In March 2008, a poster relating to non-clinical data of CK-1827452 was presented at the 2008 Annual Scientific Sessions of the American College of Cardiology Meeting. The authors concluded that CK-1827452 increased left ventricular function and reduced filling pressures but, in contrast to conventional inotropic agents, did not increase myocardial oxygen consumption or reduce subendocardial blood flow in the setting of heart failure or in heart failure with severe left ventricular hypertrophy.

CK-1827452 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 cardiovascular program of approximately \$5.3 million for the three months ended March 31, 2008, and \$5.6 million for the three months ended March 31, 2007. We anticipate that our expenditures relating to the research and development of compounds in our cardiovascular 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 cardiovascular program under our collaboration and option agreement with Amgen following Amgen's exercise of its option. If Amgen elects to exercise its option, it would be responsible for development and commercialization of CK-1827452 and related compounds, subject to our development and commercial participation rights. In addition, we may be eligible to receive precommercialization and commercialization milestone payments of up to \$600 million on CK-1827452 and other products arising from the research under the collaboration as well as escalating royalties 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 products in North America and participate in agreed commercial activities in institutional care settings, at Amgen's expense. If Amgen elects not to exercise its option on CK-1827452, we may then independently proceed to develop CK-1827452 and the research collaboration would terminate.

### **Oncology**

In the first quarter ended March 31, 2008, we continued to advance our oncology development programs for our drug candidates ispinesib and SB-743921 as they progressed in Phase I of their respective Phase I/II clinical trials and GSK continued conducting the first-time-in-humans Phase I clinical trial of our drug candidate GSK-923295. Ispinesib, SB-743921 and GSK-923295 are being developed in connection with our collaboration and license agreement with GSK, or the GSK Agreement. This strategic alliance is focused on novel small molecule therapeutics targeting a family of cytoskeletal proteins known as mitotic kinesins for the treatment of cancer. Pursuant to a November 2006 amendment to the GSK Agreement, we assumed responsibility, at our expense, for the continued research, development and commercialization of ispinesib and SB-743921, subject to GSK's option to resume development and commercialization of either or both of ispinesib and SB-743921. This option is exercisable until the end of 2008. 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 believe that the royalty rates to be paid to us for future sales of each of ispinesib, SB-743921 and GSK-923295 could potentially increase to an upper-teen percentage rate, based on increasing product sales and co-funding by us. 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 commercial activities. We are also researching other compounds for the potential treatment of cancer.

### ***Ispinesib***

The clinical trials program for ispinesib, an inhibitor of kinesin spindle protein, or KSP, has consisted to date of nine Phase II clinical trials and eight Phase I or Ib clinical trials evaluating the use of this drug candidate in a variety of both solid and hematologic cancers. We believe that the breadth of this clinical trials program has taken into consideration the potential and the complexity of developing a drug candidate such as ispinesib, and should help us to identify those tumor types and dosing regimens that are the most promising for the continued development of ispinesib. We have reported Phase II clinical trial data for ispinesib in metastatic breast, non-small cell lung, ovarian, colorectal, head and neck, hepatocellular, renal and prostate cancers and in melanoma. To date, we believe clinical activity for ispinesib has been observed in non-small cell lung cancer, ovarian and breast cancer, 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. Under our strategic alliance with GSK, we have initiated a focused development program for ispinesib in the treatment of patients with locally advanced or metastatic breast cancer. This program is intended to build upon the previous data from the clinical trials conducted by GSK and the NCI, and is designed to further

## [Table of Contents](#)

define the clinical activity profile of ispinesib in chemotherapy-naïve locally advanced or metastatic breast cancer patients in preparation for potentially initiating a later stage clinical trials program of ispinesib for the second-line treatment of advanced breast cancer.

Currently ongoing and recently completed clinical trials of ispinesib are as follows:

*Breast Cancer:* In December 2007, we initiated an open-label, non-randomized Phase I/II clinical trial designed to evaluate ispinesib as monotherapy administered as a first-line treatment in chemotherapy-naïve patients with locally advanced or metastatic breast cancer. This trial is designed to be a proof-of-concept study to potentially amplify the signals of clinical activity seen in GSK's Phase II monotherapy trial of ispinesib in breast cancer that had failed to respond or progressed after treatment with an anthracycline and a taxane, and is intended to provide the data necessary to inform ispinesib's further development, as well as to inform GSK's potential exercise of its option to develop and commercialize ispinesib. The Phase I portion of the Phase I/II trial is designed to determine the dose-limiting toxicity and maximum tolerated dose, or MTD, of ispinesib as monotherapy administered as a one-hour intravenous infusion on days 1 and 15 of a 28-day cycle in female patients with locally advanced or metastatic adenocarcinoma of the breast who have not received prior chemotherapy. Once an MTD is determined, the clinical trial is planned to move into Phase II, which is designed to assess the overall response rate to ispinesib, using the Response Evaluation Criteria in Solid Tumors, or RECIST, in patients with measurable locally advanced or metastatic breast cancer who have not received prior chemotherapy. In the Phase II portion of this clinical trial, ispinesib is planned to be administered as a one-hour intravenous infusion on days 1 and 15 of a 28-day treatment cycle at the MTD determined in Phase I. We continue to enroll patients and dose-escalate in the Phase I portion of this Phase I/II clinical trial. In June 2008, we plan to present initial data from the Phase I portion of this trial at the annual meeting of the American Society of Clinical Oncology, or ASCO. We anticipate that additional data from the Phase I portion of this trial will be available in 2008.

*Ispinesib with capecitabine:* In the second quarter of 2007, GSK concluded patient treatment in a dose-escalating, Phase Ib clinical trial evaluating the safety, tolerability and pharmacokinetic profile of ispinesib in combination with capecitabine. In 2006, interim clinical trial data were presented demonstrating that the combination of ispinesib and capecitabine may have an acceptable tolerability profile. The optimally tolerated regimen in this clinical trial was not defined at that time; however, the MTD of ispinesib as monotherapy (18 mg/m<sup>2</sup>, administered as an intravenous infusion every 21 days) was tolerated with therapeutic doses of capecitabine, specifically daily oral doses of 2000 mg/m<sup>2</sup> and 2500 mg/m<sup>2</sup> for 14 days. Plasma concentrations of ispinesib did not appear to be affected by the presence of capecitabine. Dose-limiting toxicities, or DLTs, consisted of Grade 2 rash that did not allow 75% of the capecitabine doses to be delivered and prolonged Grade 4 neutropenia. In this clinical trial, a total of 12 out of 24 patients had a best response of stable disease as determined by RECIST. We anticipate that final data from this trial will be available in the first half of 2008. The timing of availability of these data is based on information provided by GSK and is outside of our control.

*Pediatric Solid Tumors:* During the quarter, the NCI closed enrollment in a Phase I clinical trial designed to evaluate the safety, tolerability, pharmacodynamics and pharmacokinetic profile of ispinesib as monotherapy administered as a one-hour infusion on days 1, 8 and 15 of a 28-day schedule to pediatric patients with relapsed or refractory solid tumors. Data from this trial are planned to be presented at the annual meeting of the ASCO in June 2008.

*Acute Leukemias, Chronic Myelogenous Leukemia or Advanced Myelodysplastic Syndromes:* The NCI recently completed enrollment in a Phase I clinical trial designed to evaluate the safety, tolerability and pharmacokinetic profile of ispinesib as monotherapy administered as a one-hour infusion on days 1, 2 and 3 of a 21-day cycle in adult patients with relapsed or refractory acute leukemias, chronic myelogenous leukemia in blast crisis or advanced myelodysplastic syndromes.

We expect that it will take several years before we can commercialize ispinesib, if at all. Ispinesib is at too early a stage of development for us to predict if and when we will be in a position to generate any revenues or material net cash flows from any resulting drugs. Accordingly, we cannot reasonably estimate when and to what extent ispinesib will generate revenues or material net cash flows, which may vary widely depending on numerous factors, including, but not limited to, the safety and efficacy profile of the drug, receipt of regulatory approvals, market acceptance, then-prevailing reimbursement policies, competition and other market conditions. We have assumed responsibility for funding the research and development costs associated with ispinesib pursuant to the November 2006 amendment to the GSK Agreement. We have initiated a focused development program for ispinesib in the treatment of patients with locally advanced or metastatic breast cancer designed to further define the clinical activity profile of ispinesib in advanced breast cancer patients, and in preparation for potentially initiating a Phase III clinical trial of ispinesib for the second-line treatment of advanced breast cancer. As a result of these activities, or if GSK does not exercise its option to resume responsibility for some or all of the development and commercialization activities associated with this drug candidate, our expenditures relating to research and development of this drug candidate would increase significantly.

### **SB-743921**

SB-743921, our second anti-cancer drug candidate, also inhibits KSP but is structurally distinct from ispinesib. SB-743921 is also being developed in connection with our strategic alliance with GSK. Though we are aware of no clinical shortcomings of ispinesib that are addressed by SB-743921, we believe that having two KSP inhibitors in concurrent clinical development increases the likelihood that a commercial product will result from this research and development program.

SB-743921 was studied by GSK in a dose-escalating Phase I clinical trial evaluating its safety, tolerability and pharmacokinetics in advanced cancer patients. The primary objectives of this clinical trial were to determine the DLTs and to establish the MTD of SB-743921 administered intravenously on a once every 21-day schedule. Secondary objectives included assessment of the safety and tolerability of SB-743921, characterization of the pharmacokinetics of SB-743921 on this schedule and a preliminary assessment of its anti-tumor activity. The observed toxicities at the recommended Phase II dose were manageable. DLTs in this clinical trial consisted predominantly of neutropenia and elevations in hepatic enzymes and bilirubin. Disease stabilization, ranging from 9 to 45 weeks, was observed in seven patients. One patient with cholangiocarcinoma had a confirmed partial response at the MTD.

*Phase I/II Hodgkin and non-Hodgkin Lymphoma:* In 2006, we initiated, at our expense, an additional clinical trial of SB-743921 in hematologic cancers. We continue to enroll and dose-escalate patients in an open-label, non-randomized Phase I/II clinical trial to investigate the safety, tolerability, pharmacodynamics and pharmacokinetic profile of SB-743921 administered as a one-hour infusion on days 1 and 15 of a 28-day schedule in patients with Hodgkin or non-Hodgkin lymphoma, first without, and then with, the addition of granulocyte colony-stimulating factor, or GCSF. In December 2007, at the Annual Meeting of the American Society of Hematology, a poster was presented summarizing interim data from Phase I of this clinical trial. The authors concluded that SB-743921 is well-tolerated without prophylactic granulocyte-colony stimulating factor at doses less than 6 mg/m<sup>2</sup> when given on this alternative dosing schedule. The best response observed was a partial response in a patient with Hodgkin lymphoma at 6 mg/m<sup>2</sup>. In this interim analysis, Grade 3 or 4 neutropenia was the most common toxicity reported and Grade 3 or 4 non-hematological toxicities have been rare. In particular, there has been no evidence of neuropathy. During the quarter, we completed enrollment in the non-GCSF arm of this trial and enrolled patients in the GCSF arm. Data from the Phase I portion of this trial will be presented at the ASCO Annual Meeting in June 2008. We anticipate final data to be available from the Phase I portion of this trial in the second half of 2008.

The clinical trials program for SB-743921 may proceed for several years, and we will not be in a position to generate any revenues or material net cash flows from this drug candidate until the program is successfully completed, regulatory approval is achieved and a drug is commercialized. SB-743921 is at too early a stage of development for us to predict when or if this may occur. The November 2006 amendment to the GSK Agreement provides for us to fund the future development of SB-743921 in all cancer indications subject to GSK's option to resume responsibility for some or all development and commercialization activities. As a result of our conduct of our current Phase I/II clinical trial of SB-743921 in hematologic cancers, and any further development activities for SB-743921 we may conduct under this amendment, our expenditures relating to research and development of this drug candidate will increase significantly.

If GSK exercises its option for either or both of ispinesib and SB-743921, it will pay us an option fee equal to the costs we independently incurred for the development of that drug candidate, plus a premium intended to compensate us for the cost of capital associated with such costs, subject to an agreed limit for such costs and premium. Upon GSK exercising its option for a drug candidate, we may receive additional precommercialization milestone payments with respect to such drug candidate and increased royalties on net sales of any resulting product, in each case, beyond those contemplated under the original agreement.

### **GSK-923295**

GSK-923295 is the third drug candidate to arise from our strategic alliance with GSK. GSK-923295 is an inhibitor of a second mitotic kinesin, centromere-associated protein E, or CENP-E. CENP-E is directly involved in coordinating the decision a cell makes to divide with the actual trigger of the mechanics of cell division. These processes are essential for cancer cells to grow. GSK-923295 causes partial and complete shrinkages of human tumors in animal models and has exhibited properties in these studies that distinguish it from ispinesib and SB-743921.

*Phase I First-Time-in-Humans:* During the quarter, GSK continued to enroll patients and dose-escalate in a first-time-in-humans Phase I clinical trial of GSK-923295. This trial is an open-label, non-randomized, dose-finding trial designed to investigate the safety, tolerability, pharmacodynamics and pharmacokinetic profile of GSK-923295 in patients with advanced solid tumors. The initiation of this clinical trial in August 2007 triggered a milestone payment of \$1.0 million from GSK to Cytokinetics under the GSK Agreement.

## [Table of Contents](#)

An oral presentation at the 2008 American Association of Cancer Research Annual Meeting highlighted interim clinical data from this trial. The authors concluded that the pharmacokinetics of GSK-923295 were generally dose-proportional over the dose range of 10-80 mg/m<sup>2</sup> and that inpatient pharmacokinetics on days 1 and 15 were similar. We anticipate that additional data from this trial will be available in 2008. The timing of availability of these data is based on information provided by GSK and is outside of our control.

*Preclinical:* In March 2008, two abstracts containing non-clinical data relating to GSK-923295 were presented at the 2008 American Association of Cancer Research Annual Meeting. A poster presentation detailed findings in a preclinical model of human neuroblastoma in which the authors concluded that CENP-E is a rational target for neuroblastoma as increased expression is associated with both tumor progression in a transgenic mouse model driven by the gene MYCN and high risk disease in humans, and that GSK-923295 is effective in vitro and in vivo against neuroblastoma. Another non-clinical poster examined potential biomarkers that may identify sensitivity to GSK-923295. The authors concluded that the proliferation of cell lines from a diversity of tumor types was inhibited by GSK-923295 and that CENP-E transcript levels did not correlate with sensitivity to GSK-923295. The authors also concluded that c-MYC amplification and/or over-expression is a potential biomarker that could be used to select patients more likely to respond to GSK-923295.

In June 2007, we amended the GSK Agreement to extend the research term for an additional year through June 19, 2008 to facilitate continued research activities under an updated research plan focused on CENP-E. Under the June 2007 amendment, GSK will have no obligation to reimburse us for full-time employee equivalents, or FTEs, or other research-related expenses during the extension of the research term.

The development program for 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 this potential drug candidate unless the program is successfully completed, regulatory approval is achieved and a drug is commercialized. GSK-923295 is at too early a stage of development for us to predict when or if this may occur. If GSK abandons development of GSK-923295 prior to regulatory approval, we may undertake and fund the clinical development of this drug candidate, or its commercialization, or we may seek a new partner for such clinical development or commercialization, or curtail or abandon such clinical development.

We recorded research and development expenses for activities relating to our mitotic kinesin programs of approximately \$2.0 million for the three months ended March 31, 2008, and \$1.0 million for the three months ended March 31, 2007. We anticipate that our expenditures relating to the development of ispinesib and SB-743921 will increase significantly as we advance through clinical development. Our expenditures will also increase if GSK does not exercise its option to resume responsibility for some or all of the development and commercialization activities associated with ispinesib and SB-743921, or if we elect to co-fund later-stage development for one or more of ispinesib, SB-743921 and GSK-923295. For those drug candidates and potential drug candidates that GSK develops under the strategic alliance, which currently includes GSK-923295 and which may include either or both of ispinesib and SB-743921 if so elected by GSK pursuant to its option, we may 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. We expect that the royalties to be paid on potential future sales, if any, by GSK of each of ispinesib, SB-743921 and GSK-923295 will be based on increasing product sales and our anticipated level of co-funding, if any. If we exercise our co-promotion option, then we will receive reimbursement from GSK for certain sales force costs we incur in support of our commercial activities.

## **Research**

In April 2008, we announced the selection of a development compound directed towards the skeletal sarcomere. Preclinical data indicates that this compound is a highly specific small molecule activator of the troponin complex, increasing its sensitivity to calcium, and subsequently leading to an increase in skeletal muscle contractility. This mechanism of action has demonstrated encouraging pharmacological activity in non-clinical models that may relate to the potential treatment of skeletal muscle weakness associated with neuromuscular diseases or other conditions. This potential drug candidate is the fifth development compound to emerge from our research activities focused on discovering novel therapeutics directed towards cytoskeletal biology.

## **Development Risks**

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

## [Table of Contents](#)

- the uncertainty of the timing of the initiation and completion of patient enrollment 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 such trials have been initiated and completed;
- the possibility of delays in characterization, synthesis or optimization of potential drug candidates in our cardiovascular program;
- delays or additional costs in developing appropriate formulations of our drug candidates for clinical trial use;
- the uncertainty of clinical trial results;
- the uncertainty of obtaining FDA or other foreign regulatory agency approval required for the clinical investigation of new therapies; and
- the uncertainty related to the development of commercial scale manufacturing processes and qualification of a commercial scale manufacturing facility.

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,” as well as other risk factors.

## **Revenues**

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

Under the Amgen Agreement, 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.

Charges to GSK in 2006 were based on negotiated rates intended to approximate the costs for our FTEs performing research under the strategic alliance and our out-of-pocket expenses, which we recorded as the related expenses were incurred. GSK paid us an upfront licensing fee, which we recognized ratably over the strategic alliance’s initial five-year research term, which ended in June 2006. In 2007, we received a \$1.0 million milestone payment from GSK relating to its initiation of a phase I clinical trial of GSK-295. We may receive additional payments from GSK upon achieving 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 nonrefundable, even if the relevant research effort is not successful.

Charges to AstraZeneca in 2005 were based on negotiated rates intended to approximate the costs for our FTEs performing research under the strategic alliance. The revenues recognized since inception to date are not refundable. The research term of our collaboration

## [Table of Contents](#)

and license agreement with AstraZeneca expired in December 2005, and we formally terminated that agreement in August 2006.

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 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, as well as from direct sales of our drugs. If Amgen exercises its option, we will retain a product-by-product option to co-fund certain later-stage development activities under our strategic alliance with Amgen, thereby potentially increasing our royalties and affording us co-promotion rights in North America. For those products being 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 co-promotion rights in North America. If we exercise our co-promotion 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, as well as the development and expansion of our drug discovery technologies. 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 November 2006 amendment to the GSK Agreement, we assumed responsibility for the continued research, development and commercialization of inhibitors of KSP, including ispinesib and SB-743921, and other mitotic kinesins, at our sole expense subject to GSK's option to resume responsibility for the development and commercialization of either or both of ispinesib and SB-743921, exercisable during a defined period. We also have the option to co-fund certain later-stage development activities for GSK-923295. Our conduct of the research and development of ispinesib and SB-743921 and the potential exercise of our co-funding option will result in a significant increase in research and development expenses. We expect to incur research and development expenses in the continued conduct of preclinical studies and clinical trials for CK-1827452 and other of our cardiac myosin activator compounds for the treatment of heart failure and in connection with our early research programs in other diseases, as well as the continued refinement and application of our existing and future proprietary drug discovery technologies. 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, 2008, we incurred costs of approximately \$62.2 million for research and development activities relating to the discovery of mitotic kinesin inhibitors, \$109.3 million for our cardiac contractility program, \$50.6 million for our proprietary technologies and \$75.5 million for all other 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. We anticipate continued increases in general and administrative expenses associated with operating as a publicly traded company.

### **Stock Compensation**

The following table summarizes stock-based compensation related to employee stock options and employee stock purchases for the three months ended March 31, 2008 and March 31, 2007, which was allocated as follows (in thousands):

	Three Months Ended	
	March 31, 2008	March 31, 2007
Research and development	\$ 865	\$ 644
General and administrative	662	516
Stock-based compensation included in operating expenses	\$ 1,527	\$ 1,160

## [Table of Contents](#)

As of March 31, 2008, there was \$12.1 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 3 years. In addition, we continue to amortize deferred stock-based compensation recorded prior to adoption of Statement of Financial Accounting Standards, or SFAS, No. 123R, or SFAS 123R, for stock options granted prior to the initial public offering. At March 31, 2008, the balance of deferred stock based compensation was \$0.2 million, which we expect to amortize in the remaining quarters of 2008.

### **Income Taxes**

We account for income taxes in accordance with SFAS 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 bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized. We have not recorded an income tax provision in the quarters ended March 31, 2008 or March 31, 2007 because we had a net taxable loss in both of those periods. Given that we have a history of recurring losses, we have recorded a full valuation allowance against our deferred tax assets.

We also follow the provisions of Financial Accounting Standards Board, or FASB, Interpretation No. 48, "Accounting for Uncertainty in Income Taxes, an Interpretation of SFAS 109," or 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, in our judgment, which is greater than 50% likely to be realized. We are currently not subject to income tax examinations and, in general, all tax years remain open due to net operating losses.

Interest and penalties are zero, and our policy for accounting for interest and penalties is to classify 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.

### **Interest and Other Income and Expense**

Interest and other income and expense consist primarily of interest income and interest expense. Interest income is primarily generated from our cash, cash equivalents and investments. Interest expense generally relates to the borrowings under our equipment financing lines.

### **Results of Operations**

#### ***Revenues***

We recorded total revenues of \$3.1 million in the first quarter of 2008 and \$3.2 million in the first quarter of 2007.

Research and development revenues from related party refers to revenues from our partner, GSK, which is also a stockholder of the Company. Research and development revenues from GSK were none and \$0.1 million in the first quarter of 2008 and 2007, respectively, and represented patent expense reimbursements.

License revenues from related parties refers to license revenue from our strategic alliances with Amgen and GSK. License revenues were \$3.1 million in both the first quarters of 2008 and 2007, and represented recognition of the upfront license fee and the premium paid on the common stock purchase by Amgen. As of March 31, 2008, the remaining balance of deferred revenue relating to the upfront license fee and stock purchase premium paid by Amgen was \$33.5 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.

We anticipate that total revenues for the year ending December 31, 2008 will be approximately \$12.0 million.

### ***Research and Development Expenses***

Research and development expenses were \$14.1 million in the first quarter of 2008, up from \$12.5 million in the first quarter of 2007. The increase in the first quarter of 2008 was primarily due to an increase of \$1.0 million for clinical and preclinical outsourcing costs as we advanced our drug candidates for the treatment of cardiovascular disease and cancer through clinical trials, as well as increases of \$0.3 million for compensation and benefit related costs and \$0.3 million for laboratory related expenses.

From a program perspective, the increase in spending in the first quarter of 2008 compared to the first quarter of 2007 was due to increases of \$1.0 million related to our mitotic kinesin inhibitor program, and \$1.4 million for our early research programs, partially offset by decreases in spending for our cardiac contractility program of \$0.3 million and for proprietary technologies of \$0.5 million.

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

	Three Months Ended	
	March 31, 2008	March 31, 2007
Mitotic kinesin inhibitors	\$ 2.0	\$ 1.0
Cardiac contractility	5.3	5.6
Proprietary technologies	0.7	1.2
All other research programs	6.1	4.7
Total research and development expenses	<u>\$ 14.1</u>	<u>\$ 12.5</u>

Clinical timelines, likelihood of success and total completion costs vary significantly for each drug candidate and are difficult to estimate. We anticipate that we will make determinations as to which early research programs to pursue and how much funding to direct to each program on an ongoing basis in response to the scientific and clinical success of each drug candidate and available resources. 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 research and development expenditures to continue to increase in 2008. We expect to advance research and development of our drug candidate CK-1827452 for the potential treatment of heart failure and our drug candidates ispinesib and SB-743921 for the potential treatment of cancer. We anticipate that research and development expenses for the year ending December 31, 2008 will be in the range of \$62.0 million to \$67.0 million.

### ***General and Administrative Expenses***

General and administrative expenses were \$4.2 million in the first quarter of 2008 compared with \$4.5 million in the first quarter of 2007. The decrease in the first quarter of 2008 was primarily due to lower patent and legal fees of \$0.4 million, offset in part by increased personnel expenses of \$0.1 million.

We expect that general and administrative expenses for the full year 2008 will continue the trend of increasing over prior years due to higher payroll-related expenses in support of our continuing corporate development activities, business development costs, expanding operational infrastructure, and costs associated with being a public company. We anticipate that general and administrative expenses for the year ending December 31, 2008 will be in the range of \$20.0 million to \$22.0 million.

### ***Interest and Other Income and Expense***

Interest and other income was \$1.4 million for the first quarter of 2008 compared with \$2.2 million for the first quarter of 2007. The decrease was due to lower interest income, resulting from lower average balances of cash, cash equivalents and investments and, from lower market interest rates earned on these investments.

Interest and other expense was \$0.1 million in the first quarter of 2008 and \$0.2 million in the first quarter of 2007 and primarily consisted of interest expense on our equipment financing line of credit.

## **Critical Accounting Policies**

The accounting policies that we consider to be our most critical (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, 2007.

In addition to the Critical Accounting Policies and Estimates summarized in our Annual Report on Form 10-K for the fiscal year ended December 31, 2007, we applied significant judgments and estimates in adopting SFAS No. 157, “Fair Value Measurements,” or SFAS 157. We used a discounted cash flow, or DCF, model to determine the estimated fair value of our investment in auction rate securities, or ARS, as of March 31, 2008. Due to the lack of observable market quotes on our ARS portfolio, we utilized DCF valuation models that relied exclusively on significant inputs that were generally less observable from objective sources. These inputs included estimates for interest rates, timing and amount of cash flows, credit quality, expected holding periods of the ARS and percentage of portfolio guaranteed by the Federal Family and Education Loan Program. The valuation models used estimates of observable market data including yields or spreads of trading instruments that we believed to be similar or comparable and assumptions that we believed to be reasonable non-observable inputs such as illiquidity premium and likelihood of redemption. The valuation of our ARS is subject to uncertainties that are difficult to predict. Factors that may impact their valuation 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 and ongoing strength and quality of market credit and liquidity.

## **Recent Accounting Pronouncements**

### *Recently Adopted Accounting Pronouncements*

Effective January 1, 2008, we adopted certain requirements of SFAS 157. See Note 1, “Organization and Summary of Significant Accounting Policies — *Fair Value of Financial Instruments.*”

On January 1, 2008, we adopted SFAS No. 159, “The Fair Value Option for Financial Assets and Financial Liabilities,” which permits entities to choose to measure many financial instruments and certain other items at fair value that are not currently required to be measured at fair value. The adoption of SFAS 159 had no effect on our financial position or results of operations.

We adopted Emerging Issues Task Force, or EITF, Issue No. 07-3, “Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities” on a prospective basis for new contracts entered into on or after January 1, 2008. EITF Issue No. 07-3 states that nonrefundable advance payments for future research and development activities should be deferred and recognized as an expense as the goods are delivered or the related services are performed. Entities should then continue to evaluate whether they expect the goods to be delivered or services to be rendered and, if an entity does not expect the goods to be delivered or services to be rendered, the capitalized advance payment should be charged to expense. The adoption of EITF Issue No. 07-3 had no effect on our financial position or results of operations.

In December 2007, the SEC issued Staff Accounting Bulletin, or SAB, No. 110, which addresses the continued use of the simplified method for estimating the expected term for stock based compensation. Previously, under SAB No. 107, the use of the simplified method was intended to be discontinued after December 31, 2007. Under SAB No. 110, companies may continue to use the simplified method in certain circumstances. We used the simplified method of estimating the expected term for stock based compensation from January 1, 2006, the date of adopting SFAS No. 123R, through December 31, 2007. Starting January 1, 2008, we ceased to use the simplified method under SAB No. 107. Instead, we used our own exercise history and extrapolate the life cycle of options outstanding as of March 31, 2008 to arrive our estimated expected term for new option grants.

### *Accounting Pronouncements Not Yet Adopted*

In November 2007, the EITF issued a consensus on EITF Issue No. 07-01, “Accounting for Collaboration Arrangements Related to the Development and Commercialization of Intellectual Property”, which is focused on how the parties to a collaborative agreement should account for costs incurred and revenue generated on sales to third parties, how sharing payments pursuant to a collaboration agreement should be presented in the income statement and certain related disclosure questions. EITF Issue No. 07-01 is to be applied retrospectively for collaboration arrangements in fiscal years beginning after December 15, 2008. We are currently evaluating the

impact on our financial statements of adopting EITF Issue No. 07-1.

In March 2008, the FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities," as an amendment to SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." SFAS No. 161 requires that the objectives for using derivative instruments be disclosed in terms of underlying risk and accounting designation. The fair value of derivative instruments and their gains and losses will need to be presented in tabular format in order to present a more complete picture of the effects of using derivative instruments. SFAS No. 161 is effective for financial statements issued for fiscal years beginning after November 15, 2008. We are currently evaluating the impact of adopting this pronouncement.

## **Liquidity and Capital Resources**

From August 5, 1997, our date of inception, through March 31, 2008, 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 \$124.6 million at March 31, 2008, down \$15.2 million from \$139.8 million at December 31, 2007. The decrease was primarily due to the use of cash to fund operations.

We have received net proceeds from the sale of equity securities of \$314.7 million from August 5, 1997, the date of our inception, through March 31, 2008, 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 the GSK Agreement in 2001, GSK made a \$14.0 million equity investment in the Company. GSK made additional equity investments in the Company in 2003 and 2004 of \$3.0 million and \$7.0 million, respectively.

In 2005, we entered into our first CEFF with Kingsbridge, or the 2005 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, from time to time under the 2005 CEFF, at our election, Kingsbridge purchased newly-issued shares of our common stock at a price between 90% and 94% of the volume weighted average price on each trading day during an eight day, forward-looking pricing period. We received gross proceeds from draw downs and sales of our common stock to Kingsbridge under the 2005 CEFF 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 CEFF with Kingsbridge.

In October 2007, we entered into a new CEFF with Kingsbridge, or 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, from time to time under the 2007 CEFF, 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 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 the 2007 CEFF. This warrant is exercisable beginning six months after the date of grant and for a period of three years thereafter. Under the terms of the 2007 CEFF, the maximum number of shares we may sell is 9,779,411 (exclusive of the shares underlying the warrant) which, under the rules of the NASDAQ Stock Market LLC, 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 the 2007 CEFF and there are no minimum commitments or minimum use penalties. The 2007 CEFF does not contain any restrictions on our operating activities, any automatic pricing resets or any minimum market volume restrictions. To date we have made no draw downs under the 2007 CEFF with Kingsbridge.

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

## [Table of Contents](#)

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 connection with our entry into the collaboration and option agreement with Amgen, we entered into a common stock purchase agreement 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, 2008, we have received \$54.3 million in non-equity payments from GSK and \$42.0 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, 2008. Interest earned on investments, excluding non-cash amortization of purchase premiums, was \$1.2 million in the first quarter of 2008, and \$24.7 million from August 5, 1997, the date of our inception, through March 31, 2008.

Net cash used by operating activities in the first quarter of 2008 was \$13.8 million and primarily resulted from our net loss of \$13.9 million.

Deferred revenue decreased \$3.1 million in the first quarter of 2008 to \$33.5 million at March 31, 2008, due to the amortization of deferred Amgen license revenue.

Net cash provided by investing activities was \$3.8 million in the first quarter 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. Restricted cash totaled \$4.1 million at March 31, 2008, down from \$5.2 million at December 31, 2007, with the decrease due to the contractual semi-annual reduction in the amount of security deposit required by our lender.

Net cash used by financing activities was \$1.0 million in the first quarter of 2008 and primarily represented principal payments on our lines of credit with General Electric Capital Corporation, or GE Capital. In August 2007, we secured a new line of credit with GE Capital of up to \$3.0 million to finance certain equipment until September 30, 2008. The line of credit is subject to our Master Security Agreement with GE Capital, dated February 2001 and as amended on March 24, 2005. Under the terms of the equipment financing line, funds borrowed by us from GE Capital are collateralized by our property and equipment purchased with such borrowed funds and other collateral. To date we have borrowed no funds under the August 2007 line.

As of March 31, 2008, our investment portfolio included \$19.1 million of AAA/Aaa rated student loan ARS, consisting of government-supported municipal debt obligations. The ARS, with total par value of \$20.0 million, were classified as long-term investments because of our inability to determine when our investments in ARS would settle. Typically the fair value of ARS approximates par value due to the frequent resets through the auction process. While we continue to earn interest on our ARS at the contractual rate, these investments are not currently trading and therefore do not currently have a readily determinable market value. Accordingly, the estimated fair value of ARS no longer approximates par value. We have recorded unrealized loss of \$0.9 million associated with our ARS as a component of stockholders' equity.

These ARS are 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. As of December 31, 2007, there were no ARS in an unrealized loss position and there were no failed auctions associated with our ARS through that date. Our ARS with auction reset dates prior to February 13, 2008 had successful auctions at which their interest rates were reset. In February 2008, we liquidated \$3.2 million of our auction rate securities at par, which were classified as short-term investment as of December 31, 2007. 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 in February and March 2008. Consequently, the investments are not currently liquid and we will not be able to access these funds until a future auction on these investments is successful, the issuer redeems the outstanding securities, the securities mature or we sell the securities in the secondary market. Maturity dates for these ARS range from 2036 to 2045. These failures resulted in the interest rates on these investments resetting to contractually stipulated "fail rates" that are variable based on short-term municipal bond or other market indices, or fixed rates that may result in us earning above-market interest rates on these investments.

## [Table of Contents](#)

As of March 31, 2008, future minimum payments under lease obligations and equipment financing lines were as follows (in thousands):

	<u>Within One Year</u>	<u>Two to Three Years</u>	<u>Four to Five Years</u>	<u>After Five Years</u>	<u>Total</u>
Operating leases	\$ 3,225	\$ 6,546	\$ 4,468	\$ 831	\$ 15,070
Equipment financing line	3,542	3,388	724	—	7,654
Total	<u>\$ 6,767</u>	<u>\$ 9,934</u>	<u>\$ 5,192</u>	<u>\$ 831</u>	<u>\$ 22,724</u>

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.

In future periods, we expect to incur substantial costs as we continue to expand our research programs and related research and development activities.

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

- the initiation, progress, timing, 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;
- if Amgen exercises its option, Amgen's decisions with regard to funding of development and commercialization of CK-1827452 or other compounds for the treatment of heart failure under our collaboration;
- GSK's decisions with regard to future funding of development of our drug candidates and potential drug candidates, including GSK-923295 and, if GSK exercises its option, either or both of isipinesib and SB-743921;
- 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, enforce and maintain selected strategic alliances and activities required for commercialization of our potential drugs;
- our plans or ability to establish development, sales, marketing or manufacturing capabilities and to achieve market acceptance for potential drugs;
- expanding and advancing our research programs;
- hiring of additional employees and consultants;
- expanding 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, long-term investments and interest earned on investments will be sufficient

## [Table of Contents](#)

to meet our projected operating requirements for at least the next 12 months. If, at any time, our prospects for internally financing our research and development programs decline, we may decide to reduce research and development expenses by delaying, discontinuing or reducing our funding of development of one or more of our drug candidates or potential drug candidates. Alternatively, we might raise funds through public or private financings, strategic relationships or other arrangements. There can be no assurance that the funding, if needed, will be available on attractive terms, or at all. Furthermore, any additional equity financing may be dilutive to stockholders and debt financing, if available, may involve restrictive covenants. Similarly, financing obtained through future co-development arrangements may require us to forego certain commercial rights to future drug candidates. Our failure to raise capital as and when needed could have a negative impact on our financial condition and our ability to pursue our business strategy.

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

As of March 31, 2008, 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, 2007.

### **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 the above risks to be a complete statement of all the potential risks or uncertainties that we face.*

### Risks Related To Our Business

***Our drug candidates are in the early stages of clinical testing and we have a history of significant losses and may not achieve or sustain profitability and, as a result, you may lose all or part of your investment.***

Our drug candidates are in the early stages of clinical testing and we must conduct significant additional clinical trials before we can seek the regulatory approvals necessary to begin commercial sales of our drugs. We have incurred operating losses in each year since our inception in 1997 due to costs incurred in connection with our research and development activities and general and administrative costs associated with our operations. We expect to incur increasing losses for at least several 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.

***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.***

We currently have no drugs for sale and we cannot guarantee that we will ever have marketable drugs. We must demonstrate that our drug candidates satisfy rigorous standards of safety and efficacy to the FDA and other regulatory authorities in the United States and 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 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 treatment of heart failure, and ispinesib, SB-743921 and GSK-923295, our drug candidates for the treatment of cancer, are currently our only drug candidates in clinical trials and 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 entry into clinical trials. Our commercial revenues, if any, will be derived from sales of drugs that we do not expect to be commercially available for several years, if at all. 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.

***We currently finance and plan to continue to finance our operations through the sale of equity, strategic alliances and debt financings, which may result in additional dilution to our stockholders, relinquishment of valuable technology rights or the imposition of restrictive covenants, or which may cease to be available on attractive terms or at all.***

We have funded all of our operations and capital expenditures with proceeds from both private and public sales of our equity securities, strategic alliances with GSK, Amgen, AstraZeneca and others, equipment financings, interest on investments and government grants. We believe that our existing cash and cash equivalents, future payments from GSK and Amgen, interest earned on investments, proceeds from equipment financings and potential proceeds from our 2007 CEFF will be sufficient to meet our projected operating requirements for at least the next 12 months. To meet our future cash requirements, we may raise funds through public or private equity offerings, strategic alliances or debt financings. To the extent that we raise additional funds by issuing equity securities, our stockholders may experience additional dilution. To the extent that we raise additional funds through 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, such financing may involve covenants that restrict our business activities. In addition, there can be no assurance that any such funding, if needed, will be available on favorable terms, or at all. If we can not raise the funds we need on favorable terms, or at all, our ability to conduct our business will be significantly harmed and our stock price could be negatively affected.

***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 demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA and other regulatory authorities in the United States and abroad, that such drug candidate is both sufficiently safe and effective. In clinical trials we will need to demonstrate efficacy for the treatment of specific indications and monitor safety throughout the clinical development process. None of our drug candidates have yet been demonstrated to be safe and effective in clinical trials and there is no assurance that they will. In addition, for each of our current preclinical compounds, we must adequately demonstrate satisfactory chemistry, formulation, stability and toxicity in order to file an investigational new drug application, or IND, that would allow us to advance that compound into clinical trials. If our preclinical studies, current clinical trials or future clinical trials are unsuccessful, our business and reputation 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 satisfactorily support the filing of an IND (or a foreign equivalent) with respect to our potential drug candidates. Even if these applications would be 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 a number of different tumor types. Similarly, Phase I clinical trials in healthy volunteers and clinical results from Phase I and II trials in patients do not necessarily predict the results of later-stage clinical trials, including the safety and efficacy profiles of any particular drug candidate. Data from Phase III clinical trials are necessary to establish whether a drug candidate is safe and efficacious for the applicable indication. In addition, there can be no assurance that the design of the clinical trials for any of our drug candidates is focused on appropriate indications, tumor types, patient populations, dosing regimens, safety or efficacy parameters, or other variables which will result in obtaining the desired safety or efficacy data to support regulatory approval to commercialize the drug. 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, there can be no assurance that the methods we select to assess particular safety or efficacy parameters will yield the same statistical precision in their estimation of 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, such data may not be sufficient to support approval by the FDA or any other U.S. or foreign regulatory authority. Preclinical and clinical data can be interpreted in different ways. Accordingly, FDA officials or officials from foreign regulatory authorities could interpret the data in different ways than we or our partners do which could delay, limit or prevent regulatory approval.

Administering any of our drug candidates or potential drug candidates may produce undesirable side effects, also known as adverse effects. Toxicities and adverse effects that we have observed in preclinical studies for some compounds in a particular research and development program may 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, or API, itself or from impurities or degradants that are present in the API or could form over time in the formulated drug candidate or the API. Such toxicities or adverse effects could delay or prevent the filing of an IND (or a foreign equivalent) with respect to such drug candidates or potential drug candidates or cause us to cease clinical trials with respect to any drug candidate. In clinical trials, administering any of our drug candidates to humans may produce adverse effects. For example, in clinical trials of ispinesib, the dose-limiting toxicity was neutropenia, a decrease in the number of a certain type of white blood cell that results in an increase in susceptibility to infection. In a Phase I clinical trial of SB-743921, the dose-limiting toxicities observed were: prolonged neutropenia, with or without fever and with or without infection; elevated transaminases and hyperbilirubinemia, both of which are abnormalities of liver function; and hyponatremia, which is a low concentration of sodium in the blood. In a Phase I clinical trial of CK-1827452, intolerable doses of CK-1827452 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 cardiac troponins I and T, which are markers of possible myocardial injury. If these or other adverse effects are severe or frequent enough to outweigh the potential efficacy of a drug candidate, our clinical trials for such drug candidate may be halted, delayed or interrupted. Furthermore, the FDA or other regulatory authorities could deny approval of such drug candidate for any or all targeted indications. The FDA, other regulatory authorities, our partners or we may suspend or terminate clinical trials at any time. Even if one or more of our drug candidates were approved for sale, 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 such drugs. Indications of potential adverse effects or toxicities which may occur in clinical trials and which we believe are not significant during the course of such clinical trials may later turn out to actually constitute serious adverse effects or toxicities when a drug has been used in large populations or for extended periods of time. 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 drugs resulting from our drug candidates, may significantly harm our reputation

and 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, especially in the heart failure and cancer indications that we are pursuing. According to industry studies, the entire drug development and testing process takes on average 12 to 15 years, and the fully capitalized resource cost of new drug development averages approximately \$800 million. However, individual clinical trials and individual drug candidates may incur a range of costs or time demands above or below this average. 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. In addition, we will need to develop suitable formulations of our drug candidates for use in clinical trials, such as an oral formulation of CK-1827452. We estimate that clinical trials of our most advanced drug candidates will continue for several years, but they 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;
- slower than expected rates of patient recruitment and enrollment, including as a result of competition for patients with other clinical trials, limited number of patients that meet the enrollment criteria, patients', investigators' or sites' reluctance to agree to the requirements of a protocol or the introduction of alternative therapies or drugs by others;
- for those drug candidates that are the subject of a strategic alliance, delays in reaching agreement with our partner as to appropriate development strategies;
- an investigational review board, or IRB, may require changes to a protocol that then require approval from regulatory agencies and other IRBs, or regulatory authorities may require changes to a protocol that then require approval from the IRBs;
- for clinical trials conducted outside of the United States, the time and resources required to identify, interpret and comply with foreign regulatory requirements or changes in those requirements;
- 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;
- inability to monitor patients adequately during or after treatment; and
- inability or unwillingness of medical investigators to follow our clinical protocols.

We do not know whether planned clinical trials will begin on time, 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 potential drug candidates and, to the extent we elect to develop a drug candidate without a strategic partner, we will need to expand our development capacity and will require additional funding.***

The development of drug candidates is complicated, and the resources that we currently have to carry out such development are limited. Pursuant to our collaboration and option agreement with Amgen, we are responsible for conducting Phase II clinical development for our drug candidate CK-1827452. We cannot engage another strategic partner for CK-1827452 until Amgen elects not to exercise its option to conduct later-stage clinical development for CK-1827452 or its option expires. If Amgen elects not to exercise its option to conduct later-stage clinical development for CK-1827452, we do not have an alternative strategic partner for that drug candidate. Pursuant to our amended collaboration and license agreement with GSK, we are responsible for conducting clinical development for our drug candidates ispinosib and SB-743921. Currently, we rely on GSK to conduct preclinical and clinical development for GSK-923295 and the NCI to conduct certain clinical trials for ispinosib. We cannot engage another strategic partner for ispinosib or SB-743921 until GSK's option to conduct later-stage clinical development for that drug candidate expires. If GSK elects to terminate its development activities with respect to GSK-923295, or not to exercise its option to conduct later-stage clinical development for either of ispinosib or SB-743921, we do not have an alternative strategic partner for these drug candidates.

For our drug candidates for which we expect to conduct clinical trials at our expense, such as CK-1827452, ispinosib and SB-743921, we plan to rely on contractors for the manufacture and distribution of clinical supplies. To the extent we conduct clinical trials for a drug candidate without support from a strategic partner, we will need to develop additional skills, technical expertise and resources necessary to carry out such development activities on our own or through the use of other third parties, such as contract research organizations, or CROs, and will incur significant additional costs.

We utilize CROs for our clinical trials within and outside of the United States. We do not have control over many aspects of our CROs' activities, and cannot fully control the amount or timing 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 such programs ourselves, and therefore may not complete their respective activities on schedule. CROs may also have relationships with our competitors and potential competitors, and may prioritize those relationships ahead of their relationships with us. Outside of the United States, we are particularly dependent on our CROs' expertise in communicating with clinical trial sites and regulatory authorities and ensuring that our clinical trials and related activities and regulatory filings comply with applicable local laws. The failure of CROs 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 laws, or our failure to properly coordinate and manage such activities, could increase the cost of our operations and delay or prevent the development, approval and commercialization of our drug candidates. In addition, if a CRO fails to perform as agreed, our ability to collect damages may be contractually limited.

If we fail to develop the additional skills, technical expertise and resources necessary to carry out the development of our drug candidates or to effectively manage our CROs carrying out such development, or if such CROs fail to perform as agreed, the commercialization of our drug candidates will be delayed or prevented.

***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. In addition, 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.

In particular, if the initial results of some 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 such time is relatively small. If GSK abandons GSK-923295, it would result in a delay in or prevent us from

## [Table of Contents](#)

commercializing GSK-923295, and would delay or prevent our ability to generate revenues. 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 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 or commercialization, curtail or abandon such clinical development or commercialization, or undertake and fund the clinical development of GSK-923295 or commercialization of the resulting drug ourselves. If we seek a new partner but are unable to do so on acceptable terms, or at all, or do not have sufficient funds to conduct such development or commercialization ourselves, we would have to curtail or abandon such development or commercialization, which could harm our business.

***If we fail to enter into and maintain successful strategic alliances for our drug candidates or potential drug candidates, we may have to reduce or delay our development of those drug candidates and potential drug candidates 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. However, we may not be able to negotiate additional strategic alliances on acceptable terms, if at all. If we are not able to maintain our existing strategic alliances or establish and maintain additional strategic alliances, we may have to limit the size or scope of, or delay, one or more of our drug development programs or research programs or undertake and fund these programs ourselves.

Our collaboration and license agreement with GSK grants it an option relating to development and commercialization rights for either or both of ispinesib and SB-743921. Our collaboration and option agreement with Amgen grants it an option relating to development and commercialization rights for CK-1827452. Each of GSK and Amgen can exercise its option during a defined period by paying us a specified option fee. We may be unable to provide to either or both of GSK and Amgen the necessary data to inform their decisions as to whether to exercise their respective options within our anticipated timeframe, or at all. In addition, either or both of GSK and Amgen may elect not to exercise its option, irrespective of the data that we provide to them. If GSK elects not to exercise its option for either or both of ispinesib and SB-743921, or Amgen elects not to exercise its option for CK-1827452, we do not have alternative strategic partners for these programs. Accordingly, we may have to limit the size or scope of, or delay, one or more of our these programs or undertake and fund these programs ourselves. Similarly, we expect to rely on strategic partners to advance and develop certain compounds from our skeletal muscle contractility and smooth muscle contractility programs. We may not be able to negotiate such strategic alliances on acceptable terms, if at all. If we are not able to establish and maintain such strategic alliances, we may have to limit the size or scope of, delay or not pursue one or more of our these programs, or undertake and fund these programs ourselves.

If we elect to increase our expenditures to fund drug development programs or research programs on our own, as we have under the November 2006 amendment to our collaboration and license agreement with GSK through which we assumed responsibility for the clinical development of ispinesib and SB-743921, we will need to obtain additional capital, which may not be available on acceptable terms, or at all.

***The success of our development activities depends in part on the performance of our strategic partners and the NCI, 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 the NCI, a government agency, to conduct several clinical trials of ispinesib and GSK to conduct clinical development of GSK-923295. There can be no assurance that GSK or the NCI, or both, will not modify their respective plans to conduct such clinical development or will proceed with such clinical development diligently. In addition, if GSK exercises its option with respect to either or both of ispinesib and SB-743921, or if Amgen exercises its option with respect to CK-1827452, they will then be responsible for the clinical development of those respective drug candidates. We have no control over the conduct of clinical development being conducted or that may be conducted in the future by GSK, the NCI or Amgen, including the timing of initiation, termination or completion of clinical trials, the analysis of data arising out of such clinical trials or the timing of

## [Table of Contents](#)

release of complete data concerning such clinical trials, which may impact our ability to report on their results. If our partners fail to perform as we expect, our potential for revenue from drugs developed through our strategic alliances, if any, could be dramatically reduced.

***We have no manufacturing capacity and depend on our strategic partners or 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 on a clinical or commercial scale. As a result, we rely on GSK to be responsible for such activities for the ongoing clinical development of GSK-923295. For CK-1827452, ispinosib, SB-743921 and any future drug candidates for which we conduct clinical development, 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. If any of our existing or future contract manufacturers fail to perform as agreed, 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 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, product recalls or withdrawals, delays or failures in product testing or delivery, cost overruns or other problems that could seriously hurt our business. Contract drug manufacturers often encounter difficulties involving production yields, quality control and quality assurance, as well as 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. Each contract manufacturer must pass a pre-approval inspection before we can obtain marketing approval for any of our drug candidates and following approval will be subject to ongoing periodic unannounced inspections by the FDA, the U.S. Drug Enforcement Agency and other regulatory agencies, to ensure strict compliance with current good manufacturing practices and other applicable government regulations and corresponding foreign standards. However, we do not have control over our contract manufacturers' compliance with these regulations and standards. If one of our contract manufacturers fails to pass its pre-approval inspection or maintain ongoing compliance, the production of our drug candidates could be interrupted, resulting in delays, 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.

If the FDA or other regulatory agencies approve any of our drug candidates for commercial sale, we will need to manufacture them in larger quantities. To date, our drug candidates have been manufactured only in small quantities for preclinical testing and clinical trials. We may not be able to successfully increase the manufacturing capacity, whether in collaboration with contract manufacturers or on our own, for any of our drug candidates in a timely or economical manner, or at all. Significant scale-up of manufacturing may require additional validation studies, which the FDA must review and approve. If we are unable to successfully increase the manufacturing capacity for a drug candidate, the regulatory approval or commercial launch of any related drugs may be delayed or there may be a shortage in supply. If any 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 such improvements.

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 such contract manufacturer 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 must approve that site. Such approval would require new 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 after

receipt of FDA approval. It may be difficult or impossible for us to find a replacement manufacturer on acceptable terms quickly, or at all, which would delay or prevent our ability to commercialize our drugs.

***We may not be able to successfully scale-up manufacture 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. 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 such 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, regulatory approval or commercial launch of that drug candidate may be delayed or there may be a shortage in supply, which could significantly harm our business.

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

We currently have no sales, marketing or distribution capabilities. To commercialize our drugs that we determine not to market on our own, we will depend on strategic alliances with third parties, such as GSK and Amgen, which have established distribution systems and direct sales forces. If we are unable to enter into such arrangements on acceptable terms, we may not be able to successfully commercialize such drugs.

With or without a partner, we plan to commercialize on our own 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 with supporting distribution capabilities. Developing such an organization is expensive and time-consuming and could delay a product launch. In addition, we may not be able to develop this capacity efficiently, cost-effectively or at all, which could make us unable to commercialize our drugs.

To the extent that we are not successful in commercializing any drugs ourselves or through a strategic alliance, our product revenues will suffer, our business and reputation will suffer and the price of our common stock could decrease.

***Our focus on the discovery and development of drug candidates directed against specific proteins and pathways within the cytoskeleton is unproven, and we do not know whether we will be able to develop any drug candidates of commercial value.***

We have focused our drug discovery and development activities on the cytoskeleton. While a number of commonly used drugs and a growing body of research validate the importance of the cytoskeleton in the origin and progression of a number of diseases, no existing drugs specifically and directly interact with the cytoskeletal proteins and the pathways that our drug candidates seek to modulate. As a result, we cannot be certain that our drug candidates and potential drug candidates will appropriately modulate the targeted cytoskeletal proteins and pathways or produce commercially viable drugs that safely and effectively treat heart failure, cancer or other diseases, or that the results we have seen in preclinical models will translate into similar results in humans. In addition, even if we are successful in developing and receiving regulatory approval for a commercially viable drug for the treatment of one disease focused on the cytoskeleton, we cannot be certain that we will also be able to develop and receive regulatory approval for drug candidates for the treatment of other forms of that disease or other diseases. If we or our partners fail to develop and commercialize our drug candidates, we will not achieve commercial success, which would materially harm our business.

***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

## [Table of Contents](#)

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, isipinesib, 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 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 United States Patent and Trademark Office, or PTO, and its foreign counterparts use to grant patents are not always applied predictably or uniformly and are ultimately subject to change. To date, no consistent policy has emerged regarding the breadth of claims allowed in biotechnology and pharmaceutical patents. Thus, we cannot be sure that any patents will issue from any pending or future patent applications owned by or licensed to us. Even if patents do issue, we cannot be sure that the claims of these patents will be held valid or enforceable by a court of law, will provide us with any significant protection against competitive products, or will afford us a commercial advantage over competitive products. For example:

- we or our licensors might not have been the first to make the inventions covered by each of our pending patent applications and issued patents;
- we or our licensors might not have been the first to file patent applications for these inventions;
- 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;
- our and our licensors' issued patents may not provide a basis for commercially viable drugs or therapies, or may not provide us with any competitive advantages, or may be challenged and invalidated by third parties;
- our or our licensors' patent applications or patents may be subject to interference, opposition or similar administrative proceedings;
- we may not develop additional proprietary technologies or drug candidates that are patentable; or
- the patents of others may prevent us or our partners from discovering, developing or commercializing our drug candidates.

The laws of 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 such 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; therefore, we may not appropriately protect this intellectual property and could thus lose valuable intellectual property rights. In addition, the legal protection afforded to inventors and owners of intellectual property in countries outside of the United States may not be as protective of intellectual property rights as in the United States, and we may, therefore, 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 a license to certain United States patents and pending United States and foreign patent applications 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.

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.

## [Table of Contents](#)

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. Senate is currently considering a bill 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. Recently, the PTO adopted new rules that were to become effective on November 1, 2007, regarding processes for obtaining patents in the United States. However, the U.S. District Court for the Eastern District of Virginia issued an injunction preventing implementation of the new rules until a consolidated lawsuit challenging the rules is resolved. The new rules are numerous and complex and their impact, as well as the resolution of the injunction and pending lawsuit, is still uncertain. The new rules, if made effective, generally are expected to make it more difficult for patent applicants to obtain patents, especially with regard to biotechnology products and processes. The rules changes, if they were to become effective, would likely make it more difficult for us and others to obtain patent protection in the United States for any future drug candidates.

If we do not obtain adequate intellectual property protection for our products in the United States, competitors could duplicate them without repeating the extensive testing that we had been required to undertake to obtain approval of the products by the FDA. Regardless of any patent protection, under the current statutory framework the FDA is prohibited by law from approving any generic version of any of our products for at least five years after it has approved our product. Upon the expiration of that period, or if that time period is altered, the FDA could approve a generic version of our product unless we have patent protection sufficient for us to block that generic version. Without sufficient patent protection, the applicant for a generic version of our product would only be required to conduct a relatively inexpensive study to show that its product is bioequivalent to our product, and would not have to repeat the studies that we conducted to demonstrate that the product is safe and effective. In the absence of adequate patent protection in other countries, competitors may similarly be able to obtain regulatory approval in those countries of products that duplicate our products.

We also rely on trade secrets to protect our technology, especially where we believe patent protection is not appropriate or obtainable. However, trade secrets are difficult to protect. While we 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 such persons may not be enforceable or provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, our enforcement efforts would be expensive and time-consuming, and the outcome would be unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Moreover, if our competitors independently develop information that is equivalent to our trade secrets, it will be more difficult for us to enforce our rights and our business could be harmed.

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

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

Our ability to commercialize drugs depends on our ability to sell such drugs without infringing the patents or other proprietary rights of third parties. Numerous 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 exploring for 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 may later result in issued patents that our drug candidates may infringe. There could also be existing patents of which we are not aware that our drug candidates may inadvertently infringe.

Patent protection is afforded on a country by country basis. Currently, we are aware of an issued U.S. patent and at least one pending U.S. patent application assigned to Curis, Inc., or Curis, relating to certain compounds in the quinazolinone class. Ispinesib falls into this class of compounds. The Curis U.S. patent claims a method of use for inhibiting signaling by what is called the hedgehog pathway using certain such 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. We are also aware that two of the Australian applications have been allowed and two of the European applications have been granted. In Europe, Australia and elsewhere, the grant of a patent may be opposed by one or more parties. We have opposed the granting of certain such patents to Curis in Europe and in Australia. One of the European patents which we opposed was recently revoked and is no longer valid in Europe.

## [Table of Contents](#)

Curis has appealed this decision. Curis or a third party may assert that the manufacture, use, importation or sale of ispinosib 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 such 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 obtain a license to these patents, we cannot guarantee that we would be able to obtain such a license on commercially reasonable terms, or at all.

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, Array Biopharma Inc., ArQule, Inc., and AstraZeneca). 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 their 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, with or without merit, can be costly and time-consuming to litigate and can delay the regulatory approval process and divert management's attention from our core business strategy;
- substantial damages for past infringement which we may have to pay if a court determines that our drugs or technologies infringe a competitor's patent or other proprietary rights;
- a court prohibiting us from selling or licensing our drugs or technologies unless the holder licenses the patent or other proprietary rights to us, which it is not required to do; and
- if a license is available from a holder, we may have to pay substantial royalties or grant cross licenses to our patents or other proprietary rights.

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 scientific advisors could impair our ability to obtain patent protection or protect our proprietary information, which, in either case, would have a significant impact on our business.***

Inventions discovered under our strategic alliance agreements 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 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 scientific advisors have contractual rights to publish data and other proprietary information, subject to our prior review. Publications by our research collaborators and scientific advisors containing such information, either with our permission or in contravention of their agreements with us, 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.

***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 at our expense, we will need to raise additional capital to:

- expand our research and development and technologies;
- fund clinical trials and seek regulatory approvals;
- build or access manufacturing and commercialization capabilities;
- implement additional internal systems and infrastructure;

## [Table of Contents](#)

- 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 cost 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.

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

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

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

Our performance is substantially dependent 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, scientific or technical staff may significantly delay or prevent the achievement of drug development and other business objectives by diverting management's attention to transition matters and identification of suitable replacements, and could have a material adverse effect on our business, operating results and financial condition. We also rely on consultants and advisors to assist us in formulating our research and development strategy. All of our consultants and advisors are either self-employed or employed by other organizations, and they may have conflicts of interest or other commitments, such as consulting or advisory contracts with other organizations, that may affect their ability to contribute to us.

In addition, we believe that we will need to recruit additional executive management and scientific and technical personnel. There is currently intense competition for skilled executives and employees with relevant scientific and technical expertise, and this competition is likely to continue. 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.

## Risks Related To Our Industry

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

We compete with companies that are also developing drug candidates that focus on the cytoskeleton, as well as companies that have developed drugs or are developing alternative drug candidates for cardiovascular diseases, cancer and other diseases for which our compounds may be useful treatments. For example, if CK-1827452 or any other of our compounds is approved for marketing by the FDA for heart failure, that compound could compete against current generically available therapies, such as milrinone, dobutamine or digoxin or newer marketed drugs such as nesiritide, as well as potentially against other novel drug candidates in development such as urocortin II, which is being developed by Neurocrine Biosciences, Inc.; ularitide, which is being developed by EKR Therapeutics, Inc.; CD-NP, which is being developed by Nile Therapeutics, Inc.; and levosimendan, which is being developed in the United States by Abbott Laboratories, in collaboration with Orion Pharma, and is commercially available in a number of countries outside of the United States.

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 could compete against existing cancer treatments such as paclitaxel, 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, Array Biopharma Inc., ArQule, Inc. and others are conducting research and development focused on KSP and other mitotic kinesins. In addition, Bristol-Myers Squibb, Merck & Co., Inc., Novartis, Genentech, AstraZeneca, Kosan Biosciences Incorporated, Hoffman-La Roche Ltd. 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 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;

## [Table of Contents](#)

- 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. Because our research approach integrates many technologies, it may be difficult for us to stay abreast of the rapid changes in each technology. If we fail to stay at the forefront of technological change we may be unable to compete effectively. Our competitors may render our technologies obsolete by advances in existing technological approaches or the development of new or different approaches, potentially eliminating the advantages in our drug discovery process that we believe we derive from our research approach and proprietary technologies.

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

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

Obtaining NDA approval can be a lengthy, expensive and uncertain process. In addition, failure to comply with the 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 also has substantial discretion in the drug approval process. Despite the time and expense exerted, failure can occur at any stage, and we could encounter problems that cause us to abandon clinical trials or to repeat or perform additional preclinical testing and clinical trials. The number and focus of preclinical studies and clinical trials that will be required for FDA approval varies depending on the drug candidate, the disease or condition that the drug candidate is designed to address, and the regulations applicable to any particular drug candidate. The FDA can delay, limit or deny approval of a drug candidate for many reasons, including, but not limited to:

- a drug candidate may not be safe or effective;
- the FDA may not find the data from preclinical testing and clinical trials sufficient;
- the FDA might not approve our or our contract manufacturer's processes or facilities; or
- the FDA may change its approval policies or adopt new regulations.

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 will also be subject to ongoing FDA obligations and continued regulatory review, such as continued safety reporting requirements, and we may also be subject to additional FDA post-marketing obligations, all of which may result in significant expense and limit our ability to commercialize our potential drugs.***

Any regulatory approvals that we or our partners receive for our drug candidates may be subject to limitations on the indicated uses for which the drug may be marketed or contain requirements for potentially costly post-marketing follow-up studies. In addition, if the FDA approves any of our drug candidates, the labeling, packaging, adverse event reporting, storage, advertising, promotion and record-keeping for the drug will be subject to extensive regulatory requirements. The subsequent discovery of previously unknown

## [Table of Contents](#)

problems with the drug, including adverse events of unanticipated severity or frequency, or the discovery that adverse effects or toxicities previously 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, and could include withdrawal of the drug from the market.

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

- timing of market introduction of competitive drugs;
- 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.***

There is significant uncertainty related to the coverage and reimbursement of newly approved drugs. The commercial success of our potential drugs in both domestic and international markets is substantially dependent on whether third-party coverage and reimbursement is available for the ordering of our potential drugs by the medical profession for use by their patients. Medicare, Medicaid, health maintenance organizations and other third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement of new drugs, and, as a result, they may not cover or provide adequate payment for our potential drugs. They may not view our potential drugs as cost-effective and reimbursement may not be available to consumers or may not be sufficient to allow our potential drugs to be marketed on a competitive basis. If we are unable to obtain adequate coverage and reimbursement for our potential drugs, our ability to generate revenue may 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 may 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 currently maintain product liability insurance. We cannot predict all the possible harms or adverse effects that may result from our clinical trials. We may not have sufficient resources to pay for any liabilities resulting from a claim excluded from, or beyond the limit of, our insurance coverage. 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

## [Table of Contents](#)

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, once we have commercially launched 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 manufactured in facilities licensed and regulated by the FDA. We intend to secure limited product liability insurance coverage, but may not be able to obtain such insurance on acceptable terms with adequate coverage, or at reasonable costs. There is also a risk that third parties that we have agreed to indemnify could incur liability, or that third parties that have agreed to indemnify us do not fulfill their obligations. Even if we were ultimately successful in product liability litigation, the litigation would consume substantial amounts of our financial and managerial resources and may create adverse publicity, all of which would impair our ability to generate sales of the affected product as well as our other potential drugs. Moreover, product recalls may be issued at our discretion or at the direction of the FDA, other governmental agencies or other companies having regulatory control for drug sales. If product recalls occur, they are generally expensive and often have an adverse effect on the image of the drugs being recalled as well as the reputation of the drug's developer or manufacturer.

***We may be subject to damages resulting from claims that we or our employees have wrongfully used or disclosed alleged trade secrets of their former employers.***

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

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

Our research and development processes involve the controlled use of hazardous materials, including chemicals 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.

In addition, our partners may use hazardous materials in connection with our strategic alliances. To our knowledge, their work is performed in accordance with applicable biosafety regulations. In the event of a lawsuit or investigation, however, we could be held responsible for any injury caused to persons or property by exposure to, or release of, these hazardous materials used by these parties. Further, we may be required to indemnify our partners against all damages and other liabilities arising out of our development activities or drugs produced in connection with these strategic alliances, which could be costly and time-consuming and distract management.

***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.***

Important documents and records, such as hard copies of our laboratory books and records for our drug candidates and compounds, are located in our corporate headquarters at a single location in South San Francisco, California near active earthquake zones. In the event of a natural disaster, such as an earthquake or flood, a catastrophic event such as a disease pandemic or terrorist attack or localized extended outages of critical utilities or transportation systems, we do not have a formal business continuity or disaster recovery plan, and could therefore experience a significant business interruption. 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 Our Common Stock

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

The stock market, particularly in recent years, has experienced significant volatility, particularly with respect to pharmaceutical, biotechnology and other life sciences company stocks. The volatility of pharmaceutical, biotechnology and other life sciences company stocks often does not relate to the operating performance of the companies represented by the stock. Factors that could cause 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 for the treatment of heart failure or cancer, including the current and proposed clinical trials for CK-1827452 for heart failure, ispinesib for leukemia, pediatric solid tumors and breast cancer, SB-743921 for Hodgkin and non-Hodgkin lymphoma, and GSK-923295 for cancer, and 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;
- announcements concerning clinical trials;
- 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;
- developments in establishing new strategic 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 commercial 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.

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, 2008, our executive officers, directors and their affiliates beneficially owned or controlled approximately 26.1% 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.

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

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley, new Securities and Exchange Commission 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 such costs. For example, compliance with the internal control requirements of Sarbanes-Oxley Section 404 has to date required the commitment of significant resources to document and test the adequacy of our internal control over financial reporting. While 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, 2007, our internal control over financial reporting was effective, 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. 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.

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

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

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

***Our common stock 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.

## 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 the 2007 CEFF with Kingsbridge. The 2007 CEFF 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. Kingsbridge will not be obligated to purchase shares under the 2007 CEFF unless certain conditions are met, which include a minimum price 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 the 2007 CEFF; and the continued listing of our stock on NASDAQ. In addition, Kingsbridge is permitted to terminate the 2007 CEFF 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 the 2007 CEFF, or if the 2007 CEFF is terminated by Kingsbridge, we may be unable to access capital on favorable 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 draw down, 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, calculated on the basis of the number of shares held by Kingsbridge (exclusive of shares that Kingsbridge may hold pursuant to exercise of the Kingsbridge warrant) 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.

Should we sell shares to Kingsbridge under the 2007 CEFF, or issue shares in lieu of a blackout payment, it will have a dilutive effect on the holdings of our current stockholders, and may result in downward pressure on the price of our common stock. If we draw down under the 2007 CEFF, we will issue shares to Kingsbridge at a discount of up to 10 percent from the volume weighted average price of our common stock. If we draw down amounts under the 2007 CEFF when our share price is decreasing, we will need to issue more shares to raise the same amount than if our stock price was higher. Issuances 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, or ARS, that represent investments in pools of assets. These ARS are 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. 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 \$0.9 million of unrealized loss in other comprehensive income (loss) 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 in other comprehensive income (loss) or impairment charges 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. If we are unable to access the funds underlying 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, or at all, and our business could be adversely effected.

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

We made no repurchases of our common stock during the three months ended March 31, 2008. As of March 31, 2008, there were no remaining shares of common stock subject to repurchase by us.

[Table of Contents](#)

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

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

None

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

<b>Exhibit Number</b>		<b>Exhibit Description</b>
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 Company.
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	(1)	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Company to Bristow Investments, L.P.
4.6	(1)	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Company to the Laurence and Magdalena Shushan Family Trust.
4.7	(1)	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Company to Slough Estates USA Inc.
4.8	(3)	Warrant for the purchase of shares of common stock, dated October 28, 2005, issued by the Company to Kingsbridge Capital Limited.
4.9	(3)	Registration Rights Agreement, dated October 28, 2005, by and between the Company and Kingsbridge Capital Limited.
4.10	(4)	Registration Rights Agreement, dated as of December 29, 2006, by and between the Company and Amgen Inc.
4.11	(5)	Warrant for the purchase of shares of common stock, dated October 15, 2007, issued by the Company to Kingsbridge Capital Limited.
4.12	(5)	Registration Rights Agreement, dated October 15, 2007, by and between the Company and Kingsbridge Capital Limited.
10.66*	(6)	Scientific Advisory Board Consulting Agreement, dated April 1, 2008, by and between the Company and James H. Sabry.

[Table of Contents](#)

<u>Exhibit Number</u>	<u>Exhibit Description</u>
10.67	(6) Executive Employment Agreement, dated March 31, 2008, by and between the Company and Michael Rabson.
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).

---

\* 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.

- (1) Incorporated by reference from our registration statement on Form S-1, registration number 333-112261, declared effective by the Securities and Exchange Commission on April 29, 2004.
- (2) Incorporated by reference from our 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 Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 2, 2008.

**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, 2008

CYTOKINETICS, INCORPORATED  
(Registrant)

/s/ Robert I. Blum

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

/s/ Sharon Surrey-Barbari

Sharon Surrey-Barbari  
Senior Vice President, Finance and Chief Financial  
Officer (Principal Financial Officer)

**EXHIBIT INDEX**

<b>Exhibit Number</b>		<b>Exhibit Description</b>
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 Company.
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	(1)	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Company to Bristow Investments, L.P.
4.6	(1)	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Company to the Laurence and Magdalena Shushan Family Trust.
4.7	(1)	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Company to Slough Estates USA Inc.
4.8	(3)	Warrant for the purchase of shares of common stock, dated October 28, 2005, issued by the Company to Kingsbridge Capital Limited.
4.9	(3)	Registration Rights Agreement, dated October 28, 2005, by and between the Company and Kingsbridge Capital Limited.
4.10	(4)	Registration Rights Agreement, dated as of December 29, 2006, by and between the Company and Amgen Inc.
4.11	(5)	Warrant for the purchase of shares of common stock, dated October 15, 2007, issued by the Company to Kingsbridge Capital Limited.
4.12	(5)	Registration Rights Agreement, dated October 15, 2007, by and between the Company and Kingsbridge Capital Limited.
10.66*	(6)	Scientific Advisory Board Consulting Agreement, dated April 1, 2008, by and between the Company and James H. Sabry.
10.67	(6)	Executive Employment Agreement, dated March 31, 2008, by and between the Company and Michael Rabson.
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).

---

\* 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.

[Table of Contents](#)

- (1) Incorporated by reference from our registration statement on Form S-1, registration number 333-112261, declared effective by the Securities and Exchange Commission on April 29, 2004.
- (2) Incorporated by reference from our 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 Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 2, 2008.

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, 2008

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 Surrey-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, 2008

By: /s/ Sharon Surrey-Barbari  
Sharon Surrey-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, 2008 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, 2008

/s/ Robert I. Blum

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

/s/ Sharon Surrey-Barbari

Sharon Surrey-Barbari  
Senior Vice President, Finance and Chief Financial Officer  
(Principal Financial Officer)