Table of Contents

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, 2005

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	**94-3291317**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**
280 East Grand Avenue	**94080**
South San Francisco, California	**(Zip Code))**
(Address of principal executive offices)	

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 an accelerated filer (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, 2005: 28,520,415

CYTOKINETICS, INCORPORATED

TABLE OF CONTENTS FOR FORM 10-Q

FOR THE QUARTER ENDED MARCH 31, 2005

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

CYTOKINETICS, INCORPORATED
(A DEVELOPMENT STAGE ENTERPRISE)

CONDENSED BALANCE SHEETS
(In thousands, except share and per share data)
(Unaudited)

	March 31, 2005	December 31, 2004 (1)
Assets		
Current Assets:		
Cash and cash equivalents	$ 14,816	$ 13,061
Short-term investments	86,809	92,637
Related party accounts receivable	131	53
Related party notes receivable — short-term portion	650	713
Prepaid and other current assets	2,419	2,603
Total current assets	104,825	109,067
Long-term investments	—	4,555
Property and equipment, net	6,727	7,336
Related party notes receivable	350	387
Restricted cash	5,136	5,980
Other assets	794	776
Total assets	$ 117,832	$ 128,101
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 1,252	$ 2,059
Accrued liabilities	3,780	3,697
Related party accrued liabilities	345	96
Short-term portion of equipment financing lines	2,421	2,387
Short-term portion of deferred revenue	4,299	2,800
Total current liabilities	12,097	11,039
Long-term portion of equipment financing lines	7,490	8,106
Long-term portion of deferred revenue	700	1,400
Total liabilities	20,287	20,545
Stockholders' equity:		
Convertible preferred stock, $0.001 par value:		
Authorized: 10,000,000 shares; Issued and outstanding: none	—	—
Common stock, $0.001 par value:		
Authorized: 120,000,000 shares; Issued and outstanding: 28,509,600 shares in 2005 and 28,453,173 shares in 2004	29	28
Additional paid-in capital	243,051	243,239
Deferred stock-based compensation	(3,552)	(4,251)
Accumulated other comprehensive loss	(181)	(188)
Deficit accumulated during the development stage	(141,802)	(131,272)
Total stockholders' equity	97,545	107,556
Total liabilities and stockholders' equity	$ 117,832	$ 128,101

(1) The condensed balance sheet at December 31, 2004 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)

	Three Months Ended		Period from August 5, 1997 (date of inception) to March 31, 2005
	March 31, 2005	March 31, 2004	
Revenues:			
Research and development revenues from related party	$ 1,572	$ 4,767	$ 33,837
Research and development, grant and other revenues	300	400	2,116
License revenues from related party	700	700	10,500
Total revenues	2,572	5,867	46,453
Operating expenses:			
Research and development (1)	10,537	9,360	150,841
General and administrative (1)	3,143	2,475	43,668
Total operating expenses	13,680	11,835	194,509
Operating loss	(11,108)	(5,968)	(148,056)
Interest and other income	712	174	9,502
Interest and other expense	(134)	(138)	(3,247)
Net loss	$ (10,530)	$ (5,932)	$ (141,801)
Net loss per common share — basic and diluted	$ (0.37)	$ (2.56)	
Weighted-average number of shares used in computing net loss per common share — basic and diluted	28,382	2,316	
(1) Includes the following stock-based compensation charges:			
Research and development	$ 229	$ 221	$ 2,287
General and administrative	173	168	1,240
	$ 402	$ 389	$ 3,527

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

CYTOKINETICS, INCORPORATED
(A DEVELOPMENT STAGE ENTERPRISE)

CONDENSED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Three Months Ended		Period from August 5, 1997 (date of inception) to March 31, 2005
	March 31, 2005	March 31, 2004	
Cash flows from operating activities:			
Net loss	$ (10,530)	$ (5,932)	$ (141,801)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization of property and equipment	788	819	12,959
Loss on disposal of property and equipment	—	9	317
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	174
Non-cash expense for acceleration of options	—	—	20
Stock-based compensation	402	389	3,527
Changes in operating assets and liabilities:			
Accounts receivable	—	74	—
Related party accounts receivable	(78)	(15)	(322)
Prepaid and other assets	142	(1,477)	(2,912)
Accounts payable	(513)	(557)	1,189
Accrued liabilities	117	347	3,696
Related party accrued liabilities	249	—	345
Deferred revenue	799	(700)	4,999
Net cash used in operating activities	(8,601)	(7,020)	(117,661)
Cash flows from investing activities:			
Purchases of investments	(14,300)	—	(375,132)
Proceeds from sales and maturities of investments	24,690	5,345	288,226
Purchases of property and equipment	(473)	(128)	(19,966)
Proceeds from sale of property and equipment	—	—	24
(Increase) decrease in restricted cash	844	—	(5,136)
Issuance of related party notes receivable	—	—	(1,146)
Proceeds from payments of related party notes receivable	100	—	146
Net cash provided by (used in) investing activities	10,861	5,217	(112,984)
Cash flows from financing activities:			
Proceeds from initial public offering, net of issuance costs	—	—	94,004
Proceeds from sale of common stock to related party	—	—	7,000
Proceeds from other issuances of common stock	98	220	1,911
Proceeds from issuance of preferred stock, net of issuance costs	—	—	133,172
Repurchase of common stock	(22)	—	(63)
Proceeds from equipment financing lines	—	—	16,327
Repayment of equipment financing lines	(581)	(492)	(6,890)
Net cash provided by (used in) financing activities	(505)	(272)	245,461
Net increase (decrease) in cash and cash equivalents	1,755	(2,075)	14,816
Cash and cash equivalents, beginning of period	13,061	10,991	—
Cash and cash equivalents, end of period	$ 14,816	$ 8,916	$ 14,816

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 to discover, develop and commercialize novel small molecule drugs specifically targeting the cytoskeleton. The Company has been primarily engaged in conducting research, developing drug candidates and product 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 was declared effective by the Securities and Exchange Commission on April 29, 2004. The Company's common stock commenced trading on the Nasdaq National Market on April 29, 2004 under the trading symbol "CYTK."

Prior to achieving profitable operations, the Company intends to continue to fund operations through the additional sale of equity securities, payments from strategic collaborations, government grant awards, debt financing and interest income.

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 the Company's management believes are necessary for fair presentation 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, 2004 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, 2004.

Certain reclassifications have been made to prior year amounts in order to conform to the current year presentation.

Comprehensive Loss

Comprehensive loss consists of net loss and other comprehensive gain (loss). Other comprehensive gain (loss) includes certain changes in stockholder's equity that are excluded from net loss. Comprehensive loss and its components for the quarter ended March 31, 2005 and 2004 are as follows (in thousands):

	Three Months Ended	
	March 31, 2005	March 31, 2004
Net loss	$ (10,530)	$ (5,932)
Change in unrealized gain (loss) on investments	7	21
Comprehensive loss	$ (10,523)	$ (5,911)

Restricted Cash

In accordance with the terms of the Company's line of credit agreement with GE Capital, the Company is obligated to maintain a certificate of deposit with the lender. The balance of the certificate of deposit was $5.1 million and $6.0 million at March 31, 2005 and December 31, 2004, respectively, and was classified as restricted cash.

Stock-based Compensation

The Company accounts for stock-based employee compensation arrangements in accordance with the provisions of Accounting Principles Board ("APB") No. 25, "Accounting for Stock Issued to Employees" and Statement of Financial Accounting Standards ("SFAS") No. 123, "Accounting for Stock-Based Compensation," and complies with the disclosure requirements of SFAS No. 148, "Accounting for Stock-Based Compensation — Transition and Disclosure — an amendment of FASB Statement No. 123". Under APB No. 25, compensation expense is based on the difference, if any, on the date of grant between the estimated fair value of the Company's common stock and the exercise price of the stock option or other instrument.

The following table illustrates the effect on net loss and net loss per common share as if the Company had applied the fair value recognition provisions of SFAS No. 123 to stock-based employee compensation (in thousands, except per share data):

	Three Months Ended	
	March 31, 2005	March 31, 2004
Net loss, as reported	$ (10,530)	$ (5,932)
Add: Stock-based employee compensation expense included in reported net loss	357	253
Deduct: Total stock-based employee compensation determined under fair value based method for all awards	(863)	(317)
Adjusted net loss	$ (11,036)	$ (5,996)
Net loss per common share, basic and diluted:		
As reported	$ (0.37)	$ (2.56)
Adjusted	$ (0.39)	$ (2.59)

The value of each employee stock option granted is estimated on the date of grant under the fair value method using the Black-Scholes option pricing model. Prior to the initial public offering on April 29, 2004, the value of each employee stock option grant was estimated on the date of grant using the minimum value method. Under the minimum value method, a volatility factor of 0% is assumed.

The value of employee stock options and employee stock purchase rights was estimated based the following weighted average assumptions:

	Employee Stock Options Three Months Ended		Employee Stock Purchase Plan Three Months Ended	
	March 31, 2005	March 31, 2004	March 31, 2005	March 31, 2004
Risk-free interest rate	4.21%	2.96%	2.15%	—
Volatility	80%	—	76%	—
Expected life (in years)	5	5	1.25	—
Expected dividend yield	0.00%	0.00%	0.00%	—

Note 2. Net Loss Per Share

Basic net loss per common share is computed by dividing 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 convertible preferred stock. 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, 2005	March 31, 2004
Numerator — net loss	$ (10,530)	$ (5,932)
Denominator:		
Weighted-average common shares outstanding	28,482	2,537
Less: Weighted-average shares subject to repurchase	(100)	(221)
Weighted-average shares used in computing basic and diluted net loss per common share	28,382	2,316

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

	Three Months Ended	
	March 31, 2005	March 31, 2004
Options to purchase common stock	3,016	2,486
Common stock subject to repurchase	78	242
Warrants to purchase common stock	70	100
Warrants to purchase convertible preferred stock (as if converted)	—	91
Convertible preferred stock (as if converted)	—	17,100
Total shares	3,164	20,019

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, 2005
	March 31, 2005	March 31, 2004	
Significant non-cash investing and financing activities:			
Deferred stock-based compensation	$ —	$ 1,650	$ 6,940
Purchases of property and equipment through accounts payable	$ 63	$ —	$ 63
Purchases of property and equipment through trade in value of disposed property and equipment	$ —	$ —	$ 125
Penalty on restructuring of equipment financing lines	$ —	$ —	$ 475
Conversion of convertible preferred stock to common stock	$ —	$ —	$ 133,172

Note 4. Related Party Agreement

In March 2005, the Company entered into an amendment to the agreement with Portola Pharmaceuticals, Inc. ("Portola"). Under the amended agreement, the term of the agreement was extended to December 31, 2005 and certain other terms and conditions of the agreement were revised. In addition, the amended agreement provides for the purchase and use of certain equipment by Portola in connection with Portola providing research and related services to the Company, and the reimbursement of certain costs of the equipment by the Company in eight quarterly payments from January 2006 through October 2007.

Note 5. Equipment Financing Line

On January 1, 2005, the existing $4.5 million equipment line of credit with GE Capital that was entered into in January 2004 expired. In March 2005, the line was renewed and the expiration date extended to December 31, 2005. Under the line of credit, the Company can borrow up to $4.5 million. Borrowings under the line are collateralized by associated property and equipment. The Company has made no additional borrowings under the line subsequent to its renewal. As of March 31, 2005, additional borrowings of $3.6 million are available to the Company under the line. In connection with the line of credit, the Company is obligated to maintain a certificate of deposit with the lender (see Note 1 *"Restricted Cash"*).

Note 6. Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board issued SFAS No. 123R, "Share-Based Payment," which replaces SFAS No. 123. SFAS No. 123R requires public companies to recognize an expense for share-based payment arrangements including stock options and employee stock purchase plans. The statement eliminates a company's ability to account for share-based compensation transactions using APB No. 25, and generally requires instead that such transactions be accounted for using a fair value based method. SFAS No. 123R requires an entity to measure the cost of employee services received in exchange for an award of equity instruments based on the fair value of the award on the date of grant, and to recognize the cost over the period during which the employee is required to provide service in exchange for the award. The Company is required to adopt SFAS No. 123R on January 1, 2006. Upon adoption of SFAS No. 123R, companies are allowed to select one of three alternative transition methods, each of which

has different financial reporting implications. Management is currently evaluating the transition methods as well as valuation methodologies and assumptions for employee stock options in light of SFAS No. 123R. Current estimates of option values using the Black-Scholes method (as shown above under *"Stock-based Compensation"* in Note 1) may not be indicative of results from valuation methodologies ultimately implemented by the Company upon adoption of SFAS No. 123R.

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 document contains forward-looking statements that are based upon current expectations within the meaning of the Private Securities Reform Act of 1995. It is our intent 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, scope and anticipated date of completion of preclinical research, clinical trials and development for our drug candidates and potential drug candidates by ourselves or our partners, including the dates of initiation and completion of patient enrollment, and numbers of patients enrolled and sites utilized for clinical trials; the potential benefits of our drug candidates and potential drug candidates; the utility of our biological focus and the broad clinical trials program for our drug candidates for the treatment of cancer; exercise of our options to co-fund the development of one or both of ispinesib (formerly designated SB-715992) and SB-743921; our plans or ability to commercialize drugs, with or without a partner; increasing losses, costs, expenses and expenditures; the sufficiency of existing resources to fund our operations for at least the next 20 months; the scope and size of research and development efforts; potential competitors; anticipated operating losses, capital requirements and our needs for additional financing; future payments under lease obligations and equipment financing lines; expected future sources of revenue and capital; our plans to obtain limited product liability insurance; our plans for strategic alliances; funding by our partners under strategic alliances; and increasing the number of our employees and recruiting additional key personnel.

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; difficulties or delays in patient enrollment for our 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); activities and decisions of, and market conditions affecting, current and future strategic partners; our ability to obtain additional financing if necessary; changing standards of care and the introduction of products by competitors or alternative therapies for the treatment of indications we target; the uncertainty of protection for our intellectual property or trade secrets, through patents or otherwise; and potential infringement of the intellectual property rights or trade secrets of third parties. In addition such statements are subject to the risks and uncertainties discussed in the "Risk Factors" section and elsewhere in this document.

Overview

Cytokinetics, Incorporated is a leading biopharmaceutical company, incorporated in Delaware in 1997, focused on the discovery, development and commercialization of novel small molecule drugs that specifically target the cytoskeleton. A number of commonly used drugs and a growing body of research validate the role the cytoskeleton plays in a wide array of human diseases. Our focus on the cytoskeleton enables us to develop novel and potentially safer and more effective drugs for the treatment of these diseases. We believe that our cell biology driven approach and proprietary technologies enhance the speed, efficiency and yield of our drug discovery and development process. To date, our unique approach has produced two cancer drug candidates, a potential drug candidate for the treatment of congestive heart failure, and other research programs addressing a variety of other disease areas including high blood pressure and asthma. Our most advanced cancer drug candidate, ispinesib, is the subject of a broad Phase II clinical trial program being conducted by our partner GlaxoSmithKline, or GSK, together with the National Cancer Institute, or NCI, designed to evaluate effectiveness in a variety of both solid and hematologic cancers. Currently, GSK is conducting three Phase II clinical trials evaluating the effectiveness of ispinesib in non-small cell lung cancer, breast cancer and ovarian cancer. GSK is collaborating with the NCI in conducting six Phase II clinical trials in six other cancer indications. SB-743921, our second cancer drug candidate being developed by GSK, entered Phase I clinical trials in mid-2004. In addition, we expect to initiate Phase I clinical trials for a novel drug candidate for the treatment of congestive heart failure in 2005.

Since our inception in August 1997, we have incurred significant net losses. As of March 31, 2005, we had an accumulated deficit of $141.8 million. We expect to incur substantial and increasing losses for the next several years if:

- we conduct later-stage development and commercialization of ispinesib and SB-743921;
- we exercise our options to co-fund the development of one or both and co-promote these drug candidates under our strategic alliance with GSK;

- we advance a series of novel cardiac myosin activators toward preclinical and clinical development for the treatment of congestive heart failure, and other drug candidates through clinical trials;
- we expand our research programs and further develop our proprietary drug discovery technologies; and
- 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.

Oncology

In the first quarter of 2005, in connection with our strategic alliance with GSK, we made progress in advancing our oncology development program. The oncology clinical trials program for ispinesib is a broad clinical trial program that consists of nine Phase II clinical trials and five Phase I/Ib clinical trials evaluating the use of ispinesib in a variety of both solid and hematologic cancers. The breadth of this clinical trial program reflects the potential of and the complexity of developing a drug candidate such as ispinesib. This approach should help us identify those tumor types that are the most promising for the continued development of ispinesib.

Currently, ispinesib is being studied in six of a total of nine planned Phase II clinical trials evaluating the safety and efficacy of ispinesib in the treatment of cancer. GSK initiated the first Phase II clinical trial in late 2003 to evaluate ispinesib as a monotherapy in non-small cell lung cancer. In mid and late 2004, GSK initiated two additional Phase II monotherapy clinical trials to evaluate ispinesib in other prevalent tumor types that represent large commercial markets, specifically breast and ovarian cancers. During the first quarter, the NCI, in conjunction with GSK, began enrollment of patients in two Phase II clinical trials, the first of which is focused on ispinesib for the second-line treatment of patients with colorectal cancer, and the second of which is focused on the first-line treatment of patients with hepatocellular cancer. More recently, the NCI initiated another Phase II clinical trial evaluating ispinesib in the first-line treatment of patients with melanoma. We anticipate that other Phase II clinical trials will be initiated in 2005 that will evaluate ispinesib in several other tumor types. In aggregate, we anticipate that Phase II clinical trials for ispinesib may potentially enroll approximately 400 patients at over 50 clinical trial sites worldwide, and evaluate our drug candidate in patients with an array of tumor types who have failed multiple prior therapies in both later- and earlier-line treatments. Furthermore, we anticipate that ispinesib may eventually be used in combination therapy regimens utilizing existing cancer drugs. In 2004, GSK initiated Phase Ib clinical trials to evaluate ispinesib in combination with standard anti-cancer therapeutics. In aggregate, we anticipate that Phase I clinical trials for ispinesib may potentially enroll over 100 patients at over 10 clinical trial sites worldwide.

Ongoing open-label monotherapy Phase II clinical trials of ispinesib under GSK sponsorship through our strategic alliance are as follows:

Non-Small Cell Lung Cancer: GSK continues to conduct an international, 70-patient two arm Phase II monotherapy clinical trial evaluating the safety and efficacy of ispinesib administered at 18 mg/m ^{2} every 21 days in the second-line treatment of patients with both platinum-sensitive and platinum-refractory non-small cell lung cancer. The clinical trial's primary endpoint is response rate as determined using the widely accepted criteria of tumor mass defined by radiologic measurement known as the Response Evaluation Criteria in Solid Tumors, or RECIST. Based on the current enrollment rates, as communicated to us by GSK, data from our platinum refractory arm and platinum sensitive arm are anticipated in 2005.

Breast Cancer: GSK continues to conduct an international, 55-patient Phase II monotherapy clinical trial evaluating the efficacy of ispinesib at 18 mg/m ^{2} every 21 days in the second- or third-line treatment of patients with breast cancer whose disease has progressed despite treatment with anthracyclines and taxanes. The clinical trial's primary endpoint is response rate as determined using RECIST criteria. Based on the current rate of patient enrollment, interim and final data are anticipated during 2005 and 2006, respectively.

Ovarian Cancer: In late 2004, GSK initiated enrollment of patients in a 35-patient Phase II monotherapy clinical trial designed to evaluate the efficacy of ispinesib at 18 mg/m ^{2} dosed every 21 days in the second-line treatment of patients with advanced ovarian cancer previously treated with a platinum and taxane-based regimen. The primary endpoint of this clinical trial is response rate as determined by RECIST criteria and blood serum levels of the tumor mass marker CA-125. Based on the current rate of patient enrollment, data are anticipated during 2005.

Colorectal Cancer: In the first quarter of 2005, the NCI initiated a 76-patient Phase II clinical trial studying ispinesib in the

second-line treatment of patients with colorectal cancer. This open-label monotherapy clinical trial will contain two arms that evaluate different dosing schedules of ispinesib, either infused at 7 mg/m ^{2} on days 1, 8 and 15 of a 28-day schedule or at 18 mg/m ^{2} every 21 days. The primary endpoint is objective response as determined using RECIST criteria.

Hepatocellular Cancer: In the first quarter of 2005, the NCI initiated a 30-patient Phase II clinical trial studying ispinesib in patients with hepatocellular cancer that have not been treated with any systemic chemotherapy. This open-label monotherapy clinical trial will evaluate ispinesib infused at 18 mg/m ^{2} every 21 days. The primary endpoint is objective response as determined using RECIST criteria.

Melanoma: In April 2005, the NCI initiated a 25-patient Phase II clinical trial studying ispinesib in patients with melanoma who may have received adjuvant immunotherapy but no chemotherapy. This open-label monotherapy clinical trial will evaluate ispinesib infused at 18 mg/m ^{2} every 21 days. The primary endpoint is objective response as determined using RECIST criteria.

In addition to these Phase II clinical trials, GSK also continues to enroll patients in three Phase Ib clinical trials evaluating ispinesib in combination therapy. These clinical trials are all dose-escalating studies evaluating the safety, tolerability and pharmacokinetics of ispinesib, one in combination with carboplatin, the second in combination with capecitabine, and the third in combination with docetaxel. In late 2004, the NCI initiated two dose-escalating Phase I clinical trials to examine the safety, pharmacokinetics and pharmacodynamics of ispinesib infused on days one, two and three of a 21-day cycle. One of these clinical trials is for the treatment of patients with acute leukemia, chronic myelogenous leukemia or myelodysplastic syndrome, refractory to standard induction therapy, and the other is for patients with histologically proven solid tumors that have failed all standard therapies.

In addition, the NCI is planning on initiating the following open-label monotherapy Phase II clinical trials of ispinesib under GSK's sponsorship:

Prostate Cancer: This Phase II clinical trial is expected to enroll 40 patients and is designed to study ispinesib in the second-line treatment of patients with hormone-refractory prostate cancer. This open-label monotherapy clinical trial will evaluate ispinesib infused at 18 mg/m ^{2} every 21 days. The primary endpoint is objective response as determined by blood serum levels of the tumor mass marker Prostate Specific Antigen.

Renal Cell Cancer: This Phase II clinical trial is expected to enroll 30 patients and is designed to study ispinesib in the second-line treatment of patients with renal cell cancer. This open-label monotherapy clinical trial will evaluate ispinesib infused at 18 mg/m ^{2} every 21 days. The primary endpoint is objective response as determined using RECIST criteria.

Head and Neck Cancer: This Phase II clinical trial is expected to enroll 33 patients and is designed to study ispinesib in the second-line treatment of patients with head and neck cancer. This open-label monotherapy clinical trial will evaluate ispinesib infused at 18 mg/m ^{2} every 21 days. The primary endpoint is objective response as determined using RECIST criteria.

We expect that it will take several years before we can commercialize ispinesib. 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 the effectiveness and safety profile of the drug, market acceptance, then-prevailing reimbursement policies, competition and other market conditions. GSK currently funds the research and development costs associated with ispinesib pursuant to our strategic alliance. We expect to determine whether and to what extent we will exercise our co-funding option during the conduct of our clinical trials for this drug candidate, taking into consideration clinical trial results and our business, finances and prospects at that time. If we exercise our option to co-fund certain later stage development activities associated with ispinesib, our expenditures relating to research and development of this drug candidate will increase significantly.

GSK continued to enroll patients in a dose-escalating Phase I clinical trial evaluating the safety, tolerability, and pharmacokinetics of SB-743921, a second kinesin spindle protein inhibitor, in advanced cancer patients. We anticipate that this clinical trial will be completed in 2005. The clinical trial 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.

GSK currently funds the research and development costs associated with SB-743921. If we exercise our option to co-fund certain later-stage development activities associated with SB-743921, our expenditures relating to research and development of this drug candidate will increase significantly.

Cardiovascular

We have focused our cardiovascular disease research and development activities on congestive heart failure, a disease 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 molecule compounds that improve cardiac contractility by specifically binding to and activating cardiac myosin, a cytoskeletal protein essential for cardiac muscle contraction.

In March 2005, we chose a drug candidate, a novel cardiac myosin activator, for further development in our heart failure program. During the first quarter of 2005, our scientists continued to synthesize and optimize several cardiac myosin activators. We have chosen a drug candidate that is orally bioavailable and has demonstrated the ability to increase cardiac contractility in animal models. This drug candidate has the ability to do this without increasing intracellular myocyte calcium or inhibiting phosphodiesterase. We are currently completing our preclinical studies with this drug candidate and plan on initiating clinical trials in 2005.

As with our drug candidates in our other programs, the compounds in our congestive heart failure program, including our new drug candidate, are 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 of them. We currently fund all research and development costs associated with this program. For the three month periods ended March 31, 2005 and 2004, we incurred costs of approximately $4.8 million, and $3.7 million, respectively, for research and development activities relating to our congestive heart failure program. We anticipate that our expenditures relating to research and development of compounds in our congestive heart failure program will increase significantly as we advance candidates from such program into clinical development.

The successful development of our drug candidates is highly uncertain. We cannot estimate with certainty or know the exact nature, timing and estimated costs of the efforts necessary to complete the development of our drug candidates or the date of completion of these development efforts. 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:

- 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;
- the uncertainty of clinical trial results;
- extensive governmental regulation, both foreign and domestic, for approval of new therapies; and
- the uncertainty related to the completion of construction and qualification of a commercial scale manufacturing facility.

If we fail to complete the development 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 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 several years, if ever,” “Clinical trials may fail to demonstrate the 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.

Funding

To date we have funded our operations primarily through the sale of equity securities, non-equity payments from GSK and AstraZeneca, equipment financings, interest on investments and government grants. We received net proceeds from the sale of equity securities of $94.0 million upon the closing of the initial public offering of our common shares in April 2004, and from August 5, 1997, the date of our inception, through March 31, 2005, we received proceeds from the sale of other equity securities of $116.2 million, excluding sales of equity to GSK. Under our strategic alliance with GSK, in 2001 GSK made a $14.0 million upfront cash

payment as well as an initial $14.0 million investment in our equity. In April 2004, GSK purchased 538,461 shares of the Company's common stock at $13.00 per share immediately prior to the closing of the Company's initial public offering for a total price of $7.0 million. GSK also made a $3.0 million equity investment in us in 2003. GSK has also committed to reimburse full time equivalents, or FTEs, through the end of the minimum five-year research term of the strategic alliance, and to make additional payments upon the achievement of certain precommercialization milestones. Cumulatively as of March 31, 2005, we received $27.4 million in FTE and other expense reimbursements and $6.5 million in milestone payments from GSK. Cumulatively as of March 31, 2005, we received $1.6 million in FTE reimbursement from our strategic alliance with AstraZeneca. Cumulatively as of March 31, 2005, we received $16.3 million under equipment financing arrangements. Cash interest earned on investments in the first quarter of 2005 and 2004 was $1.1 million and $0.5 million, respectively. We had no grant revenues in the first quarter of 2005 and $0.1 million of grant revenues in the first quarter of 2004.

GSK has the contractual right to reduce its funding of our FTEs at its discretion, subject to certain agreed minimum levels, in the beginning of each contract year based on the activities of the agreed upon research plan. GSK has agreed to fund worldwide development and commercialization of drug candidates that arise from our strategic alliance and that GSK elects to continue in development. We will earn royalties from sales of any resulting drugs. We retain a product-by-product option to co-fund certain later-stage development activities, thereby potentially increasing our royalties and affording co-promotion rights in North America. In the event we exercise our co-promotion option, we are entitled to receive reimbursement from GSK for certain sales force costs we incur in support of our commercial activities.

Revenues

Our current revenue sources are limited, and we do not expect to generate any direct revenue from product sales for several years. We currently recognize revenues from our strategic alliances with GSK and AstraZeneca for contract research activities, which we record as related expenses as incurred.

Charges to GSK are based on negotiated rates that are intended to approximate the costs for our FTEs performing research under the strategic alliance and our out-of-pocket expenses. GSK has paid us an upfront licensing fee, which we recognize ratably over the five-year research term of the strategic alliance. 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 not refundable, even if the relevant research effort is not successful. Because a substantial portion of our revenues for the foreseeable future will depend on achieving research, development and other precommercialization milestones under our strategic alliance with GSK, our results of operations may vary substantially from year to year. In the event we exercise our co-promotion option, we are entitled to receive reimbursement from GSK for certain sales force costs we incur in support of our commercial activities.

Charges to AstraZeneca are based on negotiated rates that are intended to approximate the costs for our FTEs performing research under the strategic alliance. We may receive additional payments from AstraZeneca upon achieving certain research 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 not refundable, even if the relevant research effort is not successful.

We expect that our future revenues ultimately will be derived from royalties on sales from drugs licensed to GSK under our strategic alliance and from those licensed to future partners, as well as from direct sales of our drugs. We retain a product-by-product option to co-fund certain later-stage development activities under our strategic alliance with GSK, thereby potentially increasing our royalties and affording co-promotion rights in North America.

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 relating to our strategic alliance with GSK consist 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. Certain of these costs are reimbursed by GSK on an FTE basis. At this time GSK funds the majority of the costs related to preclinical and clinical development of the compounds that are selected for development. Under our strategic alliance, we have an option on a product-by-product basis to co-fund certain later-stage development costs for each of these drug candidates. If we exercise that option, our research and development expenses will increase significantly. 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. We expect to incur research and development expenses to conduct preclinical studies and clinical trials for our cardiac myosin activator compounds for the treatment of congestive heart failure and in connection with our early research programs in other diseases, as well as the continued advancement of our PUMA system, Cytometrix technologies and our other existing and future drug discovery technologies. During the period from our inception through March 31, 2005, we incurred costs of approximately $41.8 million for research and development activities relating to the discovery of mitotic kinesin inhibitors, $48.7 million for our congestive heart failure program, $35.5 million for our PUMA system and Cytometrix technologies and $24.8 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 finance, business development and corporate development. Other significant costs include facilities costs and professional fees for accounting and legal services, including legal services associated with obtaining and maintaining patents. As we enter our second year as a public company, we anticipate increases in general and administrative expenses associated with operating as a publicly traded company, such as increased costs for insurance, investor relations and compliance with section 404 of the Sarbanes-Oxley Act of 2002.

Stock Compensation

In connection with the grant of stock options to employees and non-employees, in prior periods we recorded deferred stock-based compensation as a component of stockholders' equity.

Deferred stock compensation for options granted to employees is the difference between the fair value of our common stock on the date such options were granted and their exercise price. We recorded amortization of the deferred stock-based compensation related to employee options of $0.4 million and $0.3 million during the first quarter of 2005 and 2004, respectively. We expect the remaining balance of deferred employee stock-based compensation of $3.6 million as of March 31, 2005 to be amortized in future years as follows, assuming no cancellations of the related stock options: $1.0 million in the remainder of 2005, $1.3 million in 2006, $0.9 million in 2007 and $0.4 million in 2008.

We value and recognize stock-based compensation expense related to options granted to non-employees as the stock options are earned. We amortize this stock-based compensation as charges to operations over the vesting periods of the options, generally four years. We recorded such non-employee stock-based compensation expense of $45,000 in the first quarter of 2005 and $136,000 in the first quarter of 2004.

The amount of non-cash stock-based compensation expense we record in future periods will increase upon our adoption of Statement of Financial Accounting Standards, or SFAS, No. 123R on January 1, 2006.

Interest and Other Income and Expense

Interest and other income and expense consist primarily of interest income and interest expense. Interest income is generated primarily from investment of our cash, cash equivalents and investments. Interest expense relates generally to the borrowings for capital asset financings.

Results of Operations

Revenues

We recorded total revenues of $2.6 million in the first quarter of 2005 compared with $5.9 million in the first quarter of 2004.

Research and development revenues from related party, which refers to revenues from our strategic alliance partner, GSK, were $1.6 million in the first quarter of 2005 compared with $4.8 million in the first quarter of 2004. The decrease was primarily due to a milestone payment of $3.0 million earned from GSK for the initiation of a Phase II clinical trial for ispinesib in the first quarter of 2004, as well as a $0.2 million decrease in funding from GSK for FTE and other expense reimbursements.

Research and Development Expenses

Research and development expenses increased to $10.5 million in the first quarter of 2005 from $9.4 million in the first quarter of 2004. Overall, the increase was attributable to higher spending for the development of our drug candidates for the treatment of congestive heart failure as well as expenses related to early research programs. Specifically, the increase was primarily due to increases in contract and other outside services of $0.5 million, salary and bonus expenses of $0.4 million, and laboratory supplies of $0.2 million.

Of the $10.5 million total research and development expenses incurred in the first quarter of 2005, $2.0 million was for programs relating to the discovery of mitotic kinesin inhibitors; $4.8 million was for research and development activities relating to our congestive heart failure program; $1.8 million was for our PUMA system and Cytometrix technologies; and $1.9 million was for all other research programs. In the first quarter of 2005, we recorded $1.6 million of related party revenue from GSK representing reimbursement of costs incurred by us related to the discovery of mitotic kinesin inhibitors.

Of the $9.4 million total research and development expenses incurred in the first quarter of 2004, $1.7 million was for programs relating to the discovery of mitotic kinesin inhibitors; $3.7 million was for research and development activities relating to our congestive heart failure research program; $2.1 million was for our PUMA system and Cytometrix technologies; and $1.9 million was for all other research programs. In the first quarter of 2004, we recorded $1.8 million of related party revenue from GSK representing reimbursement of costs incurred by us related to the discovery of mitotic kinesin inhibitors.

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 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. 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, 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 2005 if we exercise our option to co-fund certain later-stage research and development activities relating to ispinesib and SB-743921, advance research and development of our cardiovascular program, and initiate human clinical trials of one of our cardiac myosin activator compounds.

General and Administrative Expenses

General and administrative expenses were $3.1 million in the first quarter of 2005 compared with $2.5 million for the first quarter of 2004. The increase in 2005 over the comparable period of the prior year was primarily due to higher legal expenses of $0.4 million, increased spending for other outside services of $0.1 million and higher salary and bonus costs of $0.1 million. Other outside services included such items as audit, insurance and consulting.

We expect that general and administrative expenses will continue to increase during 2005 due to increasing payroll related expenses in support of our initial precommercialization efforts, business development costs, our expanding operational infrastructure, compliance with the requirements of section 404 of the Sarbanes-Oxley Act of 2002 and other costs associated with being a public company.

Interest and Other Income and Expense

Interest and other income was $0.7 million in the first quarter of 2005 compared with $0.2 million in the first quarter of 2004. The increase in the first quarter of 2005 was attributable to higher interest yields in 2005, and to higher average balances of cash and investments in 2005 as a result of proceeds received from our initial public offering in April 2004.

Interest and other expense was $0.1 million in both the first quarter of 2005 and 2004, and represented primarily interest expense on our equipment financing line of credit.

Liquidity and Capital Resources

From August 5, 1997, our date of inception, through March 31, 2005, 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 totaled $101.6 million at March 31, 2005 compared with $110.3 million at December 31, 2004, with the decrease occurring due to our use of the proceeds from maturing investments to fund operations.

Net cash used in operating activities in the first quarter of 2005 was $8.6 million, and resulted primarily from a net loss of $10.5 million. This compares with net cash used in operating activities of $7.0 million, and a net loss of $5.9 million, in the first quarter of 2004.

Net cash provided by investing activities was $10.9 million and $5.2 million in the first quarter of 2005 and 2004, respectively, and represented primarily proceeds from sales and maturities of investments, net of purchases. Restricted cash totaled $5.1 million at March 31, 2005 and $6.0 million at December 31, 2004. The balance decreased because our equipment financing lender required a lower security deposit as of March 2005.

Net cash used in financing activities was $0.5 million in the first quarter of 2005 and $0.3 million in the first quarter of 2004, and in both periods represented primarily repayments of our equipment financing line of credit.

On January 1, 2005, the existing $4.5 million equipment line of credit with GE Capital that we entered into in January 2004 expired. In March 2005, the line was renewed and the expiration date extended to December 31, 2005. Under the line of credit, we can borrow up to $4.5 million. Borrowings under the line are collateralized by property and equipment. We have made no additional borrowings under the line subsequent to its renewal. As of March 31, 2005, additional borrowings of $3.6 million are available to us under the line. In connection with the line of credit, we are obligated to maintain a certificate of deposit with the lender.

As of March 31, 2005, future minimum payments under lease obligations and equipment financing lines were as follows (in thousands):

	Within One Year	Two to Three Years	Four to Five Years	After Five Years	Total
Operating leases	$ 2,002	$ 3,902	$ 3,757	$ 6,618	$ 16,279
Equipment financing line	2,421	5,171	2,319	—	9,911
Total	$ 4,423	$ 9,073	$ 6,076	$ 6,618	$ 26,190

Our long-term commitments under operating leases relate to our facility lease in South San Francisco, California, which expires in 2013. We are investigating additional office space expansion opportunities to support our administrative, research and development requirements, as we expect that by executing our planned strategies, we will require additional space in future periods. We have made no binding commitments to access any additional lease space pursuant to these efforts.

Under the provisions of our amended agreement with Portola Pharmaceuticals, Inc., or Portola, we are obligated to reimburse Portola for certain equipment costs incurred by Portola in connection with research and related services that Portola provides to us. We expect to incur these costs when the equipment becomes available for use and continuing until the expiration date of the agreement. Our payments to Portola related to these costs are scheduled to be made in eight quarterly installments commencing in the first quarter of 2006 and continuing through the fourth quarter of 2007.

We expect to incur substantial costs as we continue to expand our research programs and related research and development activities. Under the terms of our strategic alliance with GSK, we have options to co-fund certain later-stage development activities for ispinesib and SB-743921. If we exercise an option to co-fund development activities, our research and development expenses will increase significantly. We expect to determine whether and to what extent we will exercise our co-funding option based on clinical results and our business, finances and prospects at the time we receive the Phase II clinical trial results for each development candidate under our strategic alliance with GSK. Research and development expenses for our unpartnered drug discovery programs consist primarily of employee compensation, supplies and materials, costs for consultants and contract research and development, facilities costs and depreciation of equipment. We expect to incur significant research and development expenses as we advance the research and development of our cardiac myosin activators for the treatment of congestive heart failure, initiate human clinical trials of one of our cardiac myosin activator compounds in 2005, pursue our other early stage research programs in multiple therapeutic areas, and develop our PUMA system, Cytometrix technologies and other proprietary drug discovery technologies.

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;
- decisions by GSK with regard to continued funding of development of our drug candidates;
- our options to co-fund the development of one or both of ispinesib and SB-743921;
- the number of drug candidates we pursue;
- the level of funding that we may provide for other current or future drug candidates, including a potential drug candidate for the treatment of congestive heart failure;
- 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 sales, marketing or manufacturing capabilities and to achieve market acceptance for potential drugs;
- expanding and advancing our research programs;
- the 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 resources, future payments from GSK and AstraZeneca, proceeds from equipment financings and interest earned on investments will be sufficient to meet our projected operating requirements for at least the next 20 months. If, at any time, our prospects for internally financing our research 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. We cannot assure you 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, 2005, 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.

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board issued SFAS No. 123R, "Share-Based Payment," which replaces SFAS No. 123. SFAS No. 123R requires public companies to recognize an expense for share-based payment arrangements including stock option plans and employee stock purchase plans. The statement eliminates a company's ability to account for share-based compensation transactions using APB No. 25, and generally requires instead that such transactions be accounted for using a fair value based method. SFAS No. 123R requires an entity to measure the cost of employee services received in exchange for an award of equity instruments based on the fair value of the award on the date of grant, and to recognize the cost over the period during which the employee is required to provide service in exchange for the award. We are required to adopt SFAS No. 123R on January 1, 2006. Upon adoption of SFAS No. 123R, companies are allowed to select one of three alternative transition methods, each of which has different financial reporting implications. Management is currently evaluating the transition methods as well as valuation methodologies and assumptions for employee stock options in light of SFAS No. 123R. Current estimates of option values using the Black-Scholes method may not be indicative of results from valuation methodologies that we ultimately implement upon adoption of SFAS No. 123R.

RISK FACTORS

Our future operating results may vary substantially from anticipated results due to a number of factors, many of which are beyond our control. The following discussion highlights some of these factors and the possible impact of these factors on future results of operations. You should carefully consider these factors before making an investment decision. If any of the following factors actually occur, our business, financial condition or results of operations could be harmed. In that case, the price of our common stock could decline, and you could experience losses on your investment.

Risks Related to Our Business

Our initial 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 initial 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 initial drug candidates, and commercialize any approved drugs. If our initial drug candidates fail 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 Food and Drug Administration, or FDA, and other regulatory authorities in the United States and abroad. We and our partners will need to conduct significant additional research, preclinical testing 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. We may not achieve any of these objectives. Ispinesib, our most advanced drug candidate for the treatment of cancer, and SB-743921, our second drug candidate 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 other drug candidate in preclinical testing or clinical development 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 one or both of these drug candidates may be discontinued at any stage of our clinical trials programs and we may not generate revenue from either of these drug candidates.

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, AstraZeneca and others, equipment financings, interest on investments and government grants. We believe that our existing cash resources, future payments from GSK and AstraZeneca, proceeds from equipment financings and interest earned on investments will be sufficient to meet our projected operating requirements for at least the next 20 months. To meet our future cash requirements, we may raise funds through public or private equity offerings, debt financings or strategic alliances. 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 debt financing, if available, such financing may involve covenants that restrict our business activities. 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. In addition, we cannot assure you that any such funding, if needed, will be available on attractive terms, or at all.

Clinical trials may fail to demonstrate the 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 safe and effective. Before we can commence clinical trials, we must demonstrate through preclinical

studies satisfactory product chemistry, formulation, stability and toxicity levels in order to file an investigational new drug application, or IND, (or the foreign equivalent of an IND) to commence clinical trials. In clinical trials we will need to demonstrate efficacy for the treatment of specific indications and monitor safety throughout the clinical development process. Long-term safety and efficacy have not yet been demonstrated in clinical trials for any of our drug candidates, and satisfactory chemistry, formulation, stability and toxicity levels have not yet been demonstrated for our drug candidates or compounds that are currently the subject of preclinical studies. If our preclinical studies, clinical trials or future clinical trials are unsuccessful, our business and reputation would be harmed and our stock price would 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 comparable regulatory filing abroad with respect to our drug candidates, and, 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. Similarly, early-stage clinical trials do not predict the results of later-stage clinical trials, including the safety and efficacy profiles of any particular drug candidate. In addition, there can be no assurance that the design of our clinical trials is focused on appropriate tumor types, patient populations, dosing regimens or other variables which will result in obtaining the desired efficacy data to support regulatory approval to commercialize the drug. 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 United States 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 that are the subject of preclinical studies to animals 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 program may recur in preclinical studies of other compounds from the same program. Such toxicities or adverse effects could delay or prevent the filing of an IND or comparable regulatory filing abroad with respect to such drug candidates or potential drug candidates. In Phase I 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 clinical trials, administering any of our drug candidates to humans may produce adverse effects. These adverse effects could interrupt, delay or halt clinical trials of our drug candidates and could result in the FDA or other regulatory authorities denying approval of our drug candidates 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 prevent, 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 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 severely harm our reputation and business.

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

Clinical trials are very expensive and difficult to design and implement, especially in the cancer and congestive heart failure indications that we are pursuing, in part because they are subject to rigorous requirements. The clinical trial process is also time consuming. According to industry sources, the entire drug development and testing process takes on average 12 to 15 years. According to industry studies, the fully capitalized resource cost of new drug development averages approximately $800 million, however, individual trials and individual drug candidates may incur a range of costs above or below this average. We estimate that clinical trials of our most advanced drug candidates will continue for several years, but may take significantly longer to complete. The commencement and completion of our clinical trials could be delayed or prevented by several factors, including, but not limited to:

- delays in obtaining regulatory approvals to commence a study;
- delays in identifying and reaching agreement on acceptable terms with prospective clinical trial sites;
- slower than expected rates of patient recruitment and enrollment, including as a result of the introduction of alternative therapies or drugs by others;
- lack of effectiveness during clinical trials;

- unforeseen safety issues;
- 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, 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 depend on GSK for the conduct, completion and funding of the clinical development and commercialization of our current drug candidates for the treatment of cancer.

Under our strategic alliance with GSK, GSK is currently responsible for the clinical development and regulatory approval of our cancer drug candidates, ispinesib and SB-743921. GSK is responsible for filing applications with the FDA or other regulatory authorities for approval of these drug candidates, and will be the owner of any marketing approvals issued by the FDA or other regulatory authorities. If the FDA or other regulatory authorities approve these drug candidates, GSK will also be responsible for the marketing and sale of these drugs. Because GSK is responsible for these functions, we cannot control whether GSK will devote sufficient attention and resources to the clinical trials program or will proceed in an expeditious manner. Under certain circumstances, GSK has discretion to elect whether to pursue the development of our drug candidates or to abandon the clinical trial programs, and, after June 20, 2006, GSK may terminate our strategic alliance for any reason upon six months prior notice, and these decisions are outside our control. Because both of our cancer drug candidates being developed by GSK act through inhibition of kinesin spindle protein, or KSP, a protein that is a member of a class of cytoskeletal proteins called mitotic kinesins that regulate DNA division, or mitosis, during cell division, it is possible that GSK may elect to proceed with the development of only one such drug candidate, and if GSK were to elect to proceed with the development of SB-743921 in lieu of ispinesib, and because SB-743921 is at an earlier stage of clinical development than ispinesib, the approval, if any, of a new drug application, or NDA, with respect to a drug candidate from our cancer program would be delayed. In particular, if the initial clinical results of some of our early clinical trials do not meet GSK's expectations, GSK may elect to terminate further development of one or both drug candidates, even though the actual number of patients that have been treated is relatively small. Abandonment of one or both of ispinesib and SB-743921 by GSK would result in a delay in or prevent us from commercializing such drug candidates, and would delay or prevent our ability to generate revenues. Disputes may arise between us and GSK, which may delay or cause termination of the clinical trials program, result in significant litigation or arbitration, or cause GSK to act in a manner that is not in our best interest. If development of our drug candidates does not progress for these or any other reasons, we would not receive further milestone payments from GSK. GSK also has the contractual right to reduce its funding of our FTEs for this program at their discretion, subject to certain agreed minimum levels, in the beginning of each contract year based on the activities of the agreed upon research plan. Even if the FDA or other regulatory agencies approve one or more of our drug candidates, GSK may elect not to proceed with the commercialization of such drugs, or may elect to pursue commercialization of one drug but not others, and these decisions are outside our control. In such event, or in the event that GSK abandons development of any drug candidate prior to regulatory approval, we would have to undertake and fund the clinical development of our drug candidates or commercialization of our drugs, seek a new partner for clinical development or commercialization, or curtail or abandon the clinical development or commercialization programs. If we were unable to do so on acceptable terms, or at all, our business would be harmed, and the price of our common stock would be negatively affected.

If we fail to enter into and maintain successful strategic alliances for certain of our drug candidates, we may have to reduce or delay our drug candidate development or increase our expenditures.

Our strategy for developing, manufacturing and commercializing certain of our drug candidates currently requires us to enter into and successfully maintain strategic alliances with pharmaceutical companies or other industry participants to advance our programs and reduce our expenditures on each program. We have formed a strategic alliance with GSK with respect to ispinesib, SB-743921 and certain other research activities. 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. If we elect to increase our expenditures to fund drug development programs or research programs on our own, we will need to obtain additional capital, which may not be available on acceptable terms, or at all.

The success of our development efforts depends in part on the performance of our 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. It is likely that our partners will 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 to conduct several important clinical trials of our drug candidates. The NCI is a government agency and there can be no assurance that the NCI will not modify its plans to conduct such trials or will proceed with such trials diligently. If our partners fail to perform as we expect, our potential for revenue from drugs developed through our strategic alliances could be dramatically reduced.

Our focus on the discovery 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 believe that our focus on drug discovery and development directed at the cytoskeleton is novel and unique to us. 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 pathways that our drug candidates seek to modulate. As a result, we cannot be certain that our drug candidates will appropriately modulate targeted cytoskeletal proteins and pathways or produce commercially viable drugs that safely and effectively treat cancer, congestive heart failure 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 viable drugs, we will not achieve commercial success.

Our proprietary rights may not adequately protect our technologies and drug candidates.

Our commercial success will depend in part on our obtaining and maintaining patent protection and trade secret protection of our technologies and drug candidates as well as successfully defending these patents against third-party challenges. We will only be able to protect our technologies and drug candidates from unauthorized use by third parties to the extent that valid and enforceable patents or trade secrets cover them. Furthermore, the degree of future protection of our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage.

The patent positions of life sciences companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in such companies' patents has emerged to date in the United States. The patent situation outside the United States is even more uncertain. Changes in either the patent laws or in interpretations of patent laws in the United States or other countries may diminish the value of our intellectual property. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. 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;
- it is possible that none of our pending patent applications or the pending patent applications of our licensors will result in issued patents;

- our issued patents and issued patents of our licensors may not provide a basis for commercially viable drugs, or may not provide us with any competitive advantages, or may be challenged and invalidated by third parties;

- we may not develop additional proprietary technologies or drug candidates that are patentable; or

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 strategic partners' employees, consultants, contractors or scientific and other advisors may unintentionally or willfully disclose our information to competitors. 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 equivalent knowledge, methods and know-how, 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, which are owned by third parties, exist in the areas that we are exploring. 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.

In particular, we are aware of an issued U.S patent and at least one pending U.S. patent application assigned to Curis, Inc. relating to certain compounds in the quinazolinone class. Ispinesib falls into this class of compounds. The Curis patent claims a method of use for inhibiting signaling by what is called the hedgehog pathway using certain such compounds. Curis has pending applications in Europe, Japan, Australia and Canada with claims covering compositions of certain quinazolinone compounds. We are also aware that the Australian application and one of the European applications have been granted. In addition, in Europe, Australia and elsewhere, the grant of a patent may be opposed by one or more parties. Curis or a third party may assert that the sale of ispinesib may infringe one or more of these or other patents. We believe that we have valid defenses against the Curis patents if asserted against us. However, we cannot guarantee that a court would find such defenses valid or that such oppositions would be successful. We have not attempted to obtain a license to this patent. If we decide to obtain a license to this patent, we cannot guarantee that we would be able to obtain such a license on commercially reasonable terms, or at all.

In addition, we are aware of various issued U.S. patents and pending U.S. and foreign patent applications assigned to cellomics, Inc. relating to an automated method for analyzing cells. One of these applications was granted in Europe. Cellomics or a third party may assert that our Cytometrix technologies fall within the scope of, and thus infringe, one or more of these patents. We have received a letter from Cellomics notifying us that Cellomics believes we may be practicing one or more of their patents and that Cellomics offers a use license for such patents through its licensing program. We believe that we have valid defenses to such an assertion. Moreover, the grant of the European patent may be opposed by one or more parties. However, we cannot guarantee that a court would find such defenses valid or that such opposition would be successful. 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 Merck & Co., Inc., or Merck). Further development of these products could be impacted by these patents and result in the expenditure of significant legal fees.

If a third party claims that we 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 upon 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.

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 our 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 the terms of their agreements with us, 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 novel small molecule drugs focused on the cytoskeleton 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;
- 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 finance future cash needs primarily through public or private equity offerings, debt financings or 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 have no 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 develop such capacity, and we will require additional funding.

The development of drug candidates is complicated, and requires resources and experience that we do not have. Currently, we rely on our strategic partners to carry out these activities for those of our drug candidates that are in clinical trials. However, we do not have a partner for our potential cardiac myosin activator drug candidate, or, in the event GSK elects to terminate its development efforts, an alternative partner for our cancer drug candidates. To the extent we decide to initiate clinical trials for a drug candidate without support from a strategic partner, such as a potential drug candidate from our cardiovascular disease program, we will need to develop the skills, technical expertise and resources necessary to carry out such development efforts on our own or through the use of other third parties, such as contract research organizations, or CROs.

If we utilize CROs, we will not have control over many aspects of their activities, and will not be able to control the amount or timing of resources that they devote to our programs. These third parties also 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. Typically, we would have to qualify more than one vendor for each function performed outside of our control, which could be time consuming and costly. The failure of CROs to carry out development efforts on our behalf according to our requirements and FDA or other regulatory agencies' standards, or our failure to properly coordinate and manage such efforts, could increase the cost of our operations and delay or prevent the development, approval and commercialization of our drug candidates.

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

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, 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.

We plan to commercialize drugs on our own, with or without a partner, 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, 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, we will incur significant additional losses and the price of our common stock will be negatively affected.

We have no manufacturing capacity, depend on a single contract manufacturer to produce our clinical trial drug supplies, 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 under development. We have no experience in drug formulation or 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 currently rely on a single contract

manufacturer to supply, store and distribute drug supplies for our clinical trials and anticipate future reliance on a limited number of contract manufacturers until we are able to expand our operations to include manufacturing capacities. Any performance failure on the part of our existing or future contract manufacturers 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.

Our drug candidates require precise, high quality manufacturing. Our failure or our contract manufacturer's failure to achieve and maintain high manufacturing standards, including the incidence of manufacturing 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 ongoing periodic unannounced inspection by the FDA, the United States 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 contract manufacturers' compliance with these regulations and standards. If one of our contract manufacturers fails to maintain compliance, the production of our drug candidates could be interrupted, resulting in delays, additional costs and potentially lost revenues. Additionally, our contract manufacturer must pass a preapproval inspection before we can obtain marketing approval for any of our drug candidates in development.

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 in small quantities for preclinical testing and clinical trials and 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 economic 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. Even 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. We currently rely on a single contract manufacturer as the sole supply source for our drug candidates. In the event of a natural disaster, business failure, strike or other difficulty, we may be unable to replace such contract manufacturer in a timely manner and the production of our drug candidates would be interrupted, resulting in delays and additional costs.

Switching manufacturers may be difficult because the number of potential manufacturers is limited and the FDA must approve any replacement manufacturer prior to manufacturing our drug candidates. Such approval would require new testing and compliance inspections. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our drug candidates 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.

We expect to expand our development, clinical research 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.

The failure to attract and retain skilled personnel could impair our drug development and commercialization efforts.

Our performance is substantially dependent on the performance of our senior management and key scientific and technical personnel, particularly James H. Sabry, M.D., Ph.D., our President and Chief Executive Officer, Robert I. Blum, our Executive Vice President, Corporate Development and Commercial Operations and Chief Business Officer, Andrew A. Wolff, M.D., F.A.C.C., our Senior Vice President, Clinical Research and Chief Medical Officer, and Sharon A. Surrey-Barbari, our Senior Vice President, Finance and Chief Financial Officer. The employment of these individuals and our other personnel is terminable at will with short or

no notice. We carry key person life insurance on James H. Sabry, M.D., Ph.D. 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 efforts, 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 cancer and cardiovascular, infectious and other diseases. For example, with respect to cancer, Bristol-Myers Squibb's Taxol, Sanofi Aventis Pharmaceuticals Inc.'s Taxotere, and generic equivalents of Taxol are currently available on the market and commonly used in cancer treatment. Furthermore, we are aware that Merck, Chiron Corp. and Bristol-Myers Squibb are conducting research focused on KSP and other mitotic kinesins. In addition, Bristol-Myers Squibb, Merck, Novartis and other pharmaceutical and biopharmaceutical companies are developing other approaches to inhibiting mitosis. With respect to congestive heart failure, we are aware of a potentially competitive approach being developed by Orion in collaboration with Abbott Laboratories.

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;
- obtain proprietary rights that could prevent us from commercializing our products;
- initiate or withstand substantial price competition more successfully than we can;
- have greater success in recruiting 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 efficacy or alter other drug candidate profile aspects that our drug candidates need to show in order to obtain regulatory approval; and
- 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, as these competitors may, and in certain cases do, operate larger research and development

programs or have substantially greater financial resources than we do. Our competitors may also have significantly greater experience in:

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

If our competitors market drugs that are less expensive, safer or more effective 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 for the commercialization of 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 an NDA from the FDA. Neither we nor our partners have received marketing approval for any of our drug candidates. Obtaining an NDA can be a lengthy, expensive and uncertain process. In addition, failure to comply with the FDA and other applicable foreign and United States 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:

- a drug candidate may not be safe or effective;
- FDA officials 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 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 also 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 problems with the drug, including adverse events of unanticipated severity or frequency, 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 could 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 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; and
- 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. 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 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 claims and may not be able to obtain adequate insurance.

Because we conduct clinical trials in humans, we face the risk that the use of our drug candidates will result in adverse effects. We currently maintain product liability insurance in the amount of $10.0 million with a $5,000 deductible per occurrence, however, such liability insurance currently excludes coverage of liability resulting from clinical trials. We cannot predict the possible harms or side

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.

In addition, once we have commercially launched drugs based on our drug candidates, we will face 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. 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, such recalls 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 our employees or we 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 severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

We use hazardous chemicals and radioactive and biological materials in our business. 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 may be expensive, and current or future environmental regulations may impair our research, development and production efforts.

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.

Our facilities in California are located near an earthquake fault, and an earthquake or other types of natural disasters or resource shortages could disrupt our operations and adversely affect 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, drought or flood, 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. 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 this volatility in the market price of our common stock include, but are not limited to:

- results from, and any delays in, the clinical trials programs for our drug candidates for the treatment of cancer, including the clinical trials for ispinesib and SB-743921, and including delays resulting from slower than expected patient enrollment in such trials;
- delays in or discontinuation of the development of any of our drug candidates by GSK;
- failure or delays in entering additional drug candidates into clinical trials, including a potential drug candidate for the treatment of congestive heart failure;
- failure or discontinuation of any of our research programs;
- delays or other developments in establishing new strategic alliances;
- announcements concerning our strategic alliances with GSK or AstraZeneca or future strategic alliances;
- issuance of new or changed securities analysts' reports or recommendations;
- market conditions in the pharmaceutical and biotechnology 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 reimbursement policies;
- FDA or other United States 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; and
- 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 has been. 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 the time and attention of our management.

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

As of February 28, 2005, our executive officers, directors and their affiliates beneficially owned or controlled approximately 39% percent 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.

Future sales of common stock by our existing stockholders may cause our stock price to fall.

The market price of our common stock could decline as a result of sales by our existing stockholders of shares of common stock in the market after our initial public offering, or the perception that these sales could occur. These sales might also make it more difficult for us to sell equity securities at a time and price that we deem appropriate. The lock-up agreements delivered by our executive officers and directors, and substantially all of our stockholders and option holders, in connection with our initial public offering on April 29, 2004, expired on October 27, 2004. Subject to applicable securities law restrictions and other agreements between the company and certain of such stockholders, these shares are now freely tradable.

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, new Securities and Exchange Commission regulations and Nasdaq National Market 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 for the year ended December 31, 2005 requires the commitment of significant resources to document and test the adequacy of our internal controls. While we plan to expend significant resources in developing the required documentation and testing procedures required by Section 404, we can provide no assurance as to conclusions of management or by our independent registered accounting firm with respect to the effectiveness of our internal controls over financial reporting. 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 resources 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 and we may be harmed.

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

The stock market in general, 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.

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.

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, 2004.

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 Quarterly Report on Form 10-Q. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that the Company's disclosure controls and procedures are effective 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.

(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 Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

None.

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

(c) The following table summarizes employee stock repurchase activity for the three months ended March 31, 2005:

Period	(a) Total Number of Shares Purchased	(b) Average Price Paid per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
January 1 to January 31, 2005	5,998	$ 1.20	–	–
February 1 to February 28, 2005	–	–	–	–
March 1 to March 31, 2005	12,470	$ 1.20	–	–
Total	18,468	$ 1.20	–	–

The total number of shares repurchased represents shares of our common stock that we repurchased from employees upon termination of employment. As March 31, 2005, approximately 77,512 shares of common stock held by employees and service providers remain subject to repurchase by us.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

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

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit Number	Exhibit Description
3.1*	Amended and Restated Certificate of Incorporation.
3.2*	Amended and Restated Bylaws.
4.1*	Specimen Common Stock Certificate.
4.2*	Fourth Amended and Restated Investors Rights Agreement, dated March 21, 2003, by and among the Registrant and certain stockholders of the Registrant.
4.3*	Loan and Security Agreement, dated September 25, 1998, by and between the Registrant and Comdisco.
4.4*	Amendment No. One to Loan and Security Agreement, dated February 1, 1999.
4.5*	Warrant for the purchase of shares of Series A preferred stock, dated September 25, 1998, issued by the Registrant to Comdisco.
4.6*	Loan and Security Agreement, dated December 16, 1999, by and between the Registrant and Comdisco.
4.7*	Amendment No. 1 to Loan and Security Agreement, dated June 29, 2000, by and between the Registrant and Comdisco.
4.8*	Warrant for the purchase of shares of Series B preferred stock, dated December 16, 1999, issued by the Registrant to Comdisco.

Exhibit Number	Exhibit Description
4.9*	Master Security Agreement, dated February 2, 2001, by and between the Registrant and General Electric Capital Corporation.
4.10*	Cross-Collateral and Cross-Default Agreement by and between the Registrant and Comdisco.
4.11*	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to Bristow Investments, L.P.
4.12*	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to the Laurence and Magdalena Shushan Family Trust.
4.13*	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to Slough Estates USA Inc.
4.14*	Warrant for the purchase of shares of Series B preferred stock, dated August 30, 1999, issued by the Registrant to The Magnum Trust.
10.54†	First Amendment to Collaboration and Facilities Agreement, dated March 24, 2005, by and between the Company and Portola Pharmaceuticals, Inc.
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certifications of the Chief Executive Officer and the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350).

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

† 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 24b-2 under the Securities Exchange Act of 1934.

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 12, 2005

CYTOKINETICS, INCORPORATED
(Registrant)

/s/ James H. Sabry
James H. Sabry
President, Chief Executive Officer and Director
(principal executive officer)

/s/ Sharon Surrey-Barbari
Sharon Surrey-Barbari
Senior Vice President, Finance and Chief Financial Officer
(principal financial officer)

EXHIBIT INDEX

Exhibit Number	Exhibit Description
3.1*	Amended and Restated Certificate of Incorporation.
3.2*	Amended and Restated Bylaws.
4.1*	Specimen Common Stock Certificate.
4.2*	Fourth Amended and Restated Investors Rights Agreement, dated March 21, 2003, by and among the Registrant and certain stockholders of the Registrant.
4.3*	Loan and Security Agreement, dated September 25, 1998, by and between the Registrant and Comdisco.
4.4*	Amendment No. One to Loan and Security Agreement, dated February 1, 1999.
4.5*	Warrant for the purchase of shares of Series A preferred stock, dated September 25, 1998, issued by the Registrant to Comdisco.
4.6*	Loan and Security Agreement, dated December 16, 1999, by and between the Registrant and Comdisco.
4.7*	Amendment No. 1 to Loan and Security Agreement, dated June 29, 2000, by and between the Registrant and Comdisco.
4.8*	Warrant for the purchase of shares of Series B preferred stock, dated December 16, 1999, issued by the Registrant to Comdisco.
4.9*	Master Security Agreement, dated February 2, 2001, by and between the Registrant and General Electric Capital Corporation.
4.10*	Cross-Collateral and Cross-Default Agreement by and between the Registrant and Comdisco.
4.11*	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to Bristow Investments, L.P.
4.12*	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to the Laurence and Magdalena Shushan Family Trust.
4.13*	Warrant for the purchase of shares of common stock, dated July 20, 1999, issued by the Registrant to Slough Estates USA Inc.
4.14*	Warrant for the purchase of shares of Series B preferred stock, dated August 30, 1999, issued by the Registrant to The Magnum Trust.
10.54†	First Amendment to Collaboration and Facilities Agreement, dated March 24, 2005, by and between the Company and Portola Pharmaceuticals, Inc.
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certifications of the Chief Executive Officer and the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350).

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

† 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 24b-2 under the Securities Exchange Act of 1934.

Exhibit - 10.54

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

FIRST AMENDMENT TO COLLABORATION AND FACILITIES AGREEMENT

This FIRST AMENDMENT ("**First Amendment**") is hereby entered into as of March 24, 2005 (the "**First Amendment Effective Date**"), by and between Portola Pharmaceuticals, Inc. ("**Portola**") and Cytokinetics, Inc. ("**Cytokinetics**") (collectively, the "**Parties**"). Terms used in this First Amendment and not otherwise defined herein shall have the meanings given to them in the Agreement (as defined below).

RECITALS

A. Portola and Cytokinetics are parties to the Collaboration and Facilities Agreement dated August 19, 2004 (the "**Agreement**").

B. The Parties wish to extend the Term of the Agreement and amend certain terms and conditions of the Agreement.

AGREEMENT

NOW, THEREFORE, the Parties agree as follows:

1. Section 1(oo). The following shall be added as Section 1(oo) of the Agreement:

   ""**Equipment**" means an [***] ([***]) [***] model number [***]."

2. Purchase and Use of Equipment. Portola has purchased at its sole cost, without reimbursement by Cytokinetics or inclusion in License Fees (subject to Section 4(d) below), the Equipment. The Equipment shall be installed at the Master Premises within forty-five (45) days of the First Amendment Effective Date and remain at the Master Premises during the Term. During the Term, Portola shall maintain in good working condition, insure and promptly replace following a casualty the Equipment. Portola hereby grants to Cytokinetics, subject to the terms and conditions of the Agreement, the non-exclusive right to have the Equipment used by Portola Personnel on behalf of Cytokinetics at the Master Premises for the performance of the Collaboration. The Equipment shall be available for use by Portola on behalf of Cytokinetics at least [***] percent ([***]%) of the business days during the period beginning on the date that the Equipment is installed at the Master Premises and ending on the expiration or termination of the Term ("**Availability Period**"). Except for such non-exclusive right by Cytokinetics, Portola shall own all right, title and interest in and to the Equipment.

3. Section 4(d). The following shall be added as Section 4(d) of the Agreement:

   "**(d) Payment for Use of Equipment and Other Activities**.
   (i) In consideration for use of the Equipment by Portola Personnel as part of the Collaboration during the Term, and in consideration for Portola's other activities under the Agreement, Cytokinetics agrees to pay Portola a total of [***] dollars ($[***]) ("**Equipment Use Fee**"), payable (with no interest) in [***] ([***]) equal [***] installments of [***] ($[***]) ("**Installment Payments**"), with the initial [***] installment payable on January 15, 2006 and the final [***] installment payable on October 15, 2007 ("**Payment Period**").

   (ii) In the event that the Agreement is terminated prior to December 31, 2005: (A) for any reason by Portola pursuant to Section 14(d), (B) pursuant to Sections 14(a), 14(b) or 14(e), or (C) by Cytokinetics pursuant to Section 14(c), the Equipment Use Fee (and correspondingly the Installment Payments) shall be pro-rated to reflect the number of months in 2005 during which the Collaboration was performed prior to the effective date of such termination. By way of example, if the Agreement is terminated by Portola in July of 2005, Cytokinetics would only be obligated to pay one half (1/2) of the Equipment Use Fee, and the [***]

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

Installment Payments payable during the Payment Period would be reduced to [***] dollars and [***] cents ($[***]) each.

(iii) In the event that: (A) the Agreement is not terminated under Section 14, (B) the Equipment is not available for use by Portola on Cytokinetics' behalf as part of the Collaboration for at least [***] percent ([***]%) or more of the business days during the Availability Period, and (C) such unavailability does not result from or arise out of Cytokinetics' negligence, willful misconduct or breach of the Agreement, then Cytokinetics shall be entitled to an equitable adjustment of the Equipment Use Fee (and correspondingly the Installment Payments) to reflect the percentage of business days in 2005 where the Equipment was available for use by Portola on Cytokinetics' behalf. By way of example, if all the foregoing conditions in (iii)(A) – (C) are met so that the Equipment is only available for use in the Collaboration [***] percent ([***]%) of the business days during the Availability Period, Cytokinetics would only be obligated to pay [***] percent ([***]%) of the Equipment Use Fee, and the [***] Installment Payments payable during the Payment Period would be reduced to [***] dollars ($[***]) each.

4. Amendment of Section 13. Section 13 of the Agreement is hereby replaced with the following:

"**Term**. The term of this Agreement shall begin on the Effective Date and end on December 31, 2005 (the "**Term**")."

5. Amendment of Exhibit D. **Exhibit D** to the Agreement shall be replaced by **Exhibit D-1** set forth in Schedule A to this First Amendment.

6. Amendment of Exhibit F. **Exhibit F** to the Agreement shall be replaced by **Exhibit F-1** set forth in Schedule B to this First Amendment.

7. Amendment of Exhibit G. **Exhibit G** to the Agreement shall be replaced by **Exhibit G-1** set forth in Schedule C to this First Amendment.

8. Amendment of Exhibit H. **Exhibit H** to the Agreement shall be replaced by **Exhibit H-1** set forth in Schedule D to this First Amendment.

9. Effectiveness. This First Amendment shall be effective upon the First Amendment Effective Date, subject to the signing by both Parties.

10. Miscellaneous.

(a) Entire Agreement. The Agreement, as modified by, and together with, this First Amendment, is the entire agreement between the Parties with respect to the subject matter of the Agreement. Except as specifically set forth in this First Amendment, the relationship between the parties with respect to the subject matter of the Agreement continues to be governed by the terms of the Agreement, the provisions of which remain in full force and effect. In the event of a conflict between the terms of the Agreement and the terms of this First Amendment, the terms of this First Amendment control. This First Amendment is not intended to confer any rights or remedies hereunder upon any person other than the Parties.

(b) Counterparts. This First Amendment may be executed in counterparts, each of which shall be deemed an original, and all of which together shall constitute one instrument.

IN WITNESS WHEREOF, this First Amendment has been executed by the Parties hereto as of the First Amendment Effective Date.

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

PORTOLA PHARMACEUTICALS, INC.

By: /s/Carol Olson

Name: Carol Olson

Title: EVP

CYTOKINETICS, INC.

By: /s/Robert I. Blum

Name: Robert I. Blum

Title: Executive Vice President, Corporate Development and Commercial Operations and Chief Business Officer

SCHEDULE A TO FIRST AMENDMENT

EXHIBIT D-1

License Fee

License Fee: The License Fee shall be equal to the sum of:

[***]% of the Space Costs for the Lab Space
[***]% of the Space Costs for the Exclusive Space
[***]% of General Lab Operating Costs (excluding Direct Cytokinetics Costs)
[***]% of the General [***] Purchases
[***]% of Support Costs
[***]% of [***] Costs (excluding Direct Cytokinetics Costs)
[***]% of Maintenance and Administration Costs
and [***]% of Additional Costs

as more fully described in the table below.

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

[***]

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

SCHEDULE B TO FIRST AMENDMENT

EXHIBIT F-1

Permitted Hazardous Materials

[***]

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

SCHEDULE C TO FIRST AMENDMENT

EXHIBIT G-1

Portola Hazardous Materials

[***]

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

SCHEDULE D TO FIRST AMENDMENT

EXHIBIT H-1

Cytokinetics Equipment

Equipment	Description	Cytokinetics asset #

[***]

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

EXHIBIT 31.1

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

I, James H. Sabry, 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)) 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) 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;

(c) 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 12, 2005

By: /s/ James H. Sabry
Name: James H. Sabry
Title: President and Chief Executive Officer

EXHIBIT 31.2

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)) 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) 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;

(c) 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 12, 2005

By: /s/ Sharon Surrey-Barbari
Name: Sharon Surrey-Barbari
Title: Senior Vice President, Finance and
Chief Financial Officer

EXHIBIT 32.1

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, 2005 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 12, 2005

/s/ James H. Sabry
President and Chief Executive Officer

/s/ Sharon Surrey-Barbari
Senior Vice President, Finance and Chief
Financial Officer