Table of Contents

As filed with the Securities and Exchange Commission on March 11, 2004
Registration No. 333-112261

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 1

TO

Form S-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CYTOKINETICS, INCORPORATED

(Exact name of Registrant as specified in its charter)

Delaware	**2834**	**94-3291317**
(State or other jurisdiction of incorporation or organization)	*(Primary Standard Industrial Classification Code Number)*	*(I.R.S. Employer Identification Number)*

280 East Grand Avenue

South San Francisco, California 94080
(650) 624-3000
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

James H. Sabry, M.D., Ph.D.

President and Chief Executive Officer
Cytokinetics, Incorporated
280 East Grand Avenue
South San Francisco, California 94080
(650) 624-3000
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Michael J. O'Donnell, Esq.
Martin J. Waters, Esq.
David B. Crawford, Esq.
Wilson Sonsini Goodrich & Rosati
Professional Corporation
650 Page Mill Road
Palo Alto, CA 94304
(650) 493-9300

Alan C. Mendelson, Esq.
Patrick A. Pohlen, Esq.
Latham & Watkins LLP
135 Commonwealth Drive
Menlo Park, CA 94025
(650) 328-4600

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"), check the following box. ☐

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If delivery of the prospectus is expected to be made pursuant to Rule 434, check the following box. ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
Common Stock $0.001 par value	$86,250,000	$6,977.63

(1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457 under the Securities Act of 1933.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission acting pursuant to said Section 8(a) may determine.

Table of Contents

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion. Dated March 11, 2004.

5,800,000 Shares

CYTOKINETICS

Common Stock

This is an initial public offering of shares of common stock of Cytokinetics, Incorporated. All of the 5,800,000 shares of common stock are being sold by the company.

Prior to this offering, there has been no public market for the common stock. It is currently estimated that the initial public offering price per share will be between $11.00 and $13.00. Application has been made for the quotation of the common stock on the Nasdaq National Market under the symbol "CYTK".

See "Risk Factors" on page 8 to read about factors you should consider before buying shares of the common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Share	Total
Initial public offering price	$	$
Underwriting discount	$	$
Proceeds, before expenses, to Cytokinetics	$	$

To the extent that the underwriters sell more than 5,800,000 shares of common stock, the underwriters have the option to purchase up to an additional 870,000 shares from Cytokinetics at the initial public offering price less the underwriting discount.

The underwriters expect to deliver the shares against payment in New York, New York on , 2004.

Goldman, Sachs & Co.

Credit Suisse First Boston

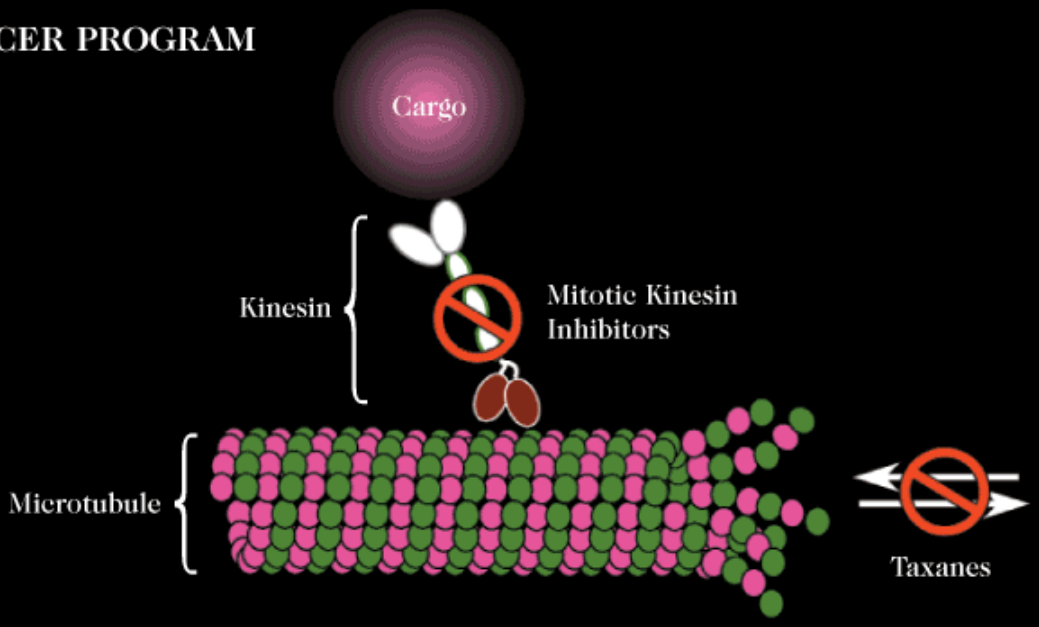
Pacific Growth Equities, LLC

Lazard

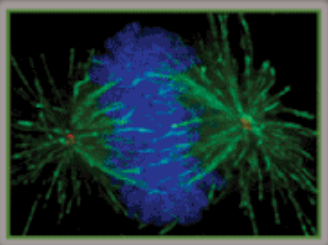
Prospectus dated , 2004.

Table of Contents

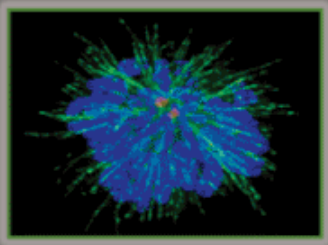
CANCER PROGRAM



Cancer is a disease characterized by unregulated cell proliferation. Mitotic kinesins [e.g., Kinesin Spindle Protein (KSP)] are cytoskeletal motor proteins that perform highly specific and essential roles in cell proliferation. These newly understood proteins transport cellular components, including genetic material, along microtubules. Microtubules are a central component of the cytoskeleton of both proliferating and non-proliferating cells, and are comprised of tubulin, the protein target of chemotherapeutic drugs known as taxanes. In our cancer program, we are focused on the discovery and development of novel classes of compounds that inhibit mitotic kinesins. Mitotic kinesin inhibitors specifically disrupt cell division, leaving other cytoskeletal processes unaffected, and therefore represent a potentially safer and more effective approach to the treatment of cancer.



Normal mitotic spindle in dividing cancer cell
(blue = genetic material, green = microtubules)



Monopolar mitotic spindle in cancer cell treated with KSP inhibitor
(blue = genetic material, green = microtubules)

The mitotic spindle is a cytoskeletal structure in proliferating cells that is responsible for the segregation of identical copies of genetic material into each of the two cells resulting from the division of a single cell. Treatment of dividing cells with an inhibitor of KSP prevents formation of a functional bipolar mitotic spindle thereby producing a characteristic monopolar mitotic spindle. Interruption of proper cell division through this mechanism in cancer cells results in cell death.

TABLE OF CONTENTS

PROSPECTUS SUMMARY

You should read the following summary together with the more detailed information regarding us, the sale of our common stock in this offering, our financial statements and notes to those financial statements that appear elsewhere in this prospectus.

Cytokinetics, Incorporated

We are a leading biopharmaceutical company focused on the discovery, development and commercialization of novel small molecule drugs that specifically target the cytoskeleton. The cytoskeleton is a complex biological infrastructure that plays a fundamental role within every human cell. A number of commonly used drugs and a growing body of research validate the role that 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 classes of drugs directed at treatments for cancer, cardiovascular disease, fungal diseases and other diseases. We have developed a cell biology driven approach and proprietary technologies to evaluate the function of many interacting proteins in the complex environment of the intact human cell. We believe that our approach enhances the speed, efficiency and yield of our drug discovery and development process by accurately and rapidly identifying drug candidates with attractive properties. Our approach has yielded two drug candidates for the treatment of cancer, a drug candidate for the treatment of acute congestive heart failure, and more than ten other research programs. Our most advanced drug candidate, SB-715992, is the subject of a broad Phase II clinical trials program designed to evaluate its effectiveness in many different types of cancer. An investigational new drug application, or IND, was filed with the U.S. Food and Drug Administration, or FDA, in 2003 for our second cancer drug candidate, SB-743921, which we expect will enter Phase I clinical development in early 2004. In addition, we expect to initiate Phase I clinical development for a drug candidate, CK-1213296, for the treatment of acute congestive heart failure in the second half of 2004. Our strategy is to develop our own commercialization capabilities for those of our drug candidates that are directed towards large concentrated markets, however, it is possible that we may never successfully commercialize any of our drug candidates. Our leading drug candidates are in clinical or earlier stages of development, and we have neither received regulatory approval for, nor derived commercial revenues from, any of them and we expect to incur increasing losses over the next several years.

Our Focus on the Cytoskeleton

We believe that the cytoskeleton is one of a few biological areas with broad potential for drug discovery and development and has been scientifically and commercially validated in a wide variety of human diseases. For example, the cytoskeleton plays a fundamental role in the cell proliferation process, and cancer is a disease of unregulated cell proliferation. A number of commonly used cancer drugs inhibit cell proliferation by disrupting aspects of cytoskeletal function. However, these drugs also interrupt cytoskeletal functions unrelated to cell proliferation. This limits their clinical benefit and results in dose-limiting toxicities. As another example, the cytoskeleton plays a fundamental role in cardiac muscle contraction and has been linked to the origins of congestive heart failure, a disease of impaired cardiac function. Certain commonly used congestive heart failure drugs that work by indirectly modulating cytoskeletal function have limited therapeutic value due to their clinical side effects. We believe that our understanding of the cytoskeleton will allow us to develop potentially safer and more effective drugs for cancer and congestive heart failure. Our other research programs are also focused on diseases in which we believe the cytoskeleton plays a significant role.

Our Drug Candidates in Development

- ***Cancer:*** **SB-715992 has entered a Phase II clinical trial for the treatment of non-small cell lung cancer and is expected to enter multiple Phase II clinical trials in other solid**

cancers throughout 2004. SB-715992 is a novel small molecule drug candidate that inhibits cell proliferation and promotes cancer cell death by specifically disrupting the function of a cytoskeletal protein known as kinesin spindle protein, or KSP. KSP is essential for cell proliferation, a process that when unregulated results in tumor growth. KSP plays no role outside of cell proliferation. Current drugs that inhibit cell proliferation, such as Taxol® (paclitaxel) and Taxotere® (docetaxel), are standard treatments for many types of cancers, but these drugs target tubulin, a cytoskeletal protein that is essential not only to cell proliferation but also to many other important cellular functions. Because SB-715992 inhibits only cell proliferation, we believe it may exhibit a lower incidence of toxicities than many existing cancer drugs. In addition, SB-715992's novel mechanism of action may be effective against a broader range of tumor types.

We are participating in the development of SB-715992 which is being conducted by GlaxoSmithKline, or GSK, under our strategic alliance. GSK commenced a Phase II clinical trial for SB-715992 in non- small cell lung cancer in late 2003. A number of parallel Phase II monotherapy clinical trials and Phase Ib combination therapy clinical trials are scheduled to begin throughout 2004. These clinical trials are expected to evaluate this novel drug candidate in multiple tumor types including colorectal, breast and ovarian cancers. Also in 2004, the National Cancer Institute, or NCI, plans to sponsor additional Phase I and Phase II clinical trials designed to evaluate SB-715992 in other tumor types and other dosing regimens.

- ***Cancer:*** **SB-743921 is expected to enter Phase I clinical trials in early 2004.** This drug candidate also inhibits KSP but is structurally distinct from SB-715992. We believe that having two KSP inhibitors for the potential treatment of cancer in concurrent clinical development increases the likelihood that a commercial drug will be developed. SB-743921 is also being developed by GSK through our strategic alliance.

- ***Cardiovascular Disease:*** **We expect to file an IND and initiate a Phase I clinical trial for our drug candidate for the treatment of acute congestive heart failure, CK-1213296, in the second half of 2004.** Our drug candidate specifically targets a cytoskeletal protein, cardiac myosin, which is essential for cardiac muscle contraction. In animal models, CK-1213296 improves cardiac function without detrimental effects on heart rhythm, heart rate or blood pressure that limit the effectiveness of existing drugs.

Our Research Programs

We have more than ten research programs that address multiple therapeutic areas, such as fungal diseases, inflammatory diseases, high blood pressure and asthma. We structure our research programs in these therapeutic areas around cytoskeletal protein targets to discover and develop novel small molecule drug candidates that may address unmet clinical needs as well as the shortcomings of existing drugs.

Our Cell Biology Driven Approach to Drug Discovery and Development

All of our compounds in research and development have been discovered internally using our unique cell biology driven approach. We develop a detailed understanding of multiple proteins within a cytoskeletal pathway or multi-protein system to identify various intervention points to modulate the pathway or system to treat disease. We can then direct our discovery activities to specific cytoskeletal proteins that may be attractive targets for the development of potentially safer and more effective drugs.

We have also developed proprietary automated technologies, including our PUMA system and Cytometrix technologies, to enable early identification and prioritization of compounds that are highly selective for their intended protein targets without other cellular effects, and are thereby less likely to give rise to clinical side effects. The integrated use of these technologies enables us to efficiently

focus our research efforts and resources on those compounds directed at novel cytoskeletal protein targets that are more likely to yield attractive drug candidates. We have advanced our Cytometrix technologies through technical development activities conducted with each of Eisai Research Institute, Novartis Pharma AG, Tularik Inc. and Vertex Pharmaceuticals, Inc.

Our Strategic Alliances

We selectively seek strategic alliances that enable us to maintain financial and operational flexibility while retaining significant economic and commercial rights to our drug candidates. In June 2001, we entered into a strategic alliance with GSK to discover, develop and commercialize small molecule drugs for the treatment of cancer as well as other diseases by targeting KSP and certain other related cytoskeletal proteins involved in cell proliferation. Under this strategic alliance, GSK has made a $14.0 million upfront cash payment and an initial $14.0 million investment in our equity. GSK has also committed to reimburse our full time equivalents, or FTEs, conducting research in connection with the strategic alliance and to make additional precommercialization milestone payments to us and pay royalties to us based on product sales. As of December 31, 2003, we have received $17.2 million in FTE reimbursement and $3.2 million in precommercialization milestone payments from GSK. We will receive future FTE reimbursement and could receive significant precommercialization milestone payments and royalties based on product sales. In addition, we retain both a product-by-product option to co-fund certain later-stage development activities in exchange for a higher royalty rate, and an option to secure additional co-promotion rights. In December 2003, we entered into a strategic alliance with AstraZeneca AB to fund and participate in the development of a new application of our Cytometrix technologies for use by both parties.

Our Corporate Strategy

Our goal is to become a fully-integrated biopharmaceutical company focused on discovering, developing and commercializing novel drugs to treat cancer, cardiovascular disease and other diseases. We intend to achieve this goal by:

- focusing on the cytoskeleton;
- leveraging our cell biology driven approach and proprietary technologies to increase the speed, efficiency and yield of our drug discovery and development process;
- pursuing multiple drug candidates for each cytoskeletal protein target and broad clinical trials for each drug candidate;
- establishing select strategic alliances to accelerate our drug development programs while preserving significant development and commercial rights; and
- building development and commercialization capabilities directed towards large concentrated markets.

Risks

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in “Risk Factors”. All of our drug candidates, including SB-715992, SB-743921 and CK-1213296, are in clinical or earlier stages of development. Accordingly, we have not received regulatory approval for, nor commercial revenues from, any of our drug candidates. It is possible that neither we nor our partners may ever successfully commercialize any of our drug candidates. As of December 31, 2003, we had incurred $94.1 million in net losses since inception. Because our initial drug candidates are in the early stages of clinical testing, we expect to continue to incur increasing losses over the next several years, and we may never become profitable.

Private Sale of Shares to GSK

We have entered into an agreement pursuant to which we will sell an affiliate of GSK approximately $7.0 million of our common stock immediately prior to the completion of this offering at a per share price equal to our per share initial public offering price. Assuming an initial public offering price of $12.00 per share, an affiliate of GSK will purchase 583,333 restricted shares of our common stock at a price of $12.00 per share.

Company Information

We were incorporated in Delaware in August 1997 as Cytokinetics, Incorporated. Our principal executive offices are located at 280 East Grand Avenue, South San Francisco, California 94080, and our telephone number is (650) 624-3000. Our website address is http://www.cytokinetics.com. Information contained in our website is not a part of this prospectus. References in this prospectus to “we,” “us” and “our” refer to Cytokinetics, Incorporated.

The Offering

Common stock offered	5,800,000 shares
Common stock to be outstanding after this offering	25,794,573 shares
Use of proceeds	For general corporate purposes, including the potential co-funding of certain later-stage development activities with respect to SB-715992 or SB-743921; preclinical activities and clinical development of our drug candidate, CK-1213296, for the treatment of acute congestive heart failure; research programs; development, sales, marketing and manufacturing operations and the potential license or acquisition of complementary technologies. See "Use of Proceeds."
Proposed Nasdaq National Market symbol	CYTK

The number of shares of common stock to be outstanding after this offering is based on 2,307,258 shares of common stock outstanding as of December 31, 2003 and also reflects the automatic conversion of preferred stock into 17,103,982 shares of common stock. This number does not include, as of December 31, 2003:

- 2,244,400 shares of common stock issuable upon exercise of options outstanding, at a weighted average exercise price of $1.06 per share;
- 100,000 shares of common stock issuable upon the exercise of warrants to purchase common stock and 181,983 shares of preferred stock issuable upon the exercise of warrants to purchase preferred stock (which will become exercisable for 90,991 shares of common stock upon consummation of this offering);
- 390,655 shares of common stock reserved for issuance under our 1997 Stock Option/ Stock Issuance Plan; and
- 4,200,000 shares of common stock to be reserved for future issuance under our 2004 Equity Incentive Plan and our 2004 Employee Stock Purchase Plan.

Except as otherwise indicated, all information in this prospectus:

- gives effect to our certificate of incorporation which we will file immediately prior to the closing of this offering;
- gives effect to the automatic conversion of all outstanding shares of preferred stock into shares of common stock upon the closing of this offering;
- gives effect to a 1-for-2 reverse stock split to be completed prior to the closing of this offering;
- gives effect to the sale of 583,333 shares of common stock to an affiliate of GSK in a concurrent private placement based on an initial offering price of $12.00 per share; and
- assumes no exercise by the underwriters of their option to purchase 870,000 additional shares from Cytokinetics in this offering.

Summary Financial Data

The following table summarizes our financial data. The summary financial data for the years ended December 31, 2001, 2002 and 2003 are derived from our audited financial statements included in this prospectus. You should read these data together with our financial statements and related notes and the information under "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." See Note 10 to our financial statements for information regarding pro forma common shares outstanding and pro forma net loss per share.

	Years Ended December 31,			Cumulative Period from August 5, 1997 (date of Inception) to December 31,
	2001	2002	2003	2003
	(in thousands, except for per share data)			
Statement of Operations Data:				
Revenues:				
Research and development revenues from related party	$ 6,764	$ 8,470	$ 7,703	$ 22,937
Research and development and grant revenues	302	126	74	502
License revenues from related party	1,400	2,800	2,800	7,000
	8,466	11,396	10,577	30,439
Operating expenses:				
Research and development (1)	20,961	28,424	34,004	100,817
General and administrative (1)	5,897	6,953	9,163	28,136
Total operating expenses	26,858	35,377	43,167	128,953
Loss from operations	(18,392)	(23,981)	(32,590)	(98,514)
Interest and other income (expense), net	2,518	901	(95)	4,440
Net loss	$(15,874)	$(23,080)	$(32,685)	$ (94,074)
Net loss per share:				
Basic and diluted	$ (11.18)	$ (13.25)	$ (17.10)	
Pro forma net loss per share:				
Basic and diluted (unaudited) (2)			$ (1.81)	
Weighted-average number of shares used in pro forma per share calculation:				
Basic and diluted (unaudited) (2)			18,029	

(1) Includes non-cash stock-based compensation.

(2) Gives effect to the conversion of all outstanding shares of preferred stock into 17,103,982 shares of our common stock effective upon the closing of this offering. See Note 10 to our financial statements.

	As of December 31, 2003		
	Actual	Pro Forma	Pro Forma, As Adjusted
		(in thousands)	
Balance Sheet Data:			
Cash, cash equivalents, short-term and long-term investments	$ 43,045	$ 43,045	$113,248
Restricted cash	7,199	7,199	7,199
Working capital(1)	27,619	27,619	97,822
Total assets	62,873	62,873	133,076
Long-term portion of equipment financing lines	8,075	8,075	8,075
Convertible preferred stock	133,172	—	—
Deficit accumulated during the development stage	(94,074)	(94,074)	(94,074)
Total stockholders' (deficit) equity	(92,031)	41,141	111,344

The table above presents summary balance sheet data on an actual basis, on a pro forma basis and on a pro forma as adjusted basis. The pro forma numbers reflect the conversion of all of our preferred stock into an aggregate of 17,103,982 shares of our common stock immediately upon the

closing of this offering and the pro forma as adjusted numbers reflect the sale of 583,333 shares of our common stock to an affiliate of GSK based on an initial offering price of $12.00 per share and the sale of 5,800,000 shares of our common stock at an assumed initial public offering price of $12.00 per share, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(1) Represents current assets less current liabilities.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below with all of the other information included in this prospectus before making an investment decision. If any of the possible adverse events described below actually occurs, our business, results of operations or financial condition would likely suffer. In such an event, the market price of our common stock could decline and you could lose all or part of your investment in our common stock.

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. Our net loss for the fiscal years ended December 31, 2003, 2002 and 2001 was $32.7 million, $23.1 million and $15.9 million, respectively. As of December 31, 2003, we had an accumulated deficit of $94.1 million. We expect to incur increasing losses for 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 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 before the 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 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. SB-715992, our most advanced drug candidate for the treatment of cancer, is currently our only drug candidate in clinical trials and we cannot be certain that the clinical development of this or any other drug candidate in preclinical testing or clinical development will be successful, that it will receive the regulatory approvals required to commercialize it, 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. We expect that SB-743921, our other cancer drug candidate, will enter Phase I clinical trials in early 2004. Because SB-743921 has a similar mechanism of action as SB-715992, 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 private placements of our securities and strategic alliances with GSK and others. We expect that the net proceeds of this offering, together with 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 24 months. For the year ended December 31, 2003, our cash outflow to fund operations was approximately $30.5 million. 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, this 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.

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. We will need to demonstrate efficacy for the treatment of specific indications and monitor safety throughout the clinical development process. To date, long-term safety and efficacy have not yet been demonstrated in clinical trials for any of our drug candidates. Through our strategic alliance, GSK is currently conducting a Phase II clinical trial to test the safety and efficacy of SB-715992 in non-small cell lung cancer. Additional Phase II and Phase Ib clinical trials for SB-715992 and Phase I clinical trials for SB-743921 are scheduled to begin throughout 2004. If these 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. The results of preclinical studies and early-stage clinical trials of our drug candidates do not necessarily predict the results of later-stage clinical trials. Drug candidates in later-stage clinical trials may fail to show desired safety and efficacy traits despite having progressed through initial clinical trials. 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 approval. Preclinical and clinical data can be interpreted in different ways. Accordingly, FDA officials 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 to humans may produce undesirable side effects. These side 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. Any failure or significant delay in completing clinical trials for our drug candidates, or in receiving regulatory approval for the sale of any drugs resulting from our drug candidates, may severely harm our business and reputation.

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, it takes on average 12 to 15 years to discover and develop a new drug. Most of that time is spent testing the drug to make sure it is safe. According to industry studies, the fully capitalized resource cost of new drug development is approximately $800 million. 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:

- 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;
- lack of effectiveness during clinical trials;
- unforeseen safety issues;
- uncertain dosing issues;
- 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 SB-715992 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 trials program, and, after June 20, 2006, GSK may terminate our strategic alliance for any reason upon six months prior notice. 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. 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. In such event, 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 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 in certain therapeutic areas 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 SB-715992, 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 strategic alliances depends in part on the performance of our partners, over which we have little or no control.

Our ability to commercialize drugs that we develop with our partners and 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. If our partners fail to perform as we expect, our potential for revenue from drugs developed through our strategic alliances with them 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.

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 and potentially other diseases. In addition, if we are successful in developing and receiving regulatory approval for a commercially viable drug for the treatment of one disease focused to 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 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

- the patents of others may have an adverse effect on our business.

We also rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are 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, it 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 may independently develop equivalent knowledge, methods and know-how, it will be more difficult for us to enforce our patent 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 United States and foreign issued patents and pending 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 United States patent and at least one pending United States patent application assigned to Curis, Inc. relating to certain compounds in the quinazolinone class. SB-715992 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. We are also aware that Curis has pending applications in Europe, Japan, Australia and Canada with claims covering compositions of certain quinazolinone compounds. Curis or a third party may assert that the sale of SB-715992 may infringe one or more of these or other patents. We believe that we have valid defenses against an assertion that SB-715992 infringes the Curis patent. However, we cannot guarantee that a court would find such defenses valid. 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 United States patents and pending United States and foreign patent applications assigned to Cellomics, Inc. relating to an automated method for analyzing cells. One of these applications is proceeding to grant 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 practising 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.

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:

- infringement and other intellectual property claims which, 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.

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 additional management and scientific personnel.

Our future funding requirements will depend on many factors, including:

- the rate of progress and cost of our clinical trials and other research and development activities;
- 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 and timing of seeking and obtaining regulatory approvals;
- 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 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 manufacturer to produce our clinical trial drug supplies, and anticipate continued reliance on third-party 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 third-party manufacturers until we are able to expand our operations to include manufacturing capacities. Any performance failure on the part of our existing or future 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 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, or DEA, and corresponding state agencies to ensure strict compliance with current Good Manufacturing Practice, or GMP, and other applicable government regulations and corresponding foreign standards; however, we do not have control over third-party manufacturers' compliance with these regulations and standards. If one of our 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 third-party 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 third-party 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 third-party 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 innovation.

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 third-party 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 third-party 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 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 and Robert I. Blum, our Executive Vice President, Corporate Development and Finance and Chief Financial Officer. Our employment agreements with these individuals and our other personnel are terminable at will with short or no notice. We carry key person life insurance on James H. Sabry, M.D., Ph.D., our President and Chief Executive Officer. 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. The 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 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 and infectious diseases. For example, with respect to cancer, Bristol-Myers Squibb's Taxol, 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 & Co., Inc. and Bristol-Myers Squibb are conducting KSP-directed research. In addition, Bristol-Myers Squibb, 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;
- 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; and
- take advantage of acquisition or other opportunities more readily than we can.

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 a NDA from the FDA. Neither we nor our partners have received marketing approval for any of our drug candidates. Obtaining a 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 a 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 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 third-party 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, physicians may elect not to recommend these drugs for a variety of reasons including:

- timing of market introduction of competitive drugs;
- demonstration of clinical safety and efficacy;
- 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 advantages over alternative treatment methods; and
- 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 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 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 litigated 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, 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 and This Offering

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

Prior to this offering, you could not buy or sell our common stock publicly. An active public market for our common stock may not develop or be sustained after this offering. We will negotiate and determine the initial public offering price with the representatives of the underwriters based on several factors. This price may vary from the market price of our common stock after this offering. You may be unable to sell your shares of common stock at or above the initial offering price due to fluctuation in the market price of the common stock arising from changes in our operating performance or prospects. In addition, 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:

- results from and any delays in the clinical trials programs, including the clinical trials for SB-715992 and SB-743921, our drug candidates for the treatment of cancer;
- failure or delays in entering additional drug candidates into clinical trials, including our drug candidate for the treatment of acute congestive heart failure, CK-1213296;
- failure or discontinuation of any of our research programs;
- delays in establishing new strategic alliances;
- announcements concerning our strategic alliances with GSK or AstraZeneca or future strategic alliances;
- delays in the development of our drug candidates and commercialization of our potential drugs by GSK or any future partners or otherwise;
- market conditions in the pharmaceutical and biotechnology sectors and issuance of new or changed securities analysts' reports or recommendations;
- actual and 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; and
- additions or departures of key personnel.

These and other external factors may cause the market price and demand for our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In addition, in the past, 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.

Our executive officers, directors and their affiliates will beneficially own or control approximately percent of the outstanding shares of our common stock (after giving effect to the conversion of all outstanding convertible preferred stock and the exercise of all outstanding vested and unvested options and warrants), following the completion of this offering and the private placement. 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 this 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 optionholders provide that Goldman, Sachs & Co., in its sole discretion, may release those parties, at any time or from time to time and without notice, from their obligation not to dispose of shares of common stock for a period of 180 days after the date of this prospectus. Goldman, Sachs & Co. has no pre-established conditions to waiving the terms of the lock-up agreements, and any decision by it to waive those conditions would depend on a number of factors, which may include market conditions, the performance of the common stock in the market and our financial condition at that time. Please see "Shares Eligible for Future Sale."

We will have broad discretion in how we use the proceeds of this offering and the private placement, and we may not use these proceeds effectively, which could affect our results of operations and cause our stock price to decline.

We will have considerable discretion in the application of the net proceeds of this offering and the private placement. We currently intend to use the net proceeds to:

- co-fund certain later-stage development activities, if we exercise our option under our strategic alliance with GSK, for either or both of SB-715992 or SB-743921;
- continue preclinical activities and conduct clinical development of our drug candidate for the treatment of acute congestive heart failure, CK-1213296;
- advance our other research programs;
- scale up our development, sales, marketing and manufacturing operations; and
- in-license technology and acquire or invest in businesses, products or technologies that we believe are complementary to our own.

We have not yet finalized the amount of net proceeds that we will use specifically for each of these purposes. We may use the net proceeds for corporate purposes that do not yield a significant return or any return at all for our stockholders.

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 SEC 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. 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, regulatory authorities may initiate legal proceedings against us and we may be harmed.

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

We have paid no cash dividends on any of our classes of capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our businesses. In addition, the terms of existing or any future debts may preclude us from paying these dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

Investors in this offering will pay a much higher price than the book value of our common stock.

If you purchase common stock in this offering, you will pay more for your shares than the amounts paid by existing stockholders for their shares. You will incur immediate and substantial

dilution of $7.68 per share, representing the difference between our pro forma net tangible book value per share after giving effect to this offering and an assumed initial public offering price of $12.00. In the past, we issued options and warrants to acquire common stock at prices significantly below the initial public offering price. To the extent these outstanding options or warrants are ultimately exercised, you will sustain further dilution.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," contains forward-looking statements.

Forward-looking statements include, but are not limited to, statements about:

- the initiation, progress, timing 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 evolving requirements of regulatory agencies;
- the number of drug candidates we pursue;
- our ability to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others, including the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims;
- our options to co-fund the development of one or both of SB-715992 and SB-743921;
- the level of funding we may provide for future drug candidates, including our drug candidate for the treatment of acute congestive heart failure, CK-1213296;
- our plans or ability to establish sales, marketing or manufacturing capabilities and to achieve market acceptance for drug candidates;
- our ability to establish, enforce and maintain selected strategic alliances and activities required for commercialization of our drug candidates;
- the acquisition of technologies, products and other business opportunities that require financial commitments;
- our estimates of future performance; and
- our estimates regarding anticipated operating losses, future revenues, if any, from successful development of our drug candidates and commercialization of our potential drugs, capital requirements and our needs for additional financing.

These statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. These risks and other factors include those listed under "Risk Factors" and elsewhere in this prospectus. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable terminology. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We do not intend to update any of the forward-looking statements after the date of this prospectus or to conform these statements to actual results. Neither the Private Securities Litigation Reform Act of 1995 nor Section 27A of the Securities Act of 1933 provides any protection for statements made in this prospectus.

USE OF PROCEEDS

Our net proceeds from the sale of 5,800,000 shares of common stock in this offering are estimated to be approximately $63.2 million, based on an assumed offering price of $12.00 per share, after deducting estimated underwriting discounts and commissions and estimated offering expenses, which are payable by us. In addition, we will receive approximately $7.0 million of additional proceeds as a result of the private placement to an affiliate of GSK.

We intend to use the proceeds of this offering and the private placement for general corporate purposes, including to:

- co-fund certain later-stage development activities, if we exercise our option under our strategic alliance with GSK, for either or both of SB-715992 or SB-743921;
- continue preclinical activities and conduct clinical development of our drug candidate for the treatment of acute congestive heart failure, CK-1213296;
- advance our other research programs;
- scale up our development, sales, marketing and manufacturing operations; and
- potentially in-license technology and acquire or invest in businesses, products or technologies that we believe are complementary to our own.

Although we periodically engage in preliminary discussions with respect to acquisitions, we are not currently a party to any agreements or commitments and we have no understandings with respect to any acquisitions.

The amounts and timing of our actual expenditures depend on several factors, including the progress of our research and development efforts and the amount of cash used by our operations. We have not determined the amount or timing of the expenditures in the areas listed above. Pending their use, we intend to invest the net proceeds in short-term, investment-grade, interest-bearing instruments.

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We do not anticipate paying any cash dividends on our capital stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business.

CAPITALIZATION

The following table sets forth our capitalization as of December 31, 2003:

- on an actual basis;
- on a pro forma basis, reflecting the conversion of all of our preferred stock into an aggregate of 17,103,982 shares of common stock immediately upon the closing of this offering; and
- on a pro forma as adjusted basis, to give effect to:
  - our sale of 5,800,000 shares of common stock in this offering at an assumed initial public offering price of $12.00 per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, and;
  - our sale of 583,333 shares of common stock to GSK for cash proceeds of $7 million, at a purchase price equal to the assumed initial public offering price of $12.00 per share.

You should read this table in conjunction with the sections of this prospectus entitled "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and with our financial statements and related notes.

	As of December 31, 2003		Pro Forma As Adjusted
	Actual	Pro Forma	
	(in thousands)		
Long-term portion of equipment financing lines	$ 8,075	$ 8,075	$ 8,075
Convertible preferred stock, $0.001 par value, 37,300,000 shares authorized, 34,124,308 shares issued and outstanding, actual, no shares issued and outstanding pro forma and pro forma as adjusted	133,172	—	
Stockholders' equity (deficit):			
Common stock, $0.001 par value, 61,500,000 shares authorized, 2,307,258 shares issued and outstanding, actual; 19,411,240 shares outstanding pro forma and 25,794,573 shares outstanding pro forma as adjusted	2	19	26
Additional paid-in capital	5,646	138,801	208,997
Deferred stock-based compensation	(3,651)	(3,651)	(3,651)
Accumulated other comprehensive income	46	46	46
Deficit accumulated during the development stage	(94,074)	(94,074)	(94,074)
Total stockholders' equity (deficit)	(92,031)	41,141	111,344
Total capitalization	$ 49,216	$ 49,216	$ 119,419

The actual number of shares of common stock shown as issued and outstanding in the table above excludes:

- 2,244,400 shares subject to stock options outstanding as of December 31, 2003;
- 390,655 shares reserved for issuance under our 1997 Stock Option/ Stock Issuance Plan as of December 31, 2003; and
- 100,000 shares of common stock issuable upon the exercise of warrants to purchase common stock and 181,983 shares of preferred stock issuable upon the exercise of warrants to purchase preferred stock (which will become exercisable for 90,991 shares of common stock upon consummation of this offering) outstanding at December 31, 2003,
- 4,200,000 shares of common stock to be reserved for future issuance under our 2004 Equity Incentive Plan and our 2004 Employee Stock Purchase Plan.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the initial public offering price per share and the pro forma as adjusted net tangible book value per share of common stock upon the completion of this offering and the private placement. Our historical net tangible book value as of December 31, 2003 was approximately $(92.0) million or $(39.89) per share. Pro forma net tangible book value per share represents our total tangible assets less total liabilities divided by the pro forma total number of shares of common stock outstanding after giving effect to the automatic conversion of all shares of our outstanding convertible preferred stock. Dilution in pro forma as adjusted net tangible book value per share represents the difference between the amount per share paid by purchasers of common stock in this offering and the pro forma as adjusted net tangible book value per share of common stock immediately after the closing of this offering.

After giving effect to the sale of the shares of common stock at an assumed initial public offering price of $12.00 per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by us and our sale of 583,333 shares of common stock to an affiliate of GSK for cash proceeds of $7 million at a purchase price equal to the assumed initial public offering price of $12.00 per share, our pro forma as adjusted net tangible book value as of December 31, 2003 would have been approximately $111.3 million, or $4.32 per share of common stock. This represents an immediate increase in pro forma net tangible book value of $2.20 per share to existing stockholders and an immediate dilution of $7.68 per share to new investors purchasing shares of common stock in this offering at the initial offering price.

The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share		$12.00
Historical net tangible book value per share as of December 31, 2003	$(39.89)	
Increase per share due to assumed conversion of all shares of convertible preferred stock	42.01	
Pro forma net tangible book value per share as of December 31, 2003	2.12	
Increase per share attributable to new investors	2.20	
Pro forma as adjusted net tangible book value per share after this offering and the private placement		4.32
Dilution per share to new investors in this offering		$ 7.68

The following table summarizes as of December 31, 2003 the number of shares of our common stock purchased from us, the total consideration paid to us, and the average price per share paid to us by existing stockholders and new investors purchasing shares of our common stock in this offering. The table assumes an initial public offering and private placement price of $12.00 per share, before deducting underwriting discounts and commissions and estimated offering expenses payable by us:

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders	19,411,240	75%	$135,064,385	64%	$ 6.96
New investors	6,383,333	25	76,600,600	36	12.00
Total	25,794,573	100%	$211,664,385	100%	

The above discussion and tables are based on 2,307,258 shares of common stock issued and outstanding as of December 31, 2003 and excludes:

- 2,244,400 shares subject to stock options outstanding as of December 31, 2003;
- 390,655 shares reserved for issuance under our 1997 Stock Option/ Stock Issuance Plan as of December 31, 2003; and
- 100,000 shares of common stock issuable upon the exercise of warrants to purchase common stock and 181,983 shares of preferred stock issuable upon the exercise of warrants to purchase preferred stock (which will become exercisable for 90,991 shares of common stock upon consummation of this offering) outstanding at December 31, 2003.
- 4,200,000 shares of common stock to be reserved for future issuance under our 2004 Equity Incentive Plan and our 2004 Employee Stock Purchase Plan.

Assuming the exercise in full of all options and warrants outstanding as of December 31, 2003, the number of shares purchased by existing stockholders would be increased by 2,435,391 shares to 21,846,631 shares, total consideration paid by them would be increased by approximately $2,828,000 to $137,892,000 and the average price per share paid by them would be decreased by $0.65 per share to $6.31 per share.

The exercise of options and warrants, all of which have an exercise price less than the assumed initial public offering price would increase the dilution to new investors an additional $0.28 per share, to $7.96 per share.

If the underwriters exercise their over-allotment option in full, the percentage of shares of common stock held by existing stockholders will be approximately 75% of the total number of shares of our common stock outstanding after this offering, and the number of shares held by new investors will be increased to 7,253,333, or approximately 25% of the total number of shares of our common stock outstanding after this offering.

SELECTED FINANCIAL DATA

The following selected financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" following this section and our financial statements and related notes included in the back of this prospectus. See also Note 10 to our financial statements for information regarding pro forma common shares outstanding and pro forma net loss per share. The selected financial data for the years ended December 31, 1999 and 2000 and as of December 31, 1999, 2000 and 2001 are derived from our audited financial statements not included in this prospectus. The selected financial data for the years ended December 31, 2001, 2002 and 2003 and as of December 31, 2002 and 2003 are derived from our audited financial statements included in this prospectus. The historical results are not necessarily indicative of results to be expected in any future period.

	Year Ended December 31,				
	1999	2000	2001	2002	2003
Statement of Operations Data:					
Revenues:					
Research and development revenues from related party	$ —	$ —	$ 6,764	$ 8,470	$ 7,703
Research and development and grant revenues	—	—	302	126	74
License revenues from related party	—	—	1,400	2,800	2,800
Total revenues	—	—	8,466	11,396	10,577
Operating expenses:					
Research and development	6,103	10,403	20,961	28,424	34,004
General and administrative	1,515	3,390	5,897	6,953	9,163
Total operating expenses	7,618	13,793	26,858	35,377	43,167
Operating loss	(7,618)	(13,793)	(18,392)	(23,981)	(32,590)
Interest and other income	378	902	3,232	2,232	2,395
Interest and other expense	(101)	(188)	(714)	(1,331)	(2,490)
Net loss	$(7,341)	$(13,079)	$(15,874)	$(23,080)	$(32,685)
Net loss per common share:					
Basic and diluted	$ (9.44)	$ (13.55)	$ (11.18)	$ (13.25)	$ (17.10)
Weighted average shares used in computing net loss per common share, basic and diluted	778	965	1,420	1,742	1,911
Pro forma net loss per common share, basic and diluted (unaudited)					$ (1.81)
Weighted average shares used in computing pro forma net loss per common share, basic and diluted (unaudited)					18,029

	As of December 31,				
	1999	2000	2001	2002	2003
Balance Sheet Data:					
Cash, cash equivalents, short-term and long-term investments	$14,823	$ 56,787	$ 62,314	$ 30,461	$ 43,045
Restricted cash	225	225	6,236	13,106	7,199
Working capital	12,888	42,781	43,887	18,571	27,619
Total assets	17,644	61,038	79,019	56,168	62,873
Long-term portion of equipment financing lines	892	1,079	3,525	7,077	8,075
Deficit accumulated during the development stage	(9,356)	(22,435)	(38,309)	(61,389)	(94,074)
Total convertible preferred stock	24,604	79,462	93,304	93,304	133,172
Total stockholders' deficit	$ (9,121)	$(21,818)	$(37,352)	$(60,588)	$ (92,031)

MANAGEMENT'S DISCUSSION AND ANALYSIS

OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion of our financial condition and results of operations in conjunction with the financial statements and the notes to those statements included elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties. As a result of many factors, such as those set forth under the section entitled "Risk Factors" and elsewhere in this prospectus, our actual results may differ materially from those anticipated in these forward-looking statements.

Overview

We are a leading biopharmaceutical company focused on the discovery, development and commercialization of novel small molecule drugs specifically targeting the cytoskeleton. Employing our cell biology driven approach and proprietary technologies we have enhanced the speed, efficiency and yield of our drug discovery and development process. We have two drug candidates for the treatment of cancer, one which is in Phase II clinical trials and the other which is expected to enter Phase I clinical trials in early 2004. We are also pursuing CK-1213296 as a drug candidate for the treatment of acute congestive heart failure and we expect to file an IND and initiate clinical trials for that compound in the second half of 2004. In addition, we are pursuing more than ten research programs addressing a number of therapeutic areas.

Since our inception in August 1997, we have incurred significant net losses. As of December 31, 2003, we had an accumulated deficit of $94.1 million. We expect to incur substantial and increasing losses for the next several years as:

- one or both of SB-715992 and SB-743921 enter later-stage development and commercialization, if we exercise our options to co-fund the development of, and co-promote, these drug candidates under our strategic alliance with GSK;
- we advance CK-1213296 for the treatment of acute congestive heart failure and other drug candidates through clinical trials;
- we expand our research programs and further develop our proprietary drug discovery technologies; and
- if 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.

A Phase II clinical trial program for SB-715992 for the treatment of cancer commenced in the fourth quarter of 2003. We anticipate that this Phase II program will be completed in 2005. A Phase III clinical trial program will then be initiated. We expect that it will take several years before we can commercialize SB-715992. Accordingly, we cannot reasonably estimate when and to what extent SB-715992 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, and then prevailing reimbursement policies, competition and other market conditions. GSK funds all research and development costs associated with SB-715992 pursuant to our strategic alliance. If we exercise our option to co-fund certain later stage development activities associated with SB-715992, our expenditures relating to research and development of this drug candidate will increase significantly.

We expect that a Phase I clinical trial for SB-743921 will commence in early 2004. The clinical trial program for SB-743921 will proceed for several years, and we will not be in a position to generate any revenues or material net cash flows from the 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 this may occur. GSK funds all 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.

We plan to file an IND and initiate Phase I clinical trials for CK-1213296 in the second half of 2004. As with our other drug candidates, CK-1213296 is at too early a stage of development for us to predict when we will be in a position to generate any revenues or material net cash flows from the drug candidate. We currently fund all research and development costs associated with CK-1213296. For the years ended December 31, 2001, 2002, and 2003 we incurred costs of approximately $6.4 million, $8.8 million, and $11.4 million, respectively, for research and development activities relating to our congestive heart failure program that gave rise to CK-1213296. We anticipate that our expenditures relating to research and development of CK-1213296 will increase significantly as we advance this drug candidate 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:

- the uncertainty of the timing of completion of patient registration in our pivotal Phase III clinical trials;
- the possibility of delays in the collection of clinical trial data and the uncertainty of the timing of the interim analyses of our pivotal Phase III clinical trials;
- 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 could have a material adverse effect on our results of operations. A further discussion of the risks and uncertainties associated with completing our projects on schedule, or at all, and certain consequences of failing to do so are set forth 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 efficiency 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.

To date, we have funded our operations primarily through the sale of equity securities, non-equity payments from GSK, capital lease financings, interest on investments and government grants. We received net proceeds from the sale of equity securities of $39.9 million in 2003, $13.8 million in 2001, $54.9 million in 2000, $19.3 million in 1999 and $5.3 million in 1998. Under our strategic alliance with GSK, GSK has made a $14.0 million upfront cash payment and an initial $14.0 million investment in our equity. GSK has also committed to reimburse FTEs performing research in connection with the strategic alliance and to make additional milestone payments and pay royalties based on product sales. As of December 31, 2003, we have received $17.2 million in FTE reimbursement and $3.2 million in milestone payments from GSK. We received $2.0 million, $6.4 million, $3.5 million, $0.6 million and $1.3 million under equipment financing arrangements in the years ending December 31, 2003, 2002, 2001, 2000, and 1999, respectively. Interest earned on investments in the years ending December 31, 2003, 2002, 2001, 2000 and 1999 was $2.4 million,

$2.2 million, $3.1 million, $0.8 million and $0.3 million, respectively. Grant revenues were $0.3 million and $0.1 million in 2001 and 2002, respectively.

GSK has also committed to reimburse FTEs through the end of the five-year research term of the strategic alliance, and to make additional payments upon the achievement of certain precommercialization milestones. GSK has agreed to fund worldwide development and commercialization of drug candidates arising from our strategic alliance. 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 alliance with GSK for contract research activities, which we record as related expenses are incurred. Charges to GSK are based on negotiated rates which are intended to approximate 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 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. None of the revenues recognized to date are refundable 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, 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.

We expect that ultimately our future revenues 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 under our strategic alliance with GSK to co-fund certain later-stage development activities with GSK under our strategic alliance, 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. These costs are reimbursed by GSK on a FTE basis. GSK funds all costs related to preclinical and clinical development of the compounds that are selected for development. Accordingly, we do not currently incur research and development expenses related to the ongoing development of SB-715992 and SB-743921. 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 an 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 clinical trials for our drug candidate for the treatment of acute congestive heart failure, CK-1213296, and in connection with our more than ten 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.

General and Administrative Expenses

General and administrative expenses consist primarily of compensation for employees in executive and operational 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. After completion of the offering made by this prospectus, we anticipate incurring increases in general and administrative expenses, such as increased costs for insurance and investor relations associated with operating as a publicly traded company. These increases will also likely include the hiring of additional personnel.

Stock Compensation

In connection with the grant of stock options to employees and non-employees, we recorded deferred stock-based compensation as a component of stockholders' deficit. 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. Through 2002, for stock options granted to non-employees, we initially recorded on the date of grant the fair value of the options, estimated using the Black-Scholes valuation model. As the non-employee options become exercisable, we revalue the remaining unvested options, with the change in fair value from period to period represented as a change in the deferred compensation charge. Beginning in 2003, we value and recognize the 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 $4.0 million of deferred stock-based compensation and $536,000 of amortization of deferred stock-based compensation related to options granted to employees during the year ended December 31, 2003. We have recorded $736,000 of deferred stock-based compensation for the period from inception through December 31, 2003 related to options granted to non-employees through 2002. We recorded amortization of non-employee deferred compensation of $93,000, $6,000, $232,000 and $555,000 for the years ended December 31, 2001, 2002 and 2003, and for the period from August 5, 1997 (date of inception) through December 31, 2003 respectively. We recorded non-employee stock-based compensation for the year ended December 31, 2003 of $158,000. We expect the remaining $3.7 million to be amortized as follows: $1,122,000 in 2004, $942,000 in 2005, $924,000 in 2006, $413,000 in 2007 and $250,000 in 2008, respectively.

The amount of non-cash stock-based compensation expense we expect in future periods may decrease if unvested options for which deferred compensation expense has been recorded are subsequently cancelled, or may increase if we make future option grants with exercise prices below the estimated fair market value of our common stock on the date of grant.

Interest and Other Income and Expense

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

Results of Operations

Years ended December 31, 2001, 2002 and 2003

Revenues

We recorded revenues of $8.5 million, $11.4 million and $10.6 million for the years ended December 31, 2001, 2002 and 2003, respectively. The increase in license revenues from our strategic alliance with GSK, which we formed in June 2001, from $1.4 million for the year ended December 31, 2001 to $2.8 million for each of the years ended December 31, 2002 and 2003 resulted from a full year of revenue recognition in 2002 and 2003 compared to a partial year of revenue recognition in 2001. Research and development and grant revenues of $7.1 million for the year ended December 31, 2001 comprised $3.5 million of reimbursement for FTEs, $2.0 million of milestone revenues, $1.3 million of research funding and $0.3 million of other revenues. Research and development and grant revenues of $8.6 million for the year ended December 31, 2002 comprised $6.7 million of reimbursement for FTEs, $1.0 million of milestone revenues, and $0.9 million of various research related revenues. The increase in FTE reimbursement resulted from a full year of FTE activity in 2002 compared to a partial year of FTE activity in 2001. Research and development and grant revenues of $7.8 million for the year ended December 31, 2003 comprised $7.1 million of reimbursement for FTEs, $0.2 million of milestone revenues, and $0.5 million of various research related expenses. The $0.4 million increase in 2003 compared to 2002 FTE reimbursement resulted from an annual expense index adjustment to the GSK FTE reimbursement effective June 20, 2003 and the initial $0.1 million FTE reimbursement from a newly negotiated collaboration with Astra Zeneca. GSK milestone revenues decreased $0.8 million in 2003 compared to 2002 and various research related expenses also decreased by $0.4 million.

Research and development expenses

Research and development expenses were $21.0 million for the year ended December 31, 2001 compared with $28.4 million for the year ended December 31, 2002. The increase in research and development expense was primarily due to increased salary and benefit costs of $3.8 million resulting from the hiring of additional research and development personnel and $1.1 million of outsourced contracted services and laboratory consumables. Research and development expenses were $34.0 million for the year ended December 31, 2003, an increase of $5.6 million from the year before. The increase was primarily due to the hiring of additional research and development personnel of $3.2 million and increased spending for contracted services and laboratory consumables of $2.4 million.

For the years ended December 31, 2001, 2002 and 2003 we incurred costs of approximately $7.9 million, $8.9 million and $6.7 million, respectively, for research and development activities relating to the discovery of mitotic kinesin inhibitors, of which GSK reimbursed $4.8 million, $7.5 million and $7.5 million, respectively. During the same periods, we incurred costs of approximately $6.4 million, $8.8 million and $11.4 million, respectively, for research and development activities relating to our congestive heart failure program, $1.8 million, $3.2 million and $7.2 million, respectively, for all other research programs and $4.9 million, $7.5 million and $8.7 million, respectively, for our PUMA system and Cytometrix technologies.

Clinical development timelines, likelihood of success and total completion costs vary significantly for each drug candidate and are difficult to estimate. We anticipate that we will 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 the subsequent compliance with applicable regulations, require 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, have a material adverse effect on our results of operations.

We expect that research and development expenditures will continue to increase substantially during 2004 and subsequent years if we exercise our options to co-fund certain later-stage research and development activities relating to SB-715992 and SB-743921, advance research and development of CK-1213296 and expand our cardiovascular clinical program, pursue additional clinical programs and build associated development of systems and infrastructure. We expect to expand the scope of our research and development programs in future periods which may result in substantial increases in research and development expenses.

General and administrative expenses

General and administrative expenses were $5.9 million for the year ended December 31, 2001 compared with $7.0 million for the year ended December 31, 2002. The increase of $1.1 million was primarily due to increased salary and benefit costs resulting from the hiring of additional general and administrative personnel. General and administrative expenses were $9.2 million for the year ended December 31, 2003, an increase of $2.2 million from the year before. The increase was primarily due to $0.3 million increased salary and benefit costs resulting from the hiring of additional general and administrative personnel and $1.4 million increased spending for contracted services.

We expect that general and administrative expenditures will continue to increase during 2004 and subsequent years due to increasing expenses associated with payroll, operating as a publicly traded company, support of our initial commercialization efforts, business development costs and expanded operational infrastructure. General and administrative expenses consist primarily of the costs of administrative personnel and related facility costs along with legal, accounting and other professional fees.

Interest and Other Income and Expense

Interest and other income (expense), net was $2.5 million for the year ended December 31, 2001 compared with $0.9 million and $(0.1) million for the years ended December 31, 2002 and 2003, respectively. The decrease in interest and other income (expense), net from the year ended December 31, 2001 as compared with the year ended December 31, 2002, was primarily due to an increase in interest and other expense from $0.7 million in 2001 to $1.3 million in 2002. The increase was due to increased debt as a result of loans entered into for capital lease financings. Interest and other income also decreased from $3.2 million in 2001 to $2.2 million in 2002. The decrease in interest income was due to lower average balances of cash, cash equivalents and investments in 2002. The $1.0 million decrease in interest and other income (expense), net from the year ended December 31, 2002 as compared with the year ended December 31, 2003 was primarily due to an increase in interest and other expenses from $1.3 million in 2002 to $2.5 million in 2003. The increase was due to increased debt as a result of loans entered into for capital lease financings. Interest and other income increased from $2.2 million to $2.4 million in 2003. The increase in interest income was due to higher average balances of cash, cash equivalents and investments in 2003.

Liquidity and Capital Resources

Our cash, cash equivalents and investments totaled $43.0 million, and our restricted cash totaled $7.2 million at December 31, 2003. From August 5, 1997, date of inception, through December 31, 2003, we funded our operations through the sale of equity securities, non-equity payments from GSK, equipment financings, government grants and interest earned on investments. We received net proceeds of $39.9 million, $13.8 million, $54.9 million, $19.3 million, and $5.3 million from the sale of equity securities in 2003, 2001, 2000, 1999, and 1998, respectively. As of December 31, 2003, we have received $36.9 million in non-equity payments from GSK. We have received $2.0 million, $6.4 million, $3.5 million, $0.6 million, and $1.3 million under equipment financing arrangements in 2003, 2002, 2001, 2000, and 1999, respectively. Grant revenues were $0.3 million and $0.1 million in 2001 and 2002, respectively. Interest earned on investments in the

years ending December 31, 2003, 2002, 2001, 2000 and 1999 was $2.4 million, $2.2 million, $3.1 million, $0.8 million, and $0.3 million, respectively.

Net cash used in operating activities was $1.8 million, $22.3 million and $30.5 million for the years ended December 31, 2001, 2002 and 2003, respectively, and resulted primarily from net losses of $15.9 million, $23.1 million and $32.7 million, respectively, adjusted for non-cash depreciation and amortization and stock-based compensation expenses and changes in accounts receivable, accounts payable and accrued liabilities balances. In 2001, cash used in operating activities was significantly decreased by the receipt of the $14.0 million license fee from GSK, which is being recognized as revenue ratably over the five-year research term of the strategic alliance.

Related party accounts receivable decreased $1.0 million from 2001 to 2002. This decrease was primarily due to a GSK clinical expense reimbursement payment of $0.9 million received in 2002.

Accrued liabilities increased $1.2 million from 2001 to 2002 due to a $1.0 million increase in general accruals and a $0.2 million increase in the PTO accrual. This 2002 increase was offset by the $1.2 million decrease in accounts payable from 2001 to 2002. Accrued liabilities increased $0.8 million from 2002 to 2003 due to additional consumable expense and outside professional services. Accounts payable increased $0.5 million from 2002 to 2003 due to increased legal and patent expense.

Net cash used in investing activities of $23.5 million and $15.1 million for the years ended December 31, 2001 and 2003, respectively was primarily used to fund our purchases of investments and to a lesser extent, to fund purchases of property and equipment. Net cash provided by investing activities was $22.6 million for the year ended December 31, 2002 as a result of sales and maturities of investments to meet liquidity needs.

Net cash provided by financing activities was $17.0 million, $4.9 million and $40.2 million for the years ended December 31, 2001, 2002 and 2003, respectively. The net cash provided by financing activities was primarily attributable to the sale of preferred stock which generated $13.8 million in 2001 and $39.9 million in 2003.

As of December 31, 2003, future minimum payments under lease obligations and equipment financing lines are as follows (in thousands):

	Within one year	One to three years	Four to five years	After five years	Total
Operating leases	$1,689	$ 3,208	$ 3,168	$7,128	$ 15,193
Equipment financing line	2,008	3,950	4,125	—	10,083
Total	$3,697	$ 7,158	$ 7,293	$7,128	$25,276

Our long-term commitments under operating leases shown above consist of payments relating to our facility lease in South San Francisco, California, which expires in 2013. We have investigated additional office space expansion opportunities to support our administrative, research and development requirements beyond the year 2004 as we expect that by executing our strategy, we will require additional space. As of this date, we have made no formal commitments or plans to access any additional lease space.

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 SB-715992 and SB-743921. If we exercise an option, our research and development expenses will increase significantly. Research and development expenses for our unpartnered drug discovery programs consist primarily of employee compensation, supplies and materials, costs for consultants and contract research, facilities costs and depreciation of equipment. We expect to incur significant research and

development expenses to complete Phase I and subsequent clinical trials for our drug candidate for the treatment of acute congestive heart failure, CK-1213296, to advance our more than ten research programs in multiple therapeutic areas and to 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 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 evolving requirements of regulatory agencies;
- the number of drug candidates we pursue;
- the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims;
- our options to co-fund the development of one or both of SB-715992 and SB-743921;
- the level of funding that we may provide for other current or future drug candidates, including our drug candidate for the treatment of acute congestive heart failure, CK-1213296;
- our plans or ability to establish sales, marketing or manufacturing capabilities and to achieve market acceptance for potential drugs;
- our ability to establish, enforce and maintain selected strategic alliances and activities required for commercialization of our potential drugs;
- 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 the net proceeds of this offering and the private placement, 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 24 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 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.

As of December 31, 2001, 2002 and 2003, 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 any 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.

Disclosure about Market Risk

Our exposure to market risk is limited to interest income sensitivity, which is affected by changes in the general level of United States interest rates, particularly because the majority of our investments are in short-term debt securities. The primary objective of our investment activities is to preserve principal while at the same time maximizing the income we receive without significantly increasing risk. To minimize risk, we maintain our portfolio of cash, cash equivalents, short-term and long-term, and restricted investments in a variety of interest-bearing instruments, including United States government and agency securities, high-grade United States corporate bonds, commercial paper and money market funds. The investment portfolio is subject to interest rate risk and will fall in value in the event market interest rates increase. Due to the short duration of our investment portfolio, we believe an immediate 10% change in interest rates would not be material to our financial condition or results of operations. We do not have any foreign currency or derivative financial instruments.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses and related disclosure of contingent assets and liabilities. We review our estimates on an ongoing basis. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. While our significant accounting policies are described in more detail in the notes to our financial statements included in this prospectus, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our financial statements.

Revenue Recognition

We recognize revenue in accordance with Securities and Exchange Commission Staff Accounting Bulletin, or SAB, No. 101, Revenue Recognition in Financial Statements, as amended by SAB Nos. 101A and 101B. SAB No. 101 requires that four basic criteria must be met before revenue can be recognized: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the fee is fixed and determinable; and collectibility is reasonably assured. Determination of whether persuasive evidence of an arrangement exists and whether delivery has occurred or services have been rendered are based on management's judgments regarding the fixed nature of the fee charged for research performed and milestones met, and the collectibility of those fees. Should changes in conditions cause management to determine these criteria are not met for certain future transactions, revenue recognized for any reporting period could be adversely affected.

Research and development revenues, which are earned under agreements with third parties for contract research and development activities, are recorded as the related expenses are incurred. Charges to the third parties are based upon negotiated rates for our FTEs and actual out-of-pocket costs. Rates for FTEs are intended to approximate our anticipated costs. Milestone payments are non-refundable and recognized as revenue when earned, as evidenced by achievement of the specified milestones and the absence of ongoing performance obligations. Any amounts received in advance of performance are recorded as deferred revenue. None of the revenues recognized to date are refundable if the relevant research effort is not successful.

Grant revenues are recorded as research is performed. Grant revenues are not refundable.

License revenues received in connection with strategic alliance agreements are deferred and recognized on a straight-line basis over the term of the agreement.

Stock-Based Compensation

We account for stock-based employee compensation arrangements in accordance with the provisions of Accounting Principles Board Opinion No. 25 ("APB 25"), "Accounting for Stock Issued to Employees," Statement of Financial Accounting Standards No. 123 ("SFAS No. 123"), "Accounting for Stock-Based Compensation" and complies with the disclosure requirements of Statement of Financial Accounting Standards ("SFAS") No. 148, "Accounting for Stock-Based Compensation and Disclosure an Amendment of FASB Statement No. 123." Under APB 25, compensation expense is based on the difference, if any, on the date of grant, between the estimated fair value of our common stock and the exercise price. SFAS No. 123 defines a "fair value" based method of accounting for an employee stock option or similar equity investment.

We account for equity instruments issued to non-employees in accordance with the provisions of SFAS No. 123 and Emerging Issues Task Force ("EITF") Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling Goods, or Services."

Recent Accounting Pronouncements

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51." FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. In December 2003, the FASB issued FIN 46R, a revision to FIN 46. FIN 46R provides a broad deferral of the latest date by which all public entities must apply FIN 46 to certain variable interest entities to the first reporting period ending after March 15, 2004. We do not expect the adoption of FIN 46 to have a material impact upon our financial position, cash flows or results of operations.

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." SFAS No. 150 establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability or an asset in some circumstances. Many of those instruments were previously classified as equity. SFAS No. 150 is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. It is to be implemented by reporting the cumulative effect of a change in an accounting principle for financial instruments created before the issuance date of SFAS No. 150 and still existing at the beginning of the interim period of adoption. While the effective date of certain elements of SFAS No. 150 has been deferred, we do not expect the adoption of SFAS No. 150 to have a material impact upon our financial position, cash flows or results of operations.

BUSINESS

Overview

We are a leading biopharmaceutical company 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. Our unique approach has produced two cancer drug candidates, an acute congestive heart failure drug candidate, and more than ten other research programs addressing a variety of other disease areas including fungal diseases, inflammatory diseases, high blood pressure and asthma. Our most advanced cancer drug candidate, SB-715992, is the subject of a broad Phase II clinical trials program, being conducted by our partner GSK, designed to evaluate effectiveness in multiple tumor types. An IND was filed with the FDA in 2003 for SB-743921, our second cancer drug candidate being developed by GSK, which we expect will enter Phase I clinical trials in early 2004. In addition, we expect to file an IND and initiate Phase I clinical trials for our drug candidate, CK-1213296, to treat acute congestive heart failure in the second half of 2004.

Because the cytoskeleton plays a fundamental role in the cell proliferation process, we focused our initial research and development activities on cancer, a disease of unregulated cell proliferation. Our most advanced cancer drug candidate, SB-715992, is a small molecule compound that interferes with cell proliferation and promotes cancer cell death by specifically inhibiting the function of KSP. KSP is a cytoskeletal protein that is essential for cell proliferation, a process which when unregulated, results in tumor growth. Unlike many commonly used cancer drugs, such as Taxol and Taxotere which also impact cytoskeletal proteins, SB-715992 inhibits only cell proliferation and does not interfere with other cell functions. As a result, we believe SB-715992 may exhibit a lower incidence of toxicities. In addition, our preclinical studies indicate that SB-715992 may be effective in treating a wider variety of tumors than existing cancer drugs. SB-715992 is being developed by GSK under our strategic alliance. A Phase II clinical trial for SB-715992 in non-small cell lung cancer began in late 2003. A series of parallel Phase II monotherapy clinical trials and Phase Ib combination therapy clinical trials are scheduled to begin throughout 2004. These additional trials are expected to evaluate SB-715992 in multiple tumor types, including colorectal, breast and ovarian cancers. In addition, the NCI plans to sponsor additional Phase I and Phase II clinical trials in 2004 to evaluate SB-715992 in other tumor types and other dosing regimens.

Our other cancer drug candidate, SB-743921, is a structurally distinct small molecule compound that also modulates cell proliferation by specifically inhibiting KSP. Like SB-715992, SB-743921 is being developed by GSK under our strategic alliance. We expect that Phase I clinical trials evaluating the safety and pharmacokinetics of SB-743921 will begin in early 2004. The concurrent development of both drug candidates is key to our strategy of maximizing the potential for the development of a commercially viable cancer drug. We expect other drug candidates targeting other related cytoskeletal proteins essential for cell proliferation will emerge from our strategic alliance with GSK. In addition, we are independently pursuing compounds directed at other cytoskeletal protein pathways, unrelated to cell proliferation, in our other research programs that may also have application for the treatment of cancer.

Our focus on the cytoskeleton enables us to leverage research and development investments made in our cancer program for our programs in other diseases. For example, we have extended our understanding of the biology of the cytoskeleton to cardiovascular disease. The cytoskeleton plays a pivotal role in cardiac muscle contraction and has been linked to the origins of congestive heart failure, a disease of impaired cardiac function. We believe that by targeting cytoskeletal proteins and multi-protein systems that are responsible for cardiac muscle contraction, we will be able to develop

effective and safe drugs for the treatment of acute and chronic congestive heart failure. We expect to file an IND and initiate a Phase I clinical trial for our drug candidate for the treatment of acute congestive heart failure, CK-1213296, in the second half of 2004. Our drug candidate specifically targets and activates cardiac myosin, a cytoskeletal protein essential for cardiac muscle contraction. In animal models, compounds arising from this program improve cardiac contractility without the potentially life-threatening effects on heart rhythm, heart rate and blood pressure often exhibited by existing congestive heart failure drugs.

We have more than ten other research programs similarly focused on diseases in which we believe the cytoskeleton plays a significant role. For example, in infectious diseases, we are conducting chemical lead optimization activities for compounds that disrupt a specific cytoskeletal protein essential to fungal cell proliferation. These compounds have demonstrated improved survival in an animal model of fungal infection and, because they are directed against a novel cytoskeletal protein target, we believe they may overcome the increasing clinical resistance seen with existing antifungal drugs. In addition, we are evaluating specific inhibitors of other cytoskeletal proteins implicated in fungal cell proliferation and virulence that may also result in potential drugs for fungal infections. We also have a research program designed to find anti-inflammatory drug candidates by targeting specific cytoskeletal proteins involved in cell movement. We have identified compounds that inhibit the function of a key cytoskeletal protein involved in the migration of inflammatory cells into diseased tissues. Furthermore, we have identified, characterized and are now seeking to chemically optimize other compounds that target another cytoskeletal multi-protein system and that inhibit smooth muscle contractility. Our objective for this research program is to discover potential drug candidates for high blood pressure, asthma and other disease conditions.

All of our compounds in research and development have been discovered internally using our cell biology driven approach and proprietary automated technologies. This approach, which we have applied specifically to the cytoskeleton, enables increased speed, efficiency and yield not only in our drug discovery process, but also potentially in clinical development. We focus on developing a detailed understanding of validated protein pathways and multi-protein systems to allow our assay systems to more correctly represent the natural environment of a human cell. This approach differs from the conventional practice of concentrating on individual protein targets assayed in a system that may not adequately represent the natural functional environment that is relevant to disease. As a result, we can identify multiple points of biological intervention to modulate a specific protein pathway or multi-protein system. Our discovery activities are thus directed at particular proteins that may be better targets for the development of potentially safer and more effective drugs.

Our PUMA system and Cytometrix technologies enable early identification and automated prioritization of compounds that are highly selective for their intended protein targets without other cellular effects, and are thereby less likely to give rise to clinical side effects. Our PUMA system identifies compounds within our small molecule library that are likely to target specific cytoskeletal proteins. Our Cytometrix technologies enable us to simultaneously analyze and quantify hundreds of effects of each compound on a cell-by-cell basis. The integrated use of these technologies enables us to efficiently focus our efforts towards those compounds directed at novel cytoskeletal protein targets that are more likely to yield attractive drug candidates. We have advanced our Cytometrix technologies through technical development activities conducted with each of Eisai Research Institute, Novartis Pharma AG, Tularik Inc. and Vertex Pharmaceuticals, Inc.

We selectively seek partners and strategic alliances that enable us to maintain financial and operational flexibility while retaining significant economic and commercial rights to our drug candidates. For example, under our strategic alliance, GSK has made a $14.0 million upfront cash payment, an initial $14.0 million equity investment and has committed to reimburse our FTEs performing research in connection with the strategic alliance. As of December 31, 2003, we have received FTE reimbursement of $17.2 million, and in the future we expect to receive additional FTE reimbursement. In addition, we have received, through December 31, 2003, $3.2 million in precommercialization milestone payments from GSK, and in the future we could receive significant

precommercialization milestone payments and royalties on product sales. GSK is responsible for worldwide development of drug candidates and commercialization of drugs arising from the strategic alliance but we retain a product-by-product option to co-fund certain later-stage development activities in exchange for a higher royalty rate and a further option to secure co-promotion rights in North America. In the event we exercise a co-promotion option, we are entitled to receive reimbursement from GSK for certain sales force costs that we may incur in support of our commercial activities. In addition to our strategic alliance with GSK, our joint technology development activities with each of Eisai Research Institute, Novartis Pharma AG, Tularik Inc. and Vertex Pharmaceuticals, Inc. have supported the continued development and further validated the proprietary technologies that we use in our research programs. In December 2003, we entered into a strategic alliance with AstraZeneca to fund and participate in the development of a new application of our Cytometrix technologies for use by both parties.

We plan to build commercial capabilities to address markets characterized by severe illnesses, large patient populations and concentrated customer groups. For example, for SB-715992 and SB-743921, we intend to establish sales and marketing capabilities in collaboration with GSK to support the future commercialization of one or both of those potential drugs in North America. In markets for which customer groups are not concentrated, we intend to seek strategic alliances for the development and commercialization of drug candidates while retaining significant financial interests.

The Cytoskeleton

The cytoskeleton is a diverse, multi-protein framework that carries out fundamental mechanical activities of cells including mitosis, or the division of genetic material during cell division, intracellular transport, cell movement and contraction and overall cell organization. It provides an ordered but dynamic organizational scaffolding for the cell, and mediates movement, whether of proteins within the cell or of the entire cell itself. The cytoskeleton is comprised of a unique set of filaments and molecular motor proteins. Filaments are long linear structures of proteins that serve as the major scaffolding in cells and conduits for movement of molecular motor proteins transporting other proteins or intracellular material. Microtubule filaments are composed of tubulin, and actin filaments are composed of actin. Molecular motor proteins, such as kinesins and myosins, are proteins that transport materials within cells and are also responsible for cellular movement. Kinesins move along microtubule filaments and myosins move along actin filaments.

These cytoskeletal proteins organize into ordered protein pathways or multi-protein systems that perform important cellular functions. For example, one such structure called the mitotic spindle organizes and divides genetic material during cell proliferation. The mitotic spindle encompasses many cytoskeletal proteins including tubulin, which forms microtubule filaments, and a sub-group of kinesins known as mitotic kinesins. The highly orchestrated action of the proteins within this structure transports and segregates genetic material during cell proliferation. Our most advanced cancer program, partnered with GSK, is focused on discovering potential drugs that inhibit human mitotic kinesins. One of our founders and scientific advisory board members, Dr. Ron Vale, first discovered kinesins. Another of our founders and scientific advisory board members, Dr. Larry Goldstein, was the first scientist to identify and characterize kinesin genes.

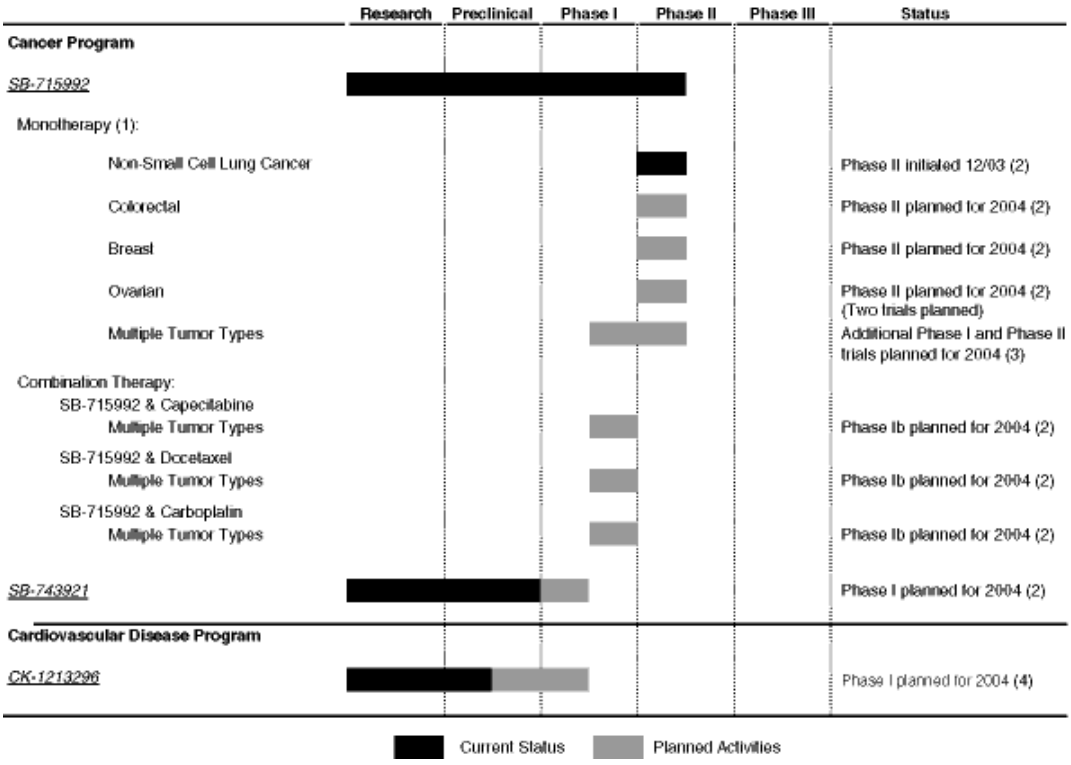
Another multi-protein cytoskeletal structure, called the cardiac sarcomere, contains a highly ordered array of cardiac myosin interacting with actin filaments. The movement of myosin along actin filaments generates the cell contraction responsible for cardiac muscle function. Our program in congestive heart failure is focused on discovering potential drugs that activate cardiac myosin. Another of our founders and scientific advisory board members, Dr. James Spudich, was one of the first scientists to characterize the functional interrelationships of the cytoskeletal proteins in the sarcomere.

Beyond the role these specific cytoskeletal proteins play in cell proliferation and cardiac muscle contraction, other cytoskeletal proteins have been implicated in a variety of other important biological processes and related human diseases. Our drug discovery activities are focused on several of these mechanical cellular processes, including cell proliferation, cardiac and other muscle contraction, cellular organization and cell motility, and are specifically directed at the cytoskeletal proteins that play essential roles in carrying out these functions. For instance, a unique set of cytoskeletal proteins forms the cellular machinery that maintains blood vessel tone. One of our research programs is focused on discovering inhibitors of these proteins as a potential treatment for high blood pressure. In addition, another unique set of cytoskeletal proteins is essential for the movement and function of inflammatory cells. We have a research program focused on the discovery of novel anti-inflammatory drug candidates that inhibit these proteins.

Our Product Development Opportunities

All of our research programs are focused on diseases in which we believe the cytoskeleton plays a significant role. The following table summarizes our clinical and preclinical programs in 2004 with their current status shown in black and planned activities shown in gray, and excludes those programs that are still in the research stage:

Clinical and Preclinical Programs in 2004



(1) The Phase I clinical trials of SB-715992 will be used to support Phase II clinical trials for each of the cancer indications set forth below.
(2) To be conducted by GSK.
(3) To be conducted by NCI. Phase I and Phase II clinical trials may include colorectal, kidney, head and neck, prostate, melanoma and hematological cancers, as well as the potential evaluation of other potential dosing schedules for SB-715992.
(4) To be conducted by Cytokinetics.

In addition to the above preclinical and clinical programs, we also have more than ten other research programs. For example, we are conducting chemical lead optimization activities in our

antifungal program with the objective of selecting a drug candidate to enter IND-enabling studies in 2005. Currently, we are also conducting research on several earlier stage research programs that we believe will contribute to our development pipeline over time.

Our Cancer Program

One of our major development programs is focused on cancer, a disease of unregulated cell proliferation. Each of our cancer drug candidates, SB-715992 and SB-743921, is a structurally distinct small molecule compound that modulates cell proliferation and promotes cancer cell death by specifically inhibiting KSP. KSP is a mitotic kinesin that acts early in the process of mitosis during cell proliferation and is responsible for the formation of a functional mitotic spindle. We initially discovered, characterized and optimized both drug candidates in our research laboratories. These drug candidates are now being developed by GSK through our strategic alliance. SB-715992 is currently the subject of a broad Phase II clinical trials program designed to evaluate efficacy against multiple tumor types. We expect SB-743921 to enter Phase I clinical trials in early 2004. We are also pursuing other potential drug candidates for the treatment of cancer, both within our strategic alliance with GSK and on our own.

Market Opportunity. Each year over 1.3 million new patients are diagnosed with primary malignant solid tumors or hematological cancers in the United States. The incidence of three of the more common cancer types, colorectal, breast and non-small cell lung cancers, in the United States represents between 35% and 50% of the total incidence of these cancers in the United States, Japan and the major commercial markets in Europe.

The current market for cancer drugs worldwide is greater than $10.0 billion. Within this market, we estimate that sales of drugs that inhibit mitosis, or anti-mitotic drugs, such as taxanes, most notably Taxol from Bristol-Myers Squibb and Taxotere from Aventis, comprise a large portion of the commercial market for cancer drugs. Worldwide sales from these taxanes alone represented over $2.0 billion in 2002.

Since their introduction over 30 years ago, anti-mitotic drugs have advanced the treatment of cancer and are commonly used for the treatment of several tumor types. However, these drugs have demonstrated no treatment benefit against certain tumor types, such as colorectal and other tumors. In addition, these drugs target tubulin, a cytoskeletal protein involved not only in mitosis and cell proliferation, but also in other important cellular functions. The inhibition of these other cellular functions produces dose-limiting toxicities such as peripheral neuropathy, an impairment of the peripheral nervous system. Neuropathies result when these drugs interfere with the dynamics of microtubule filaments that are responsible for the long-distance transport of important cellular components within nerve cells.

Our Solution. Mitotic kinesins form a diverse family of newly characterized cytoskeletal proteins that, like tubulin, facilitate the mechanical processes required for mitosis and cell proliferation. There are 14 human mitotic kinesins required to carry out cell division. We have identified and characterized all of them. Each of these mitotic kinesins functions in a pathway to enable cell division. In our cancer program directed towards inhibitors of mitotic kinesins, we have screened each mitotic kinesin and identified small molecule inhibitors of most of them using our PUMA system, and have begun characterizing these inhibitors using our Cytometrix technologies. We believe that this comprehensive approach to the complete mitotic kinesin pathway will allow us to identify a number of drug candidates that may have diverse clinical utilities. The first mitotic kinesin in this pathway and the one upon which we have focused a majority of our research and development efforts is KSP.

We believe that drugs inhibiting KSP and other mitotic kinesins represent the next generation of anti-mitotic cancer drugs. Mitotic kinesins are essential to mitosis, and, unlike tubulin, appear to have no role in unrelated cellular functions. In addition, they are expressed only in proliferating cells and in higher concentrations in many tumor cells than in non-cancerous proliferating cells. We believe drugs

that inhibit KSP and other mitotic kinesins can arrest mitosis and cell proliferation without impacting unrelated, normal cellular functions, avoiding many of the toxicities commonly experienced by patients treated with existing anti-mitotic cancer drugs.

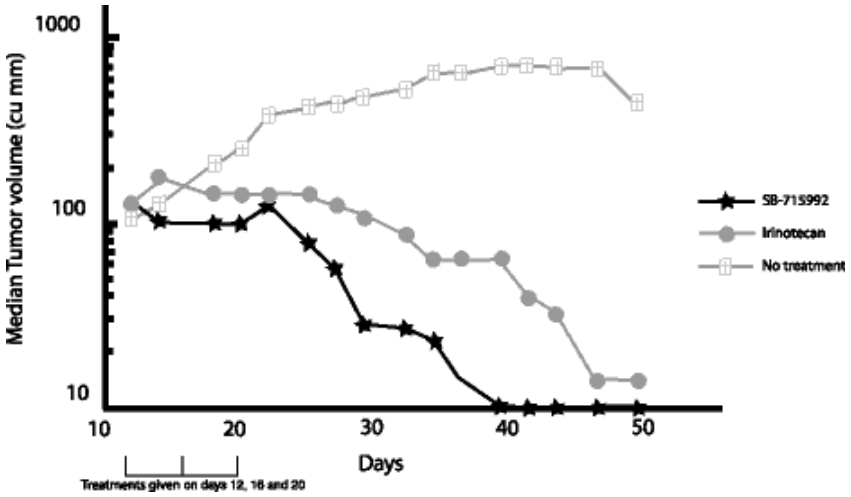
Our small molecule inhibitors of KSP are highly potent and specific. We have performed detailed biochemical studies to understand the precise molecular mechanism by which our drug candidates inhibit KSP activity. By inhibiting KSP, a cell cannot undertake the first step of mitosis, the separation of the two poles of the mitotic spindle and a monopolar mitotic spindle is created. Interruption of proper cell division through this mechanism in cancer cells results in cell death. In preclinical research, our drug candidates cause shrinkage of tumor size or reduction in tumor growth rates in more than ten different animal models, including cancers of the colon, lung, breast, ovary, pancreas and prostate, sarcomas and leukemias. These models reveal favorable results for our drug candidates in comparison to existing drugs such as irinotecan, topotecan, gemcitabine, paclitaxel, vinblastine and cyclophosphamide. Based on our preclinical data, we believe that our KSP inhibitor drug candidates may have the potential to expand the range of tumor types susceptible to this novel form of targeted anti-mitotic treatment.

We have identified, characterized and optimized several distinct structural classes of KSP inhibitors as well as specific inhibitors of other mitotic kinesins. Our KSP inhibitor drug candidates, SB-715992 and SB-743921, are being developed by GSK through our strategic alliance. We and GSK are also characterizing several other mitotic kinesin inhibitors that may have therapeutic potential. We believe that our cancer drug candidates may be safer, more effective and treat a wider variety of tumor types than current anti-mitotic drugs. In addition, preclinical data on SB-715992 indicate that this compound may have an additive effect in certain combination regimens with existing cancer drugs. Potential advantages of our drug candidates include:

- ***Broad therapeutic potential.*** Our preclinical testing indicates that SB-715992 and SB-743921 cause tumor regression in the form of partial response, complete response or tumor growth inhibition in a variety of tumor types. This is consistent with the important role that KSP plays in cell proliferation in all tumor types, and with the observation that KSP expression levels are higher in some tumor cells than in non-cancerous cells. The graphic below illustrates preclinical effects observed with SB-715992 in a mouse model of colon cancer, a type of cancer that is difficult to treat with existing anti-mitotic drugs.

Reduction in Tumor Volume

SB-715992 Compared to Irinotecan in a Mouse Model of Colon Cancer



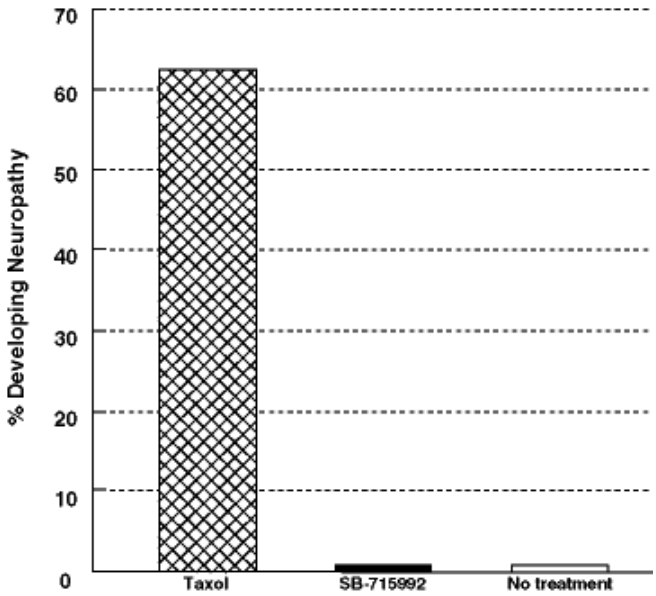
SB-715992 causes colon tumor reduction in a mouse model. This graph shows the size of human colon tumors implanted in a mouse as treated with SB-715992 (shown on the lower curve with stars), irinotecan, a drug that is commonly used in treating colon cancer (middle curve with circles) or no treatment (upper curve with squares). Mice given SB-715992 experienced greater tumor shrinkage over the course of the study than those given irinotecan. Both drugs were administered at the maximum dose tolerated by the animals on days 12, 16 and 20 of the study.

- ***Favorable safety profile.*** Preclinical testing of SB-715992 and SB-743921 demonstrates that these compounds have fewer toxicities than many existing cancer drugs. These studies indicate that the primary toxicities are temporary, limited to gastrointestinal side effects and a reduction in bone marrow function. We observed no evidence of drug-related toxicities to the nervous system, heart, lung, kidney or liver. We believe that this safety profile could enable higher dosing of SB-715992 and SB-743921 and increase their therapeutic value.

Because neuropathy is a common dose-limiting side effect of anti-mitotic cancer drugs, such as Taxol, we analyzed the effects of SB-715992 on the peripheral nervous system in a mouse model.

Incidence of Neurotoxicity Side Effects

SB-715992 Compared to Taxol in a Mouse Model



This graph shows the percentage of mice developing peripheral nervous system dysfunction after being given Taxol (shown on the left with hatched bar), SB-715992 (shown in the middle with black bar) or no treatment (shown on the right with white bar). No evidence of nervous system dysfunction is seen in mice given SB-715992, whereas Taxol causes nerve dysfunction in over 60% of mice tested. Both drugs were given at doses used to treat cancer in mouse models.

Current Program Status. SB-715992 is the subject of an ongoing broad Phase II clinical trials program designed to evaluate its efficacy in treating multiple tumor types. The first Phase II clinical trial began in late 2003 to evaluate SB-715992 as a monotherapy in non-small cell lung cancer. Throughout 2004, other monotherapy Phase II clinical trials are planned to evaluate SB-715992 in other prevalent tumor types addressing large commercial markets, including colorectal, breast and ovarian cancers. Also, throughout 2004, the NCI plans to sponsor several additional Phase I and Phase II clinical trials to evaluate other potential dosing regimens and the effectiveness of SB-715992 in other tumor types, which may include colorectal, kidney, head and neck, prostate, melanoma and hematological cancers, respectively. In aggregate, we anticipate that Phase II clinical trials for SB-715992 will enroll more than 500 patients at over 50 clinical trial sites worldwide and evaluate our drug candidate in patients with a wide array of tumor types who have failed multiple prior therapies in both later and earlier-line treatments. Furthermore, we anticipate that SB-715992 may eventually be used in combination therapy regimens with existing cancer drugs. Phase Ib clinical trials are planned throughout 2004 to evaluate SB-715992 in combination with standard cancer drugs such as capecitabine, docetaxel and carboplatin.

The design of the Phase II clinical trials program draws upon information learned from Phase I clinical trials of SB-715992. GSK commenced the first Phase I clinical trial of SB-715992 in August 2002. This clinical trial, which is nearing completion, is an open-label, non-randomized, dose-finding trial investigating safety, tolerability, pharmacokinetics and pharmacodynamics of SB-715992. This Phase I clinical trial is evaluating various doses of SB-715992 given as a one-hour intravenous infusion repeated once every three weeks. A second similarly designed dose-finding Phase I clinical trial commenced in January 2003. This second study, which is also nearing completion, is evaluating dosing of SB-715992 given once per week for each of three weeks and repeated over a 28-day

cycle. In both clinical trials, the participants are patients with different types of cancer, all of whom have previously failed multiple regimens of drugs.

As of March 1, 2004, 45 patients were enrolled in the first clinical trial and 30 patients were enrolled in the second clinical trial. The only dose-limiting toxicity observed in both clinical trials is temporary neutropenia, a decrease in the number of a certain type of white blood cell. This was anticipated given that we believe SB-715992 inhibits KSP in these white blood cells and prevents their proliferation. At the planned Phase II clinical dosing levels, Phase I clinical trial investigators have observed no clinically meaningful evidence of drug-related toxicity to the nervous system, heart, lung, kidney or liver. Both studies demonstrate that the pharmacokinetics of SB-715992 are dose-proportional, indicating that an increased dose is correlated with increased drug exposure. This allows us to more accurately correlate drug dose with drug effectiveness. Although these Phase I clinical trials were not designed to measure efficacy, anti-cancer activity was observed as indicated by stabilization of disease in thirteen patients with colorectal, liver, head and neck, prostate, pancreatic and kidney cancers over three to thirteen courses of treatment. In addition, trial investigators reported tumor shrinkage in five patients with colorectal, kidney, prostate and pancreatic cancers.

In December 2003, under our strategic alliance, GSK filed an IND for SB-743921, a structurally distinct KSP inhibitor. We expect GSK to commence Phase I clinical trials for this drug candidate in early 2004. The Phase I clinical trials program for SB-743921 is designed as an open-label, non-randomized, dose-finding trial investigating safety, tolerability, pharmacokinetics and pharmacodynamics of this drug candidate. Though we are aware of no clinical shortcomings of SB-715992 that are addressed by SB-743921, we believe that having two KSP inhibitors in concurrent clinical development increases the likelihood that a commercial product will result from this program.

Commercialization. GSK is responsible for the worldwide development and commercialization of SB-715992 and SB-743921 and other drug candidates arising from the strategic alliance. We will receive royalties from the sale of any drugs developed under the strategic alliance. In addition, we retain an option for each of SB-715992 and SB-743921 to co-fund certain later-stage development activities, and thereby increase our potential royalty rate. Furthermore, for those drug candidates that we co-fund certain later-stage development activities, we have a further option to secure co-promotion rights in North America. We expect that the royalties to be paid on future sales of SB-715992 and SB-743921 could potentially increase to an upper-teen percentage rate based on increasing product sales and our anticipated level of co-funding. 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. We expect to develop sales and marketing capabilities to support the North American commercialization of one or both of SB-715992 and SB-743921 and other drug candidates that may be developed under our strategic alliance with GSK. Because cancer patients are largely treated in institutional and other settings that can be addressed by a specialized sales force, developing our commercial capabilities to address such treatment centers is consistent with our corporate strategy of focusing our commercial efforts on large, concentrated markets.

Our Cardiovascular Disease Program

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 targeting and activating cardiac myosin, a cytoskeletal protein essential for cardiac muscle contraction. In animal models, our drug candidate in this program, CK-1213296, improves cardiac contractility without the adverse effects on heart rate, blood pressure and oxygen consumption often exhibited by existing congestive heart failure drugs. We are pursuing CK-1213296 for intravenous administration in an acute care setting. We expect to file an IND with the FDA and initiate a Phase I clinical trial for CK-1213296 in the

second half of 2004. We are conducting additional chemical optimization activities for other compounds that are intended for the treatment of chronic congestive heart failure through oral administration.

Market Opportunity. Congestive heart failure is a widespread and rapidly growing disease affecting approximately five million people in the United States alone. The high prevalence of congestive heart failure translates into significant hospitalization rates and associated societal costs. The number of hospital discharges in the United States identified with a primary diagnosis of congestive heart failure rose from 550,000 in 1989 to 900,000 in 1999. Congestive heart failure is the most common primary diagnosis identified in hospital discharges for patients over 65. The annual costs of congestive heart failure in the United States are estimated to be $28.8 billion, including $17.1 billion for inpatient care.

The market for congestive heart failure drugs was approximately $2.7 billion in 2001 and is expected to grow to approximately $4.0 billion by 2011. Current congestive heart failure drugs may have reached a plateau in terms of efficacy because they typically treat only the symptoms and effects of the disease. We believe that drugs that directly target the underlying cellular mechanisms responsible for congestive heart failure will be more effective.

Existing drugs that improve cardiac contractility, including milrinone, dobutamine and digoxin, treat congestive heart failure in part by improving the contraction of cardiac cells, thus leading to an improvement in overall cardiac contractility. These drugs work through a complex cascade of cellular proteins, eventually resulting in an increase in intracellular calcium and a subsequent increase in cardiac cell contractility. However, activation of this cascade and the elevation of calcium levels may also impact other cardiac cell functions, producing unintended and potentially life threatening side effects, such as cardiac ischemia from increased oxygen demand and cardiac arrhythmias. Cardiac ischemia is a condition in which oxygen delivery to the heart is limited and is frequently observed in heart failure patients due to constriction or obstruction of blood vessels. Cardiac arrhythmias are irregularities in the force, quality and sequence of the heart beat. In addition, these existing drugs impact tissues apart from cardiac muscle leading to increases in heart rate and decreases in blood pressure, which can complicate their use in this patient population. Therefore, although existing drugs may be effective in treating the symptoms of heart failure, they often increase congestive heart failure patient morbidity and mortality.

Our Solution. We believe that the direct activation of cardiac myosin is a more specific mechanism by which to improve cardiac cell contractility. Cardiac myosin is the cytoskeletal protein in the cardiac cell that is directly responsible for converting chemical energy into the mechanical force that results in contraction. Cardiac muscle cell contractility is driven by the cardiac sarcomere, the fundamental unit of muscle contraction in the heart that is a highly ordered cytoskeletal structure composed of cardiac myosin, actin and a set of regulatory proteins. The sarcomere represents one of the most thoroughly characterized protein machines in human biology. Existing drugs that seek to improve cardiac cell contractility increase the concentration of intracellular calcium, which indirectly activates cardiac myosin, but this effect on calcium levels also produces potentially life threatening side effects. Alternatively, our drug candidate for the treatment of acute congestive heart failure, CK-1213296, increases cardiac contractility by specifically targeting and directly activating cardiac myosin so that it attaches to actin to generate contractile force in the cardiac sarcomere.

We believe we are the first to develop potential drug candidates that specifically activate cardiac myosin. We accomplished this by leveraging our expertise in the biochemistry, biophysics, chemistry and pharmacology of the cardiac sarcomere. We developed a series of proprietary assays that measure the integrated function of the cardiac sarcomere. We believe that we are the first to reconstitute for use in a high-throughput screen the essential components of the cardiac sarcomere from purified proteins as a fully calcium-regulated system simulating the activity of the multi-protein system *in vivo*. The resulting high-throughput assay, incorporated within our PUMA system, is capable of detecting modulators of key aspects of sarcomere function ranging from cardiac myosin

interaction with the actin filament to the sensitivity of the regulatory proteins to calcium. We have also developed a suite of complementary assays for the characterization of cardiac myosin activators in a manner that predicts their physiological activity. As a result, we can rapidly advance and evaluate highly potent and selective compounds in predictive assays replicating physiologic systems, and determine the precise mechanism of action of promising chemical compounds.

We have identified multiple chemical series of cardiac myosin activators with attractive properties through repeated characterization in cell and animal models. In rats, guinea pigs and dogs, compounds arising from this program demonstrate increased cardiac contractility and improved cardiac efficiency without accompanying adverse effects.

Our preclinical testing indicates that CK-1213296 works through a novel mechanism of action that enables the modulation of cardiac cell contraction without increasing intracellular calcium levels or interfering with other unrelated cardiac muscle functions. As a result, we believe that CK-1213296 may effectively improve cardiac contractility and cardiac output for the treatment of acute congestive heart failure patients without adversely impacting heart rate or blood pressure and minimally affecting cardiac energy consumption.

We believe that CK-1213296 could be safer and more effective than existing congestive heart failure drugs. Potential advantages of compounds arising from this program may include:

- ***Cardiac efficiency.*** Our preclinical testing indicates that compounds arising from this program both enhance cardiac output and improve cardiac efficiency. Cardiac output measures the volume of blood pumped into circulation by the heart per minute. Cardiac work is the product of cardiac output and blood pressure. One measure of cardiac efficiency is the ratio of cardiac work divided by oxygen consumption.

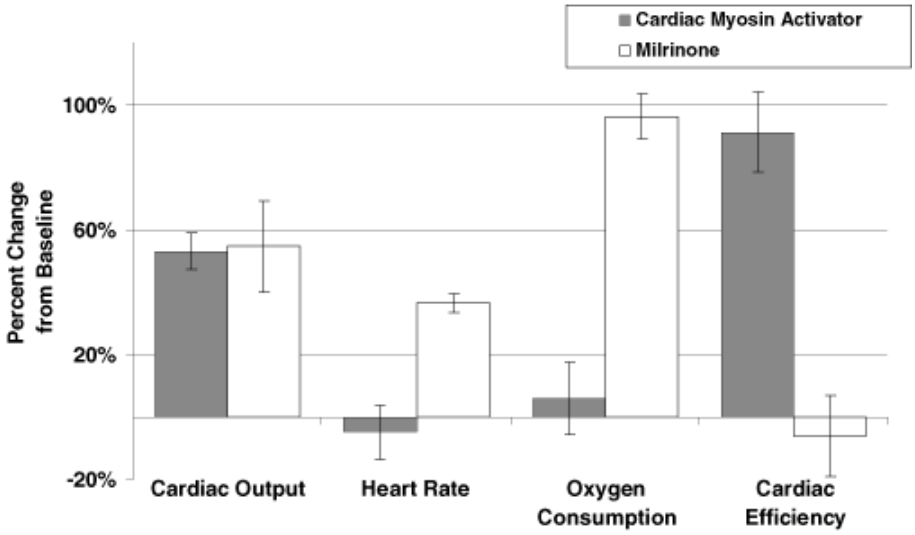
- ***Favorable safety profile.*** Our preclinical testing indicates that compounds arising from this program may enhance cardiac output without significantly increasing heart rate, decreasing blood pressure or causing cardiac arrhythmias.

We expect that the properties of CK-1213296 could result in its improved safety over existing congestive heart failure drugs and allow for the potential use of our cardiac myosin activators for the treatment of patients for whom current drugs cannot be safely administered.

As shown below, in studies in a rat model, a precursor compound to CK-1213296 improves cardiac efficiency at a dose producing an equal increase in cardiac output, as compared to milrinone, a drug commonly used to treat acute congestive heart failure.

Increase in Cardiac Efficiency

Our Cardiac Myosin Activator Compared to Milrinone in a Rat Model



A cardiac myosin activator efficiently increases cardiac output. This graph shows the percentage change of cardiac output, heart rate, oxygen consumption and cardiac efficiency in rat hearts as measured against a baseline. The baseline was established by measuring these cardiac functions in the rat model prior to treatment. While both the cardiac myosin activator (gray bars) and milrinone (white bars) both increase cardiac output in isolated hearts, only the cardiac myosin activator achieves the increase in cardiac output with no associated increase in heart rate or significant increase in oxygen consumption.

Currently our objective in this program is to complete preclinical testing for CK-1213296. In addition, some of our other compounds have properties that may allow for the development of an orally administered compound suitable for the treatment of chronic congestive heart failure. We believe that cardiac myosin activators arising from our cardiovascular disease drug discovery activities may represent improvements relative to drugs commonly used in the treatment of both acute and chronic congestive heart failure.

Current Program Status. We are currently performing advanced characterization activities on CK-1213296. We expect to file an IND and initiate a Phase I clinical trial with CK-1213296 for the treatment of acute congestive heart failure in the second half of 2004. We plan to design this Phase I clinical trial to assess in healthy volunteers the drug candidate's safety, including dosing pharmacokinetics and effects on blood pressure and heart rate. We expect that follow-on studies will evaluate the effects of our drug candidate on cardiac output.

Compounds, such as CK-1213296, identified through our research program have been shown to be effective in animal models of normal cardiac function and of heart failure. These compounds specifically activate cardiac myosin and increase cardiac contractile force *in vitro* and *in vivo,* and have no unintended effects on related targets in skeletal or smooth muscle. Furthermore, these compounds have no unintended effects on cardiac cellular calcium concentration. In animal models, these compounds increase cardiac contractility and have no significant adverse effects on heart rate or blood pressure. We are pursuing CK-1213296 for intravenous administration for use in treating

acute congestive heart failure. We are also undertaking chemical optimization activities for compounds that are intended for oral administration for use in treating chronic congestive heart failure.

Commercialization. While we may seek a strategic alliance to assist in the further funding and expansion of our cardiovascular disease drug discovery and development program, we expect to build capabilities to develop, market and sell our acute congestive heart failure drugs in North America. Because acute congestive heart failure patients are largely treated in teaching and community-based hospitals that can be addressed by a specialized sales force, developing our commercial capabilities to address such treatment centers is consistent with our corporate strategy of focusing our commercial efforts on large, concentrated markets. We expect to rely on one or more strategic alliances to further the discovery, development and commercialization of our potential acute congestive heart failure drugs outside North America and our potential chronic congestive heart failure drugs worldwide.

Other Research Programs

The cytoskeleton plays a role in a broad array of disease areas beyond cancer and cardiovascular disease. Our drug discovery and development activities focused on other therapeutic areas will build on our investments in and experience gained from our more mature cancer and cardiovascular disease programs. Currently, we are conducting drug discovery activities on several earlier stage research programs that we believe will continue to contribute novel drug candidates to our pipeline over time. In each case, our decision to pursue these programs is based on a therapeutic rationale regarding the role of specific cytoskeletal proteins implicated in the relevant disease and desired treatment.

We currently have several chemical series of antifungal drug candidates in lead optimization stage. Many critically ill patients, who have received bone marrow transplantations, solid organ transplantations, chemotherapy or treatment in an intensive care unit, suffer from systemic fungal infections as a result of suppressed or weakened immune systems. Depending on the patient, their condition and the underlying disease, these infections can be fatal. It is estimated that more than 120,000 patients will be treated with antifungal drugs in 2008. The largest drug in this market is Diflucan® (fluconazole), which had sales of approximately $1.1 billion in 2002. The effectiveness of existing antifungals is limited due to their spectrum of activity, their side effects and the resistance to these drugs that develops over time. The evolving resistance of fungal infections requires drugs that are directed against novel microbial targets with novel mechanisms of action.

Currently, we are characterizing several series of antifungal compounds. Each of these compounds targets one of several fungal mitotic kinesins. As with human mitotic kinesins, fungal mitotic kinesins play a role in the formation and function of the mitotic spindle in fungal cell proliferation. In a preclinical model, compounds arising from this program increased survival in mice with systemic fungal infections. We are currently conducting chemical lead optimization activities and expect to continue these activities through 2004, with the goal of selecting a drug candidate for development and initiating IND-enabling studies in 2005. In addition, we are evaluating specific inhibitors of other compounds against other cytoskeletal proteins implicated in fungal cell proliferation and virulence that may also result in drug candidates for fungal infections.

In addition to the programs mentioned above, we have more than ten other research programs in cancer, cardiovascular disease, inflammatory diseases, asthma, high blood pressure and other therapeutic areas. In each of these areas, there is a scientific and therapeutic rationale for modulating a specific cytoskeletal protein pathway or multi-protein system for the treatment of disease that guides our activities. For example, we have a research program designed to find anti-inflammatory drug candidates by targeting specific cytoskeletal proteins involved in cell movement. We have identified compounds that inhibit the function of a key cytoskeletal protein involved in the migration of inflammatory cells into diseased tissues. Furthermore, we have identified, characterized

and are now seeking to chemically optimize compounds that inhibit smooth muscle contractility. Our objective for this research program is to discover potential drug candidates for high blood pressure, asthma and other diseases.

Our Cell Biology Driven Approach to Drug Discovery and Development

All of our compounds in discovery and development have been discovered internally using our cell biology driven approach and proprietary automated technologies.

Cell Biology Driven Approach. We believe that the human cell represents a comprehensive environment in which the full complement of proteins and biological pathways and systems operate, and is therefore the most appropriate context for drug discovery. Unlike the conventional drug discovery approach that typically focuses on a singular molecular target or protein in isolation, we focus on each protein along an entire biological pathway or in multi-protein systems that better represent the natural environment of the cell in which the target proteins function. We then seek to identify the most appropriate protein target or targets, as well as multiple effective ways to chemically modulate each target to elicit the appropriate cellular response without other effects and thereby more likely achieve a desired therapeutic effect. We believe that this approach maximizes the chance of finding the preferred protein target implicated in a particular disease and provides multiple opportunities for success within each target-based drug discovery and development program. Our approach to drug discovery and development may thereby increase the productivity and likelihood of success of our research and development activities compared to the more customary approach practiced by other companies.

Proprietary Drug Discovery Technologies. Our proprietary automated technologies, most notably our PUMA system and Cytometrix technologies, enable early identification and prioritization of drug candidates.

Our PUMA system is a high-throughput screening platform comprised of a series of automated proprietary multi-protein biochemical assays designed to comprehensively screen large compound libraries to yield chemical entities that specifically modulate each of several cytoskeletal molecular motor proteins. To date, we have applied the PUMA system to perform more than 20 million assays, against an in-house library of approximately 500,000 small molecule compounds and a diverse group of molecular motor protein targets. Unlike many screening platforms, these technologies allow us to analyze protein pathway activity and complexity in a high-throughput format that we believe is more predictive of the natural cellular environment. We complement this system with a customized suite of secondary and supplemental biochemical assays.

The PUMA system leverages our focus and expertise in cytoskeletal biology and is a highly sensitive and specific screen for both inhibitors and activators of molecular motor proteins such as mitotic kinesin inhibitors in our cancer program and activators of cardiac myosin in our cardiovascular disease program. We screen small molecule members of our compound library against specific cytoskeletal targets, as well as against related proteins that mediate other cellular functions, to ensure that we identify compounds that modulate our protein targets of interest in a highly potent, specific and understandable manner.

We have developed our Cytometrix technologies as an automated cell biology platform that is an integral part of our small molecule drug discovery process. Cytometrix technologies are our suite of automated and digital microscopy assays that enable us to screen for potency and specificity against multiple biological targets in cells, facilitating the early identification and rejection of those compounds that may have unintended effects and that may subsequently give rise to toxicities. By eliminating undesirable compounds earlier in the drug discovery process, we can focus our attention and resources on the most promising drug candidates. As a result, we believe we minimize investment on commercially unattractive compounds and we can devote more resources to understanding, qualifying and optimizing the compounds that are more likely to yield safe and effective drug candidates.

Cytometrix technologies systematically and comprehensively measure responses of individual human cells to potential drug candidates across multiple experimental conditions. For example, in our cancer program, Cytometrix technologies measure, on a cell-by-cell basis, the number of cells at each stage of cell division and cell death and characterize the type of cell death. This is accomplished by combining the same microscope-based approach that has characterized biological research in the past with modern robotic cell handling, digital imaging, image segmentation and analysis and information handling software technologies.

Cytometrix technologies enable us to efficiently analyze the effects of individual compounds against all proteins simultaneously on a cell-by-cell basis in contrast to assessing more simple outputs of a compound against a single molecular target as is practiced in most other screening systems. Cytometrix technologies profile both existing drugs and small molecule compounds arising out of our drug discovery activities to create detailed cell-by-cell reports of an individual compound's biological response. In 2003, Cytometrix technologies measured hundreds of variables across each of over 800 million human cells. The resulting information is quantitative and reproducible, allowing prioritization of potential drug candidates by identifying those compounds with certain unintended cellular effects. We believe Cytometrix technologies provide additional and potentially complementary information to gene and protein expression pattern analyses because they measure, cell-by-cell, the response of a network of integrated proteins within their natural environment, the human cell.

Attractive small molecule compounds, first identified in primary screening against cytoskeletal protein targets using the PUMA system, are more thoroughly profiled using Cytometrix technologies for secondary screening. These technologies generate quantifiable and reproducible cell-based profiles that fingerprint the cellular responses of diverse molecular mechanisms of drug action. Through the integrated use of our PUMA system and Cytometrix technologies, we are able to efficiently focus our efforts towards those compounds that are directed towards novel cytoskeletal protein targets and that are more likely to yield attractive drug candidates.

Advanced Small Molecule Chemistries. We have assembled a small molecule compound library containing approximately 500,000 compounds. We designed this library to maximize diversity and drug-like characteristics. We support this library with a fully automated infrastructure for compound handling and housing, thus allowing rapid and accurate robotic integration of this chemistry resource with our PUMA system and Cytometrix technologies. We utilize our chemistry technologies together with our expertise in cell biology, pharmacology, drug metabolism and pharmacokinetics for the rapid identification and advancement of attractive compounds and potential drug candidates.

Discovery Informatics. We have organized our drug discovery operations based on the principle that aggregating informatics across biology and chemistry leads to predictive approaches to target identification, compound analoging and lead optimization, as well as enhances the speed, efficiency and yield of our drug discovery and development process. In support of this principle, we have also created a powerful discovery informatics infrastructure that efficiently manages large and complex data sets representing valuable cell biology driven and biochemical research insights across state-of-the-art chemoinformatics, bioinformatics and genomics resources.

Our Corporate Strategy

Our goal is to become a fully-integrated biopharmaceutical company focused on discovering, developing and commercializing novel drugs to treat cancer, cardiovascular disease and other disease areas. We intend to achieve this goal by:

Focusing on the cytoskeleton.

We focus our drug discovery activities on the cytoskeleton because its role in disease has been scientifically and commercially validated. We believe that our unique understanding of the cytoskeleton will enable us to discover drug candidates with novel mechanisms of action and

which may avoid the limitations of current drugs. We believe that there are few, if any, other companies that have focused specifically on the cytoskeleton.

Because the cytoskeleton has been validated in a wide array of human disease, we intend to pursue drug discovery programs across a number of therapeutic areas and we believe we can leverage research and development investments made for a program directed at one therapeutic area to programs directed at other therapeutic areas. This may facilitate our building a diverse pipeline of drug candidates in a cost-effective fashion.

Leveraging our cell biology driven approach and proprietary technologies to increase the speed, efficiency and yield of our drug discovery and development process.

Our innovative cell biology driven research approach and proprietary technologies, including our PUMA system and Cytometrix technologies, enhance the speed, efficiency and yield of the discovery and, potentially, the development process. We believe we can identify and focus on the most promising compounds earlier in the drug discovery process. We do this by quickly and efficiently eliminating those compounds that exhibit potential toxicities. As a result, we may save time and discovery and development resources and reduce the occurrence of later-stage failures. This early intervention and screening may result in a higher yield of drug candidates with a greater chance of clinical success.

Pursuing multiple drug candidates for each cytoskeletal protein target and broad clinical trials for select drug candidates.

For each of our programs, we characterize several drug candidates for each of a number of cytoskeletal protein targets that act together in a protein pathway or in a multi-protein system. By leveraging our drug discovery efficiencies, we intend to identify, for each cytoskeletal protein target, multiple potential drug candidates that we may progress into clinical development. We believe that this approach of pursuing a portfolio of potential drug candidates for each cytoskeletal protein target in parallel allows us to increase our potential for commercial success.

Because the cytoskeleton plays a fundamental role in many related diseases, we have an opportunity in those diseases to conduct broad and comprehensive Phase II clinical development trials programs for our drug candidates across multiple related disease areas. We believe that by pursuing this approach we increase the probability of these drug candidates achieving success in clinical trials and maximize the commercial potential related to these programs.

Establishing select strategic alliances to accelerate our drug development programs while preserving significant development and commercial rights.

We intend to selectively enter into strategic alliances to advance our drug discovery and development programs or technologies, to obtain financial support and to leverage the therapeutic area expertise and development and commercialization resources of our partners to accelerate the development of our drug candidates. Where appropriate, we plan to maintain certain rights in development of potential drug candidates and commercialization of potential drugs arising from our alliances so we can build our internal clinical development and sales and marketing capabilities while also maintaining a significant share of the potential revenues for any products arising from each alliance.

Building development and commercialization capabilities directed at large concentrated markets.

We focus our drug discovery and development efforts on large commercial market opportunities in concentrated markets, such as cancer and acute congestive heart failure. By

focusing on concentrated markets, we believe that a company at our stage of development can compete effectively within these markets against larger, more established companies with more financial resources. For each opportunity focused on these markets, we intend to build clinical development and sales and marketing capabilities in order to become a fully-integrated biopharmaceutical company that can develop and commercialize drugs that arise from our research programs.

Our Strategic Alliances

GlaxoSmithKline. In June 2001, we formed a strategic alliance with GSK to discover, develop and commercialize novel small molecule drugs targeting KSP and certain other cytoskeletal proteins involved in cell proliferation for applications in the treatment of cancer and other diseases. This strategic alliance leverages our expertise in the biology and pharmacology of mitotic kinesins and GSK's pharmaceutical research, development and commercialization capabilities. Under this strategic alliance, GSK has made a $14.0 million upfront cash payment and an initial $14.0 million investment in our equity. GSK has also committed to reimburse our FTEs conducting research in connection with the strategic alliance and to make additional milestone payments and pay royalties based on product sales. As of December 31, 2003, we have received $19.7 million in FTE and other reimbursement and $3.2 million in precommercialization milestone payments. GSK is responsible for worldwide development of drug candidates and commercialization of drugs arising from the strategic alliance, but we retain a product-by-product option to co-fund certain later-stage development activities in exchange for a higher royalty rate and a further option to secure co-promotion rights in North America. In the event we exercise a co-promotion option for a product, we are entitled to receive from GSK reimbursement of certain sales force costs that we may incur in support of our commercial activities. We are eligible to receive precommercialization milestone payments ranging from $30.0 to $50.0 million for each mitotic kinesin target for products directed towards each target. In addition, our royalty rate increases based on our level of participation in funding of certain later-stage development activities and as total worldwide sales escalate for each drug developed and commercialized under the strategic alliance. We expect that the royalties to be paid on future sales of SB-715992 and SB-743921 could potentially increase to an upper-teen percentage rate based on our anticipated level of co-funding of certain later-stage development activities of the drug candidates and increasing product sales.

At predefined times during the research term of the collaboration, we are entitled to select certain mitotic kinesin targets and related compounds for independent research and development at our expense. If we elect to pursue a compound independently, then at a predetermined time during clinical development, GSK will have an option to return the compound to the joint activities of the collaboration subject to GSK's payment to us of both an amount based on a premium over our research and development costs and also an enhanced royalty on product sales. In the event that GSK does not exercise its option with respect to a compound, we may independently develop and commercialize that compound, subject to a royalty on product sales payable to GSK.

Under our strategic alliance, GSK has commenced a comprehensive Phase II clinical trials program designed to evaluate SB-715992 in parallel clinical trials across multiple tumor types in 2003. We expect GSK to commence Phase I clinical trials of SB-743921 to begin in early 2004. Additionally, through the strategic alliance, we are performing target validation, hit identification and lead characterization and optimization on other cytoskeletal targets, to select potential drug candidates that may similarly be advanced to clinical development.

AstraZeneca. In December 2003, we formed an exclusive strategic alliance with AstraZeneca to develop automated imaging-based cellular phenotyping and analysis technologies for the *in vitro* prediction of hepatotoxicity, or toxicity of the liver, a common reason for failure of drug candidates in clinical development. AstraZeneca has agreed to fund a portion of our technology development activities over a two-year research term and pay annual licensing fees and make a milestone payment to us upon the successful achievement of certain agreed-upon performance criteria.

Other Strategic Alliances. We have advanced our Cytometrix technologies through our Cytometrix Technologies Development Partner Program with each of Eisai Research Institute, Novartis Pharma AG, Tularik Inc. and Vertex Pharmaceuticals, Inc. These partners provided us with research compounds that were profiled using our Cytometrix technologies. We have completed our obligations associated with these relationships.

We formed a strategic alliance with Exelixis, Inc. in December 2001 to design and generate diverse, small molecule compound libraries. We and Exelixis may use these libraries for screening in our respective drug discovery programs. Exelixis may use its proprietary combinatorial chemistry platform to synthesize compounds designed in collaboration with us. The synthesized compounds will be jointly owned and each company will have the right to use the compounds in its own internal research programs, as well as in its respective collaborative research efforts.

Our Patents and Intellectual Property

Our policy is to patent the technology, inventions and improvements that we consider important to the development of our business. As of December 31, 2003, we had 72 issued United States patents, notices of allowance on six additional United States patent applications and over 100 additional pending United States and foreign patent applications. In addition, we have an exclusive license to five United States patents and more than 20 pending United States and foreign patent applications from the University of California and Stanford University. We also rely on trade secrets, technical know-how and continuing innovation to develop and maintain our competitive position.

We seek to protect our proprietary information by requiring our employees, consultants, contractors, outside partners and other advisers to execute nondisclosure and assignment of invention agreements upon commencement of their employment or engagement, through which we seek to protect our intellectual property. Agreements with our employees also prevent them from bringing the proprietary rights of third parties to us. We also require confidentiality or material transfer agreements from third parties that receive our confidential data or materials.

Our commercial success will depend in part on 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 from unauthorized use by third parties to the extent that valid and enforceable patents or trade secrets cover them.

The patent positions of pharmaceutical, biotechnology and other 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 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 and 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.

The degree of future protection for 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. 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 none of 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 therapies, or may not provide us with any competitive advantages, or may be challenged and invalidated by third parties;

- our patent applications or patents may be subject to interference, opposition or similar administrative proceedings;

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

- the patents of others may have an adverse effect on our business.

The defense and prosecution of intellectual property suits, interferences, oppositions and related legal and administrative proceedings in the United States are costly, time consuming to pursue, and result in diversion of resources. The outcome of these proceedings is uncertain and could significantly harm our business.

We also rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. While we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, partners and other advisors may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third party illegally obtained and is using our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how.

The pharmaceutical, biotechnology and other life sciences industries are characterized by the existence of a large number of patents and frequent litigation based upon allegations of patent infringement. While our drug candidates are in clinical trials, and prior to commercialization, we believe our current activities fall within the scope of the exemptions provided by 35 U.S.C. Section 271(e) in the United States and Section 55.2(1) of the Canadian Patent Act, each of which covers activities related to developing information for submission to the FDA and its counterpart agency in Canada. As our drug candidates progress toward commercialization, the possibility of an infringement claim against us increases. While we attempt to ensure that our drug candidates and the methods we employ to manufacture them do not infringe other parties' patents and other proprietary rights, competitors or other parties may assert that we infringe on their proprietary rights.

In particular, we are aware of an issued United States patent and at least one pending United States patent application assigned to Curis, Inc. relating to certain compounds in the quinazolinone class. SB-715992 falls into this class of compounds. The Curis patent claims a method of use for inhibiting signaling the hedgehog pathway using certain quinazolinones. We are also aware that Curis has pending applications in Europe, Japan, Australia and Canada with claims covering compositions of certain quinazolinone compounds. Curis or a third party may assert that the sale of SB-715992 candidate may infringe one or more of these or other patents.

We believe that we have valid defenses to an assertion that SB-715992 infringes the Curis patent. However, we cannot guarantee that a court would find such defenses valid. 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 a European patent application assigned to Cellomics, Inc. relating to an automated method for analyzing cells. The Cellomics application is proceeding to grant in Europe. We are also aware that Cellomics has pending applications in the United States, Canada, Japan and Australia. Cellomics or a third party may assert that our Cytometrix technologies fall within the scope of the Cellomics European patent application and thus, may infringe one or more of

these or other patents. 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. 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.

Government Regulation

The FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries impose substantial requirements upon the clinical development, manufacture, marketing and distribution of drugs. These agencies and other federal, state and local entities regulate research and development activities and the testing, manufacture, quality control, safety, effectiveness, labeling, storage, record keeping, approval, advertising and promotion of our drug candidates and drugs.

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FFDCA, and implementing regulations. The process required by the FDA before our drug candidates may be marketed in the United States generally involves the following:

- completion of extensive preclinical laboratory tests, preclinical animal studies and formulation studies all performed in accordance with the FDA's good laboratory practice, or GLP, regulations;
- submission to the FDA of an IND application which must become effective before clinical trials may begin;
- performance of adequate and well-controlled clinical trials to establish the safety and efficacy of the product candidate for each proposed indication;
- submission of a NDA to the FDA;
- satisfactory completion of an FDA preapproval inspection of the manufacturing facilities at which the product is produced to assess compliance with current GMP, or cGMP, regulations; and
- FDA review and approval of the NDA prior to any commercial marketing, sale or shipment of the drug.

The testing and approval process requires substantial time, effort and financial resources, and we cannot be certain that any approvals for our drug candidates will be granted on a timely basis, if at all.

Preclinical tests include laboratory evaluation of product chemistry, formulation and stability, as well as studies to evaluate toxicity in animals. The results of preclinical tests, together with manufacturing information and analytical data, are submitted as part of an IND application to the FDA. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises concerns or questions about the conduct of the clinical trial, including concerns that human research subjects will be exposed to unreasonable health risks. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Our submission of an IND, or those of our collaborators, may not result in FDA authorization to commence a clinical trial. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development, and the FDA must grant permission before each clinical trial can begin. Further, an independent institutional review board, or IRB, for each medical center proposing to conduct the clinical trial must review and approve the plan for any clinical trial before it commences at that center and it must monitor the study until completed. The FDA, the IRB, or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects or patients are being exposed to an

unacceptable health risk. Clinical testing also must satisfy extensive Good Clinical Practice, or GCP, regulations and regulations for informed consent.

Clinical Trials. For purposes of NDA submission and approval, clinical trials are typically conducted in the following three sequential phases, which may overlap:

- *Phase I:* Studies are initially conducted in a limited population to test the drug candidate for safety, dose tolerance, absorption, metabolism, distribution and excretion in healthy humans or, on occasion, in patients, such as cancer patients. In some cases, particularly in cancer trials, a sponsor may decide to run what is referred to as a "Phase Ib" evaluation, which is a second safety-focused Phase I clinical trial typically designed to evaluate the impact of the drug candidate in combination with currently approved drugs.

- *Phase II:* Studies are generally conducted in a limited patient population to identify possible adverse effects and safety risks, to determine the efficacy of the drug candidate for specific targeted indications and to determine dose tolerance and optimal dosage. Multiple Phase II clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more expensive Phase III clinical trials. In some cases, a sponsor may decide to run what is referred to as a "Phase IIb" evaluation, which is a second, confirmatory Phase II clinical trial that could, if positive and accepted by the FDA, serve as a pivotal clinical trial in the approval of a drug candidate.

- *Phase III:* These are commonly referred to as pivotal studies. When Phase II clinical trials demonstrate that a dose range of the drug candidate is effective and has an acceptable safety profile, Phase III clinical trials are undertaken in large patient populations to further evaluate dosage, to provide substantial evidence of clinical efficacy and to further test for safety in an expanded and diverse patient population at multiple, geographically dispersed clinical trial sites.

In some cases, the FDA may condition approval of an NDA for a drug candidate on the sponsor's agreement to conduct additional clinical trials to further assess the drug's safety and effectiveness after NDA approval. Such post-approval trials are typically referred to as Phase IV clinical trials.

New Drug Application. The results of drug candidate development, preclinical testing and clinical trials are submitted to the FDA as part of an NDA. The NDA also must contain extensive manufacturing information. Once the submission has been accepted for filing, by law the FDA has 180 days to review the application and respond to the applicant. The review process is often significantly extended by FDA requests for additional information or clarification. The FDA may refer the NDA to an advisory committee for review, evaluation and recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations. The FDA may deny approval of an NDA if the applicable regulatory criteria are not satisfied, or it may require additional clinical data or an additional pivotal Phase III clinical trial. Even if such data are submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. Data from clinical trials are not always conclusive and FDA may interpret data differently than we or our collaborators interpret data. Once issued, the FDA may withdraw drug approval if ongoing regulatory requirements are not met or if safety problems occur after the drug reaches the market. In addition, the FDA may require testing, including Phase IV clinical trials, and surveillance programs to monitor the effect of approved products which have been commercialized, and the FDA has the power to prevent or limit further marketing of a drug based on the results of these post-marketing programs. Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved label. Further, if there are any modifications to the drug, including changes in indications, labeling, or manufacturing processes or facilities, we may be required to submit and obtain FDA approval of a new NDA or NDA supplement, which may require us to develop additional data or conduct additional preclinical studies and clinical trials.

Fast Track Designation. The FDA's fast track program is intended to facilitate the development and to expedite the review of drugs that are intended for the treatment of a serious or life-threatening condition for which there is no effective treatment and which demonstrate the potential to address unmet medical needs for the condition. Under the fast track program, the sponsor of a new drug candidate may request the FDA to designate the drug candidate for a specific indication as a fast track drug concurrent with or after the filing of the IND for the drug candidate. The FDA must determine if the drug candidate qualifies for fast track designation within 60 days of receipt of the sponsor's request.

If fast track designation is obtained, the FDA may initiate review of sections of an NDA before the application is complete. This rolling review is available if the applicant provides and the FDA approves a schedule for the submission of the remaining information and the applicant pays applicable user fees. However, the time period specified in the Prescription Drug User Fees Act, which governs the time period goals the FDA has committed to reviewing an application, does not begin until the complete application is submitted. Additionally, the fast track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

In some cases, a fast track designated drug candidate may also qualify for one or more of the following programs:

- ***Priority Review.*** Under FDA policies, a drug candidate is eligible for priority review, or review within a six-month time frame from the time a complete NDA is accepted for filing, if the drug candidate provides a significant improvement compared to marketed drugs in the treatment, diagnosis or prevention of a disease. A fast track designated drug candidate would ordinarily meet the FDA's criteria for priority review. We cannot guarantee any of our drug candidates will receive a priority review designation, or if a priority designation is received, that review or approval will be faster than conventional FDA procedures, or that FDA will ultimately grant drug approval.

- ***Accelerated Approval.*** Under the FDA's accelerated approval regulations, the FDA is authorized to approve drug candidates that have been studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit to patients over existing treatments based upon either a surrogate endpoint that is reasonably likely to predict clinical benefit or on the basis of an effect on a clinical endpoint other than patient survival. In clinical trials, surrogate endpoints are alternative measurements of the symptoms of a disease or condition that are substituted for measurements of observable clinical symptoms. A drug candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase IV or post-approval clinical trials to validate the surrogate endpoint or confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or to validate a surrogate endpoint or confirm a clinical benefit during post-marketing studies, will allow the FDA to withdraw the drug from the market on an expedited basis. All promotional materials for drug candidates approved under accelerated regulations are subject to prior review by the FDA.

When appropriate, we and our collaborators intend to seek fast track designation or accelerated approval for our drug candidates. We cannot predict whether any of our drug candidates will obtain a fast track or accelerated approval designation, or the ultimate impact, if any, of the fast track or the accelerated approval process on the timing or likelihood of FDA approval of any of our drug candidates.

Satisfaction of FDA regulations and requirements or similar requirements of state, local and foreign regulatory agencies typically takes several years and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease. Typically, if a drug candidate is intended to treat a chronic disease, as is the case with some of the drug

candidates we are developing, safety and efficacy data must be gathered over an extended period of time. Government regulation may delay or prevent marketing of drug candidates for a considerable period of time and impose costly procedures upon our activities. The FDA or any other regulatory agency may not grant approvals for new indications for our drug candidates on a timely basis, if at all. Even if a drug candidate receives regulatory approval, the approval may be significantly limited to specific disease states, patient populations and dosages. Further, even after regulatory approval is obtained, later discovery of previously unknown problems with a drug may result in restrictions on the drug or even complete withdrawal of the drug from the market. Delays in obtaining, or failures to obtain, regulatory approvals for any of our drug candidates would harm our business. In addition, we cannot predict what adverse governmental regulations may arise from future United States or foreign governmental action.

Other regulatory requirements. Any drugs manufactured or distributed by us or our collaborators pursuant to FDA approvals are subject to continuing regulation by the FDA, including recordkeeping requirements and reporting of adverse experiences associated with the drug. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with ongoing regulatory requirements, including cGMPs, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Failure to comply with the statutory and regulatory requirements can subject a manufacturer to possible legal or regulatory action, such as warning letters, suspension of manufacturing, seizure of product, injunctive action or possible civil penalties. We cannot be certain that we or our present or future third-party manufacturers or suppliers will be able to comply with the cGMP regulations and other ongoing FDA regulatory requirements. If our present or future third-party manufacturers or suppliers are not able to comply with these requirements, the FDA may halt our clinical trials, require us to recall a drug from distribution, or withdraw approval of the NDA for that drug.

The FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities and promotional activities involving the Internet. A company can make only those claims relating to safety and efficacy that are approved by the FDA. Failure to comply with these requirements can result in adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe legally available drugs for uses that are not described in the drug's labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, impose stringent restrictions on manufacturers' communications regarding off-label use.

Competition

We compete in the segments of the pharmaceutical, biotechnology and other related markets that address cancer, cardiovascular disease and antifungal applications, each of which is highly competitive. We face significant competition from most pharmaceutical companies as well as biotechnology companies that are also researching and selling products designed to address cancer, cardiovascular disease or antifungal applications. Many of our competitors have significantly greater financial, manufacturing, marketing and drug development resources than we do. Large pharmaceutical companies in particular have extensive experience in clinical testing and in obtaining regulatory approvals for drugs. These companies also have significantly greater research capabilities than we do. In addition, many universities and private and public research institutes are active in cancer, cardiovascular disease and antifungal research, some in direct competition with us.

We believe that our ability to successfully compete will depend on, among other things:

- efficacy, safety and reliability of our drug candidates;
- the speed at which we develop drug candidates;
- completion of clinical development and laboratory testing and obtaining regulatory approvals for drug candidates;
- timing and scope of regulatory approvals;
- our ability to manufacture and sell commercial quantities of a product to the market;
- product acceptance by physicians and other health care providers;
- quality and breadth of our technology;
- skills of our employees and our ability to recruit and retain skilled employees;
- protection of our intellectual property;
- cash flows under existing and potential future arrangements with licensees, partners and other parties; and
- availability of substantial capital resources to fund development and commercialization activities.

It is possible that our competitors will develop drug candidates and market drugs that are less expensive and more effective than our future drugs or that will render our drugs obsolete. It is also possible that our competitors will commercialize competing drugs before we or our partners can launch any drugs developed from our drug candidates. Companies that currently sell drugs in our markets of interest include, for example, Bristol-Myers Squibb, Abbott, Aventis, Johnson & Johnson, Merck and Pfizer. Other companies that are early-stage are currently developing alternative treatments and products that could compete with our drugs. These organizations also compete with us to attract qualified personnel and potential parties for acquisitions, joint ventures or other strategic alliances.

Legal Proceedings

We are not involved in any legal proceedings.

Facilities

Our facilities consist of approximately 53,408 square feet of research and office space. We lease 50,195 square feet located at 280 East Grand Avenue in South San Francisco, California until 2013 with an option to renew that lease over that timeframe. We also lease 3,213 square feet at 250 East Grand Avenue in South San Francisco, California on a month-to-month basis.

Employees

As of December 31, 2003, our workforce consisted of 163 full-time employees, 57 of whom hold Ph.D. or M.D. degrees, or both, and 30 of whom hold other advanced degrees. Of our total workforce, 131 are engaged in research and development and 32 are engaged in business development, finance, and administration. We have no collective bargaining agreements with our employees, and we have not experienced any work stoppages. We believe that our relations with our employees are good.

MANAGEMENT

Executive Officers and Directors

Our directors and executive officers as of January 15, 2004 are as follows:

Name	Age	Position
James H. Sabry, M.D., Ph.D.	45	President and Chief Executive Officer; Director
Robert I. Blum	40	Executive Vice President, Corporate Development and Finance and Chief Financial Officer
David J. Morgans, Jr., Ph.D.	51	Senior Vice President, Drug Discovery and Development
Jay K. Trautman, Ph.D.	45	Vice President, Technology
Gail A. Sheridan	55	Vice President, Human Resources
Stephen Dow(1)(3)	48	Director
A. Grant Heidrich, III(1)(2)	51	Director
Charles Homcy, M.D.	55	Director
William J. Rutter, Ph.D.(1)(2)(3)	76	Director
Michael Schmertzler	51	Director
James A. Spudich, Ph.D.(3)	62	Director

(1) Member of the Audit Committee.

(2) Member of the Compensation Committee.

(3) Member of the Nominating and Governance Committee.

James H. Sabry, M.D., Ph.D. co-founded our company and has served as our President and Chief Executive Officer and as a member of our board of directors since August 1997. Prior to that he held faculty positions at the University of California, San Francisco, from 1989 to 1998, and Harvard Medical School from 1984 to 1987. Dr. Sabry received a M.D. from Queens University and a Ph.D. in Cell Biology from the University of California, San Francisco.

Robert I. Blum has served as our Executive Vice President, Corporate Development and Finance and Chief Financial Officer since January 2004. From October 2001 to December 2003, he served as our Senior Vice President, Corporate Development and Finance and Chief Financial Officer. From July 1998 to September 2001, Mr. Blum was our Vice President, Business Development. Prior to joining us in July 1998, he was Director, Marketing at COR Therapeutics, Inc., a biopharmaceutical company from 1996. From 1991 to 1996, he was Director, Business Development at COR Therapeutics. Prior to this, Mr. Blum performed roles of increasing responsibility in sales, marketing and other pharmaceutical business functions at Marion Laboratories, Inc. and Syntex Laboratories, Inc. Mr. Blum received B.A. degrees in Human Biology and Economics from Stanford University and a M.B.A. from Harvard Business School.

David J. Morgans, Jr., Ph.D. has served as our Senior Vice President, Drug Discovery and Development since October 2003. From March 2002 to September 2003, he served as our Senior Vice President, Drug Discovery and, from January 2002 to February 2002, he served as our Vice President, Drug Discovery. From October 2000 to December 2001, he served as our Vice President Chemistry. From July 1998 to October 2000, Dr. Morgans served as Vice President of Research for Iconix Pharmaceuticals, Inc., a biopharmaceutical company. From March 1995 to July 1998, he was Vice President, Inflammatory Diseases at Roche Bioscience, a pharmaceutical company. From 1983 to 1995, he held various positions at Syntex Laboratories, Inc., most recently as Director, Medicinal Chemistry. From 1980 to 1983, Dr. Morgans was Assistant Professor of Chemistry at University of California, Santa Cruz. Dr. Morgans received a B.S. in Chemistry from Saint Joseph's University in Philadelphia and a Ph.D. in Chemistry from Columbia University.

Jay K. Trautman, Ph.D. has served as our Vice President, Technology since May 2003. He served as our Vice President, Cell Technologies from June 2002 to May 2003. From March 2000 to June 2002, he served as the Chief Executive Officer of Praelux Incorporated, a research and development company and wholly owned subsidiary of Amersham Biosciences Corp. From March 1996 to March 2000, Dr. Trautman held a variety of positions at Praelux and its predecessor company, SEQ Ltd., and was responsible for directing research and development activities. Dr. Trautman received a B.S. in Chemistry from the University of Washington and a Ph.D. in Chemistry from Cornell University.

Gail A. Sheridan has served as our Vice President, Human Resources since January 2004. She joined Cytokinetics as a consultant in March 2003 and became an employee in January 2004. She was sole proprietor of Human Resources Consulting from January 1995 to December 2003. From 1993 to 1995, she was Director, Human Resources at SyStemix Incorporated. From 1990 to 1993, she was Director, Human Resources at Software Publishing Corporation. From 1986 to 1990, Ms. Sheridan was a Principal at Telemarketing Solutions. From 1983 to 1986, she held Vice President positions at Bank of America. Ms. Sheridan holds a B.A. in Political Science from the University of California at Berkeley and an M.A. in American Studies from the University of Southern California.

Stephen Dow has served as a member of our board of directors since April 1999. Mr. Dow has been a General Partner with Sevin Rosen Funds, a venture capital firm, since 1983. Since 1989, Mr. Dow has served on the board of directors of Citrix Systems, an enterprise software company, and has been Citrix's Chairman of the Board since May 2002. Mr. Dow received a B.A. in Economics and a M.B.A. from Stanford University.

A. Grant Heidrich, III has served as a member of our board of directors since April 1999. Mr. Heidrich has been a Managing Director of certain Mayfield funds, each a venture capital firm, since 1983. Mr. Heidrich currently serves as Chairman of the board of directors of Tularik, Inc., a biotechnology company, and as the Lead Outside Director of Millennium Pharmaceuticals, Inc., a biopharmaceutical company. Mr. Heidrich received a B.A. in Human Biology from Stanford University and a M.B.A. from Columbia University.

Charles Homcy, M.D. has served as a member of our board of directors since February 2003. Since November 2003, Dr. Homcy has served as Chief Executive Officer of Portola Pharmaceuticals, Inc., a biopharmaceutical company. From January 2003 to November 2003, Dr. Homcy served as Senior Research and Development Advisor of Millennium Pharmaceuticals. From February 2002 to December 2002, Dr. Homcy served as the President of Research and Development at Millennium Pharmaceuticals. From 1995 to February 2002, he served as Executive Vice President, Research and Development of COR Therapeutics, Inc., where he served as a member of the board of directors from 1998 to February 2002. From 1994 to March 1995, Dr. Homcy was President of the Medical Research Division of American Cyanamid Company-Lederle Laboratories (now a division of Wyeth-Ayerst Laboratories). From 1990 to 1994, Dr. Homcy was Executive Director of the Cardiovascular and Central Nervous System Research Section at Lederle Laboratories. Dr. Homcy currently serves on the board of directors of Millennium Pharmaceuticals and Kosan Biosciences, Inc., a biopharmaceutical company. Dr. Homcy received a A.B. in Biology and a M.D. from Johns Hopkins University.

William J. Rutter, Ph.D. has served as a member of our board of directors since May 1999. Since July 2002, Dr. Rutter has been the Chairman, Chief Executive Officer and a principal shareholder of Synergenics LLC, a biotechnology consulting company. From 1981 until May 1999, Dr. Rutter served as Chairman of the Board of Directors of Chiron Corporation, a biopharmaceutical, vaccine and blood testing company that he co-founded. He is currently Chairman Emeritus of Chiron. From August 1983 to April 1989, Dr. Rutter was the Director of the Hormone Research Institute at the University of California, San Francisco. Since January 2000, Dr. Rutter has served on the board of directors of Sangamo Biosciences, Inc., a biotechnology company. Dr. Rutter received a B.A. in

Biochemistry from Harvard University, a M.S. in Biochemistry from the University of Utah and a Ph.D. in Biochemistry from the University of Illinois.

Michael Schmertzler has served as a member of our board of directors since April 2003. Since 2001, Mr. Schmertzler has been a Managing Director of Aries Advisors, LLC, the sub-advisor to Credit Suisse First Boston Equity Partners, L.P., a private equity fund, and the Chair of the investment committee. From 1997 to 2001, Mr. Schmertzler was Co-Head of United States and Canadian Private Equity at Credit Suisse First Boston, an investment banking company. Prior to 1997, Mr. Schmertzler held various management positions with Morgan Stanley and its affiliates, including President of Morgan Stanley Leveraged Capital Funds and Managing Director, and was Managing Director and Chief Financial Officer of Lehman Brothers Kuhn Loeb, an investment banking firm. Mr. Schmertzler received a B.A. from Yale College in Molecular Biophysics and Biochemistry, History and City Planning and a M.B.A. from the Harvard Business School.

James A. Spudich, Ph.D. co-founded our company and has served as a member of our board of directors since August 1997. From September 1998 to September 1999, he served as our Principal Scientist. Dr. Spudich is the Douglass M. Nola Leishman Professor in Cardiovascular Disease and Professor of Biochemistry and Developmental Biology at Stanford University where he has been a member of the faculty since 1977. From 1994 to 1998, Dr. Spudich served as Chairman of Stanford University's Department of Biochemistry. From 1979 to 1984, he was Chairman of Stanford's Department of Structural Biology. He was elected a member of the American Academy of Arts and Sciences in 1997 and a member of the National Academy of Sciences in 1991. Dr. Spudich is also a member of our scientific advisory board. Dr. Spudich received a B.S. in Chemistry from the University of Illinois and a Ph.D. in Biochemistry from Stanford University.

Scientific Advisory Board

The following individuals are members of our scientific advisory board:

John C. Chabala, Ph.D. is a founder and member of the Management Scientific Advisory Board of Pharmacopeia, Inc., a combinatorial chemistry and chemoinformatics company, where he served as President from 1993 to 1996 and Chief Scientific Officer from 1993 to 1997. Prior to joining Pharmacopeia, Dr. Chabala was Vice President of Discovery Chemistry at Bristol-Myers Squibb from 1991 to 1993. Prior to that, he was with Merck ultimately as Executive Director, Basic Chemistry, supervising a variety of medicinal and other chemistry programs. Dr. Chabala received a B.S. in Chemistry from Bucknell University, and a Ph.D. in Organic Chemistry from Massachusetts Institute of Technology.

David G. Drubin, Ph.D. is Professor of Genetics in the Department of Molecular and Cell Biology at the University of California, Berkeley, where he has been a member of the faculty since 1988. Dr. Drubin is Associate Editor of Molecular Biology of the Cell, Editor of the Journal of Cell Biology and a member of the editorial board of Trends of Cell Biology. He was elected Co-Chair and Chair of the Gordon Research Conference on the Plant and Fungal Cytoskeleton in 1995 and 1998, respectively, and was Chair of the Program Committee for the 1999 meeting of the American Society of Cell Biology. Dr. Drubin received an A.B. in Biochemistry from the University of California at Berkeley, and a Ph.D. in Biochemistry from the University of California at San Francisco.

Lawrence S. B. Goldstein, Ph.D. co-founded our company in August 1997. Dr. Goldstein has been a member of the University of California, San Diego faculty since 1995, where he is Professor of Cellular and Molecular Medicine and an Investigator in the Howard Hughes Medical Institute. From 1984 to 1993, he was Professor of Cellular and Developmental Biology at Harvard University. Dr. Goldstein is a member of the editorial boards of Molecular Biology of the Cell and the Journal of Cell Biology. He is also Associate Editor of the Annual Review of Cell and Developmental Biology. Dr. Goldstein received a B.A. in Biology from the University of California, San Diego, and a Ph.D. in Genetics from the University of Washington.

Eric M. Gordon, Ph.D. held the position of Senior Vice President of Research at Sunesis Pharmaceuticals, Inc. from October 1998 to July 2002. From 1996 to 1998, Dr. Gordon was President, Scientific Founder and Chief Scientific Officer of Versicor. Prior to this, Dr. Gordon served as Vice President of Research and Director of Chemistry at Affymax Research Institute from 1992 to 1996, and from 1990 to 1992, he was the Director of Medicinal Chemistry at The Squibb Institute in Princeton where he began as a Postdoctoral Fellow in 1974. His professional activities include serving as president of the Princeton American Chemical Society, Adjunct Professor of Medicinal Chemistry at the University of Wisconsin, and he was elected an American Association Advancement of Science (AAAS) Fellow. Dr. Gordon received a B.S. and a Ph.D. in Medicinal Chemistry from the University of Wisconsin.

Marc W. Kirschner, Ph.D. is the founding chair of the Department of Cell Biology and the Carl W. Walter Professor of Cell Biology at Harvard Medical School, where he joined the faculty in 1993. Dr. Kirschner was a co-founder of Harvard's Institute of Chemistry and Cell Biology. From 1978 to 1993, Dr. Kirschner was Professor at the University of California, San Francisco. From 1972 to 1978, he was on faculty at Princeton University. Dr. Kirschner is a member of the National Academy of Sciences and the American Academy of Arts and Sciences, and was elected a Foreign Member of the Royal Society of London in 1999. Dr. Kirschner received a B.A. in Chemistry from Northwestern University and received a Ph.D. in Cell Biology from the University of California, Berkeley.

Larry E. Overman, Ph.D. has been a member of the faculty at the University of California, Irvine since 1971, where he is currently a Distinguished Professor of Chemistry. He is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. Dr. Overman is Editor-in-Chief of Organic Reactions and a member of the Board of Consulting Editors of Tetrahedron Publications. He is a member of the board of directors of Organic Syntheses and Organic Reactions and a member of Pharmacopeia's scientific advisory board. Dr. Overman received a B.A. in Chemistry in 1965 from Earlham College and a Ph.D. in Organic Chemistry in 1969 from the University of Wisconsin.

Thomas D. Pollard, M.D. is the Higgins Professor of Molecular, Cellular and Developmental Biology at Yale University. From 1996 to 2000, Dr. Pollard served as Professor and President of the Salk Institute for Biological Studies in La Jolla, California. From 1977 to 1996, Dr. Pollard directed the Department of Cell Biology at the Johns Hopkins Medical School. From 1993 to 1998, he chaired the Commission on Life Sciences at the National Research Council. Dr. Pollard served as Council Member and President of both the American Society for Cell Biology and the Biophysical Society. Dr. Pollard received a B.A. in Chemistry and Zoology from Pomona College, and a M.D. from Harvard Medical School.

Stephen J. Smith, Ph.D. is a Professor of Molecular and Cellular Physiology at the Stanford University School of Medicine. From 1977 to 1979, Dr. Smith was a Miller Fellow at the University of California, Berkeley. Dr. Smith received a B.S. in Psychology from Reed College, and a Ph.D. in Physiology and Biophysics from the University of Washington.

James A. Spudich, Ph.D. Dr. Spudich's biographical information is provided above.

Ronald D. Vale, Ph.D. co-founded our company in August 1997. Since 1986, Dr. Vale has been a member of the University of California, San Francisco faculty. Dr. Vale was appointed to the Howard Hughes Medical Institute in 1995, and was elected to the National Academy of Sciences in 2001. He serves as the Chair of the Department of Cellular and Molecular Pharmacology at the University of California, San Francisco and is the W. K. Hamilton Distinguished Professor of Anesthesia. Dr. Vale received a B.S. in Biology and Chemistry from the University of California, Santa Barbara, and a Ph.D. in Neurosciences from Stanford University.

Board Composition and Committees

Our board of directors currently consists of seven members. Prior to the closing of this offering, our board of directors will be divided into three classes, with each director serving a three-year term and one class being elected at each year's annual meeting of stockholders. Directors A. Grant Heidrich and William J. Rutter will be in the class of directors whose initial term expires at the 2004 annual meeting of stockholders. Directors James Spudich and Charles Homcy will be in the class of directors whose initial term expires at the 2005 annual meeting of the stockholders. Directors Stephen Dow, Michael Schmertzler and James Sabry will be in the class of directors whose initial term expires at the 2006 annual meeting of stockholders.

Our board of directors currently has an audit committee, a compensation committee and a nominating and governance committee. Directors Stephen Dow, A. Grant Heidrich and William J. Rutter are currently members of the audit committee. The audit committee reviews our internal accounting procedures and consults with and reviews the services provided by our independent accountants. Directors A. Grant Heidrich and William J. Rutter are currently members of the compensation committee. The compensation committee reviews and recommends to the board of directors the compensation and benefits for all of our officers and establishes and reviews general policies relating to compensation and benefits for our other employees. Directors Stephen Dow, James Spudich and William J. Rutter are currently members of the nominating and governance committee. The nominating and governance committee assists our board of directors in the areas of membership selection, evaluation of overall effectiveness of the board of directors and the review of developments in corporate governance practices.

Director Compensation

We reimburse our non-employee directors for their expenses incurred in connection with attending board and committee meetings but do not plan to compensate them for their services as board or committee members. We have in the past granted non-employee directors options to purchase our common stock pursuant to the terms of our 1997 Stock Option/ Stock Issuance Plan, and our board continues to have the discretion to grant options to new and continuing non-employee directors. In addition, one director has purchased shares of our common stock pursuant to restricted stock purchase agreements, subject to a repurchase right in our favor. For a discussion of such director's restricted stock purchase agreement, see "Related Party Transactions."

In January 2004, our stockholders approved our 2004 Equity Incentive Plan, which provides for automatic grants of stock options to directors who are not our officers or employees. The 2004 Equity Incentive Plan provides that such directors will automatically receive:

- one-time option grants of 20,000 shares vesting annually over three years from the date of joining the board which are to be granted on such date at the fair market value of one share of our common stock on the date of grant; and

- annual option grants of 15,000 shares vested in full on the date of grant which are to be granted on the date of each annual stockholder meeting following the closing of this offering at the fair market value of one share of our common stock on the date of grant, provided that such grant will only be made to non- employee directors that have been members of the board for at least six months at the time of such annual stockholder meeting.

Executive Compensation

The following table sets forth the compensation earned for services rendered to us in all capacities by our Chief Executive Officer and our other executive officers whose total cash compensation exceeded $100,000 — collectively, the "Named Executive Officers" — for the year ended December 31, 2003.

Summary 2003 Compensation Table

Name and Principal Positions	Year	Annual Compensation ($) Salary	Bonus	Other	Long-Term Compensation Securities Underlying Options (#)	All Other Compensation(7)
James H. Sabry, M.D., Ph.D.,	2003	$ 354,167	$ 86,760	$10,610(2)	75,000(8)	$ 1,031
President and Chief	2002	317,917	71,190	10,610(2)	300,000(9)	660
Executive Officer	2001	277,083	52,500	1,152(2)	—	618
Robert I. Blum,	2003	268,404	210,290	6,248(3)	179,425(10)	604
Executive Vice President,	2002	268,484	42,525	8,987(3)	150,000(11)	468
Corporate Development and Finance and Chief Financial Officer	2001	234,375	31,500	9,256(3)	—	456
David J. Morgans, Jr., Ph.D.,	2003	243,078	54,660	11,123(4)	54,500(12)	1,239
Senior Vice President,	2002	226,208	34,965	8,935(5)	50,000(13)	1,146
Drug Discovery and Development	2001	192,708	—	8,935(5)	15,000(14)	609
Jay K. Trautman, Ph.D.,	2003	223,333	39,800	—	27,500(15)	736
Vice President, Technology(1)	2002	126,992	60,000	11,506(6)	62,500(16)	228

(1) Dr. Trautman's employment with us began on June 3, 2002.

(2) Represents loan to be forgiven over eight years beginning November 12, 2001.

(3) Represents interest payments on a loan co-signed by us on behalf of Mr. Blum.

(4) Represents loans to be forgiven over eight years beginning on October 18, 2000 and May 20, 2002.

(5) Represents loan to be forgiven over eight years beginning October 18, 2000.

(6) Represents non-deductible moving expenses.

(7) Represents group term life Insurance

(8) Represents a stock option granted to Dr. Sabry in May, 2003. Such option vests monthly over a four-year period beginning March 1, 2003.

(9) Represents a stock option granted to Dr. Sabry in July, 2002. Such option vests monthly over a five-year period beginning March 15, 2002.

(10) Represents a stock option granted to Mr. Blum in May, 2003, which vests monthly over a four-year period beginning March 1, 2003, and a stock option granted in December, 2003, which vests monthly over a five-year period beginning December 18, 2003.

(11) Represents a stock option granted to Mr. Blum in July, 2002. Such option vests monthly over a five-year period beginning March 15, 2002.

(12) Represents a stock option granted to Dr. Morgans in May, 2003. Such option vests monthly over a four-year period beginning March 1, 2003.

(13) Represents a stock option granted to Dr. Morgans in July, 2002. Such option vests monthly over a five-year period beginning March 15, 2002.

(14) Represents a stock option granted to Dr. Morgans in March, 2001. Such option vested as to 25% of the shares subject to the option on March 14, 2002, and as to 1/48th of the shares subject to such option each month thereafter.

(15) Represents a stock option granted to Dr. Trautman in May, 2003. Such option vests monthly over a four-year period from March 1, 2003.

(16) Represents a stock option granted to Dr. Trautman in July, 2002. Such option vested as to 25% of the shares subject to the option on June 3, 2003, and as to 1/48th of the shares subject to such option each month thereafter.

Option Grants in 2003

The following table sets forth information concerning grants of stock options to each of the executive officers named in the table above during 2003. All options granted to these executive officers in 2003 were granted under the 1997 Stock Option/ Stock Issuance Plan, as amended. Except as otherwise noted, one forty-eighth of the shares subject to each option vests and becomes exercisable on the first month after the vesting commencement date, and an additional one-forty-eighth of the shares subject to each option vests each month thereafter. The percent of the total options set forth below is based on an aggregate of 613,769 options granted to employees during 2003. All options were granted at fair market value as determined by our board of directors on the date of grant.

Potential realizable value represents hypothetical gains that could be achieved for the options if exercised at the end of the option term assuming that the initial public offering price of our common stock appreciates at 5% and 10% over the option term. The assumed 5% and 10% rates of stock price appreciation are provided in accordance with rules of the Securities and Exchange Commission and do not represent our estimate or projection of our future common stock price.

	Individual Grants					
Name	Number of Securities Underlying Options Granted	Percent of Total Options Granted to Employees During Period (%)	Exercise Price Per Share ($)	Expiration Date	Potential Realizable Value at Assumed Annual Rates of Stock Appreciation for Option Term ($) 5%	10%
James H. Sabry, M.D., Ph.D.	75,000	12.2%	$ 1.20	5/21/13	1,394,632	2,209,198
Robert I. Blum	37,500	6.1	1.20	5/21/13	697,316	1,104,599
	141,925	23.1	2.00	12/18/13	2,504,912	3,888,397
David J. Morgans, Jr., Ph.D.	54,500	8.9	1.20	5/21/13	1,013,433	1,605,350
Jay K. Trautman, Ph.D.	27,500	4.5	1.20	5/21/13	511,365	810,039

Aggregate Option Exercises in 2003 and Values at December 31, 2003

The following table sets forth information concerning exercisable and unexercisable stock options held by the executive officers named in the summary compensation table at December 31, 2003. The value of unexercised in-the-money options is based on an assumed initial offering price of $12.00 per share minus the actual exercise prices. All options were granted under our 1997 Stock Option/ Stock Issuance Plan, as amended. Except as otherwise noted, these options vest over four years and otherwise generally conform to the terms of our 1997 Stock Option/ Stock Issuance Plan, as amended.

			Number of Securities Underlying Unexercised Options at December 31, 2003 (#)		Value of Unexercised In-the-Money Options at December 31, 2003 ($)(2)	
Name	Shares Acquired On Exercise	Value Realized ($) (1)	Exercisable	Unexercisable	Exercisable	Unexercisable
James H. Sabry, M.D., Ph.D.	—	—	687,500(3)	—	7,691,250	—
Robert I. Blum	—	—	441,925(4)	—	4,729,000	—
David J. Morgans, Jr., Ph.D.	17,500	199,850	182,000(5)	—	2,007,350	—
Jay K. Trautman, Ph.D.	30,000	324,000	60,000(6)	—	648,000	—

(1) Based upon the assumed initial public offering price of $12.00 per share less the exercise price per share.

(2) Value is determined by subtracting the exercise price of an option from an assumed $12.00 per share fair market value of our common stock.

(3) If Dr. Sabry's employment with us terminated, 351,771 of the shares issuable upon the exercise of Dr. Sabry's options would currently be subject to repurchase by us at the original purchase price.

(4) If Mr. Blum's employment with us terminated, 303,436 of the shares issuable upon the exercise of Mr. Blum's options would currently be subject to repurchase by us at the original purchase price.

(5) If Dr. Morgan's employment with us terminated, 98,136 of the shares issuable upon the exercise of Dr. Morgan's options would currently be subject to repurchase by us at the original purchase price.

(6) If Dr. Trautman's employment with us terminated, 61,406 of the shares issuable upon the exercise of Dr. Trautman's options would currently be subject to repurchase by us at the original purchase price.

Stock Plans

1997 Stock Option/ Stock Issuance Plan

Our board of directors adopted and our stockholders approved the 1997 Stock Option/ Stock Issuance Plan in December 1997 and January 1998, respectively. Our board of directors will not grant any additional options under the plan following the effective date of this offering. However, the plan will continue to govern the terms and conditions of the outstanding options previously granted under the plan.

A total of 4,416,172 shares of our common stock are authorized for issuance under the 1997 Stock Option/ Stock Issuance Plan. As of December 31, 2003, options to acquire a total of 2,244,400 shares of our common stock were issued and outstanding, and a total of 1,781,132 shares of our common stock had been issued upon the exercise of options granted under the plan.

The plan provides for the grant of nonstatutory stock options to our employees and consultants, and for the grant of incentive stock options within the meaning of Section 422 of the Internal Revenue Code to our employees. Our board of directors administers the 1997 Stock Option/ Stock Issuance Plan. The administrator has the authority to determine the terms and conditions of the options granted under the plan.

Generally, in the event of a "change of control," the successor corporation will assume each outstanding option or replace such options with a cash incentive program that preserves the spread between the strike price and fair market value associated with such option. If the outstanding options are not assumed, or if the successor corporation does not replace such options with a cash incentive program, the outstanding options will become fully exercisable immediately prior to such change of control and will terminate upon the consummation of the change of control. Generally, if options are assumed in connection with the change of control and an optionee's employment is terminated as the result of an "involuntary termination" within 24 months of the change of control, the options held by such optionee will immediately vest in full.

2004 Equity Incentive Plan

Our board of directors adopted our 2004 Equity Incentive Plan in January 2004 and our stockholders approved it in January 2004. Our 2004 Equity Incentive Plan provides for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to our employees and our parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, stock purchase rights, restricted stock, stock appreciation rights, performance units and performance shares to our employees, directors and consultants and our parent and subsidiary corporations' employees and consultants.

We have reserved a total of 3,200,000 shares of our common stock for issuance pursuant to the 2004 Equity Incentive Plan, of which no options have been issued. The 2004 Equity Incentive Plan will become effective on the day prior to the completion of this offering. In addition, the shares reserved for issuance under our 2004 Equity Incentive Plan include (a) shares reserved but unissued under the 1997 Stock Option/ Stock Issuance Plan as of the effective date of this offering, (b) shares returned to the 1997 Stock Option/ Stock Issuance Plan as the result of termination of options or the repurchase of shares issued under such plan, and (c) annual increases in the number of shares

available for issuance on the first day of each fiscal year beginning with our fiscal year beginning in 2005, equal to the lesser of:

- 3.5% of the outstanding shares of common stock on the first day of our fiscal year,
- 3,000,000 shares, or
- an amount our board may determine.

Our board of directors or a committee of our board administers our 2004 Equity Incentive Plan. In the case of options intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Internal Revenue Code, the committee will consist of two or more "outside directors" within the meaning of Section 162(m) of the Code. The administrator has the power to determine the terms of the awards, including the exercise price, the number of shares subject to each such award, the exercisability of the awards and the form of consideration, if any, payable upon exercise. The administrator also has the authority to institute an exchange program by which outstanding awards may be surrendered in exchange for awards with a lower exercise price.

The administrator determines the exercise price of options granted under our 2004 Equity Incentive Plan, but with respect to nonstatutory stock options intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code and all incentive stock options, the exercise price must at least be equal to the fair market value of our common stock on the date of grant. The term of an incentive stock option may not exceed ten years, except that with respect to any participant who owns 10% of the voting power of all classes of our outstanding stock, the term must not exceed five years and the exercise price must equal at least 110% of the fair market value on the grant date. The administrator determines the term of all other options.

No optionee may be granted an option to purchase more than 1,500,000 shares in any fiscal year. However, in connection with his or her initial service, an optionee may be granted an additional option to purchase up to 1,500,000 shares.

After termination of an employee, director or consultant, he or she may exercise his or her option for the period of time stated in the option agreement. Generally, if termination is due to death or disability, the option will remain exercisable for 12 months. In all other cases, the option will generally remain exercisable for three months. However, an option generally may not be exercised later than the expiration of its term.

Stock purchase rights, which represent the right to purchase our common stock, may be issued under our 2004 Equity Incentive Plan. The administrator determines the purchase price of stock purchase rights. Unless the administrator determines otherwise, we will retain a repurchase option on issued shares that we may exercise upon the termination of the purchaser's service with us for any reason. The administrator determines the rate at which our repurchase option will lapse.

Stock appreciation rights may be granted under our 2004 Equity Incentive Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the exercise date and the date of grant. The administrator determines the terms of stock appreciation rights, including when such rights become exercisable and whether to pay the increased appreciation in cash or with shares of our common stock, or a combination thereof.

Restricted stock may be granted under our 2004 Equity Incentive Plan. Restricted stock awards are shares of our common stock that vest in accordance with terms and conditions established by the administrator. The administrator will determine the number of shares of restricted stock granted to any employee. The administrator may impose whatever conditions to vesting it determines to be appropriate. For example, the administrator may set restrictions based on the achievement of specific performance goals. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

Performance units and performance shares may be granted under our 2004 Equity Incentive Plan. Performance units and performance shares are awards that will result in a payment to a participant only if performance goals established by the administrator are achieved or the awards otherwise vest. The administrator will establish organizational or individual performance goals in its discretion, which, depending on the extent to which they are met, will determine the number or the value of performance units and performance shares to be paid out to participants. Performance units shall have an initial dollar value established by the administrator prior to the grant date. Performance shares shall have an initial value equal to the fair market value of our common stock on the grant date.

Our 2004 Equity Incentive Plan also provides for the automatic grant of options to our non-employee directors. Each non-employee director appointed or elected to the board after the completion of this offering will receive an initial option to purchase 20,000 shares upon such appointment or election, except for those directors who become non-employee directors by ceasing to be employee directors. In addition, beginning in 2005, non-employee directors who have been directors for at least six months will receive a subsequent option to purchase 15,000 shares following each annual meeting of our stockholders. All options granted under the automatic grant provisions have a term of ten years and an exercise price equal to fair market value on the date of grant. Each initial option becomes exercisable as to one-third of the shares subject to such option on each anniversary of the date of grant, provided the non-employee director remains a service provider on such dates. Each subsequent option shall be exercisable in full on the date of grant.

Our 2004 Equity Incentive Plan generally does not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime.

Our 2004 Equity Incentive Plan provides that in the event of a "change of control," the successor corporation will assume or substitute an equivalent award for each outstanding option, stock appreciation right and stock purchase right. If there is no assumption or substitution of outstanding options, stock appreciation rights and stock purchase rights, the administrator will provide notice to the recipient that he or she has the right to exercise the option, stock appreciation right or stock purchase right as to all of the shares subject to the award, including shares which would not otherwise be exercisable, for a period of time as the administrator may determine from the date of the notice. The award will terminate upon the expiration of such period. In the event an outside director is terminated on or following a change in control, other than pursuant to a voluntary resignation, his or her options will fully vest and become immediately exercisable.

Our 2004 Equity Incentive Plan will automatically terminate in 2009, unless we terminate it sooner. In addition, our board of directors has the authority to amend, suspend or terminate the 2004 Equity Incentive Plan provided such action does not impair the rights of any participant.

2004 Employee Stock Purchase Plan

Concurrently with this offering, we intend to establish our 2004 Employee Stock Purchase Plan, and a total of 1,000,000 shares of our common stock will be made available for sale.

Our board of directors or a committee of our board administers our 2004 Employee Stock Purchase Plan. Our board of directors or its committee has full and exclusive authority to interpret the terms of our 2004 Employee Stock Purchase Plan and determine eligibility.

All of our employees are eligible to participate if they are customarily employed by us or any participating subsidiary for at least 20 hours per week and more than five months in any calendar year. However, an employee may not be granted an option to purchase stock if such employee:

- immediately after the grant owns stock possessing 5% or more of the total combined voting power or value of all classes of our capital stock, or
- has rights to purchase stock under our employee stock purchase plans that accrues at a rate that exceeds $25,000 worth of stock for each calendar year.

Our 2004 Employee Stock Purchase Plan is intended to qualify under Section 423 of the Internal Revenue Code and provides for consecutive, overlapping 24-month offering periods. Each offering period includes four six-month purchase periods. The offering periods generally start on the first trading day on or after May 1 and November 1 of each year, except for the first such offering period which will commence on the first trading day on or after the effective date of this offering and will end on the first trading day on or after the earlier of (a) May 1, 2006 or (b) 27 months from the beginning of the first offering period.

Our 2004 Employee Stock Purchase Plan permits participants to purchase common stock through payroll deductions of up to 15% of their eligible compensation which includes a participant's base salary, wages, overtime pay, shift premium and recurring commissions, but does not include payments for incentive compensation or bonuses. A participant may purchase a maximum of 2,500 shares during a six-month purchase period.

Amounts deducted and accumulated by the participant are used to purchase shares of our common stock at the end of each six-month purchase period. The price is 85% of the lower of the fair market value of our common stock at the beginning of an offering period or after a purchase period end. If the fair market value at the end of a purchase period is less than the fair market value at the beginning of the offering period, participants will be withdrawn from the current offering period following their purchase of shares on the purchase date and will be automatically re-enrolled in a new offering period. Participants may end their participation at any time during an offering period, and will be paid their payroll deductions to date. Participation ends automatically upon termination of employment with us.

A participant may not transfer rights granted under the 2004 Employee Stock Purchase Plan other than by will, the laws of descent and distribution or as otherwise provided under the 2004 Employee Stock Purchase Plan.

In the event of a "change of control," a successor corporation may assume or substitute each outstanding option. If the successor corporation refuses to assume or substitute for the outstanding options, the offering period then in progress will be shortened, and a new exercise date will be set.

Our board of directors has the authority to amend or terminate our 2004 Employee Stock Purchase Plan, except that, subject to certain exceptions described in the 2004 Employee Stock Purchase Plan, no such action may adversely affect any outstanding rights to purchase stock under our 2004 Employee Stock Purchase Plan.

401(k) Plan

In July 1998, we adopted a Retirement Savings and Investment Plan, the 401(k) Plan, covering our full-time employees located in the United States. The 401(k) Plan is intended to qualify under Section 401(k) of the Internal Revenues Code, so that contributions to the 401(k) Plan by employees or by us, and the investment earnings thereon, are not taxable to the employees until withdrawn. If our 401(k) Plan qualifies under Section 401(k) of the Internal Revenues Code, our contributions will be deductible by us when made. Our employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit of $13,000 if under 50 years old and $16,000 if 50 years or older in 2004 and to have those funds contributed to the 401(k) Plan. The 401(k) Plan permits us, but does not require us, to make additional matching contributions on behalf of all participants. To date, we have not made any contributions to the 401(k) Plan.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has at any time been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Stock Issuances to our Directors, Officers and Principal Stockholders

In April 1998, we sold 5,300,000 shares of our Series A preferred stock at $1.00 per share. In August 1999, we sold 6,896,545 shares of our Series B preferred stock at $2.90 per share. In November 2000, we sold 11,578,980 shares of our Series C preferred stock at $4.75 per share. In July 2001, we sold 2,333,334 shares of our Series D preferred stock at $6.00 per share. In March and April 2003, we sold 8,015,449 shares of our Series E preferred stock at $5.00 per share. Our Series A, Series B, Series C and Series E preferred stock is convertible into shares of our common stock on a 1-for-0.5 basis. Our Series D preferred stock is convertible into shares of our common stock on a 1-for-0.5160639 basis.

Upon the closing of this offering, all shares of our outstanding preferred stock will be automatically converted into shares of common stock. We have entered into an agreement pursuant to which our preferred stockholders will have registration rights with respect to their shares of common stock following this offering. For a description of these registration rights, see "Description of Capital Stock."

Since our inception, we have from time to time sold shares of our common stock pursuant to option exercises and restricted stock purchases, at per share prices ranging from $0.0075 per share to $1.00, to our directors, officers, founders and consultants, subject to repurchase rights in our favor that lapse over specified periods, typically four years. The repurchase right entitles us to repurchase the unvested shares at the original purchase price paid by the purchaser upon the termination of a purchaser's services with us.

Listed below are those persons who participated in the transactions described above who are our executive officers or directors or who beneficially own five percent or more of our securities.

	Common Stock		Convertible Preferred Stock					
Name of Purchaser	Shares (#)	Aggregate Consideration ($)	Series A (#)	Series B (#)	Series C (#)	Series D (#)	Series E (#)	Aggregate Consideration ($)
5% Stockholders								
Entities affiliated with Sevin Rosen Funds(1)	—	—	2,250,000	1,032,757	1,052,631	—	2,000,000	20,244,993
Entities affiliated with Credit Suisse First Boston(2)(11)	—	—	—	—	4,210,527	—	2,000,000	30,000,003
Vulcan Ventures, Inc.	—	—	—	1,724,137	2,105,264	—	800,000	19,000,001
Entities affiliated with Mayfield(3)	—	—	2,250,000	1,034,482	578,947	—	400,000	9,999,996
Glaxo Group Limited	—	—	—	—	—	2,333,334	600,000	17,000,004
Biomedicine, L.P.	—	—	—	1,724,137	210,526	—	200,000	6,999,996
Entities affiliated with Alta Biopharma Group(4)	—	—	—	—	1,263,158	—	800,000	10,000,001
Executive Officers and Directors								
James H. Sabry, M.D., Ph.D.(5)	250,000	3,750	—	—	—	—	—	—
Robert I. Blum	112,500	22,500	—	—	—	—	—	—
Jay K. Trautman, Ph.D.	30,000		—	—	—	—	—	—
David J. Morgans, Jr., Ph.D.	17,500	10,150	—	—	—	—	—	—
James A. Spudich, Ph.D.(6)	275,000	8,750	—	—	—	—	—	—
Stephen Dow(7)	—	—	2,250,000	1,032,757	1,052,631	—	2,000,000	20,244,993
Grant Heidrich, III(8)	—	—	2,250,000	1,034,482	631,579	—	405,449	10,277,243
Michael Schmertzler(9)(11)	—	—	—	—	4,210,527	—	2,000,000	30,000,003
William J. Rutter, Ph.D.(10)	3,500	700	—	344,827	—	—	—	999,998

(1) Represents: (a) 6,000 shares of Series A preferred stock and 1,380 shares of Series B preferred stock held by Sevin Rosen Bayless Management Company (which will convert into an aggregate of 3,690 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (b) 2,080,188 shares of Series A preferred stock, 956,086 shares of Series B preferred stock and 195,158 shares of Series C preferred stock held by Sevin Rosen Fund VI L.P. (which will convert into an aggregate of 1,615,716 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (c) 163,812 shares of Series A preferred stock, 75,291 shares of Series B preferred stock and 15,368 shares of Series C preferred stock held by Sevin Rosen VI Affiliates Fund L.P. (which will convert into an aggregate of 127,235 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (d) 825,263 shares of Series C preferred stock and 686,000 shares of Series E preferred stock held by Sevin

Rosen Fund VIII L.P. (which will convert into an aggregate of 755,631 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (e) 16,842 shares of Series C preferred stock and 14,000 shares of Series E preferred stock held by Sevin Rosen VIII Affiliates Fund L.P. (which will convert into an aggregate of 15,421 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (f) 1,251,900 shares of Series E preferred stock held by Sevin Rosen Fund VII L.P.; (which will convert into an aggregate of 625,950 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); and (g) 48,100 shares of Series E preferred stock held by Sevin Rosen VII Affiliates Fund L.P. (which will convert into an aggregate of 24,050 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split).

(2) Represents: (a) 2,893,799 shares of Series C preferred stock and 1,561,993 shares of Series E preferred stock held by Credit Suisse First Boston Equity Partners, L.P. (which will convert into 2,227,896 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (b) 808,891 shares of Series C preferred stock and 436,617 shares of Series E preferred stock held by Credit Suisse First Boston Equity Partners (Bermuda), L.P. (which will convert into 622,754 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (c) 288,000 shares of Series C preferred stock held by EMA Private Equity Fund 2000, L.P. (which will convert into 144,000 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (d) 217,263 shares of Series C preferred stock held EMA Partners Fund 2000, L.P. (which will convert into 108,631 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); and (e) 2,574 shares of Series C preferred stock and 1,390 shares of Series E preferred stock held by Credit Suisse First Boston U.S. Executive Advisors, L.P. An affiliate of Credit Suisse Group, of which Credit Suisse First Boston LLC is an indirect wholly-owned subsidiary, is either the general partner, managing general partner or investment manager of each of these entities (which will convert into 1,982 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split). Credit Suisse Group and Credit Suisse First Boston LLC each disclaims beneficial ownership of the shares owned by such investment partnerships to the extent attributable to partnership interests therein held by persons other than Credit Suisse Group and its affiliates.

(3) Represents: (a) 2,137,500 shares of Series A preferred stock, 982,758 shares of Series B preferred stock, 278,499 shares of Series C preferred stock and 353,961 shares of Series E preferred stock held by Mayfield IX (which will convert into 1,876,359 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (b) 112,500 shares of Series A preferred stock, 51,724 shares of Series B preferred stock, 14,658 shares of Series C preferred stock and 18,629 shares of Series E preferred stock held by Mayfield Associates Fund IV (which will convert into 98,755 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (c) 285,790 shares of Series C preferred stock held by Cell Trust (which will convert into 142,895 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); and (d) 27,410 shares of Series E preferred stock by Cell Trust II (which will convert into 13,705 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split).

(4) Represents: (a) 1,194,169 shares of Series C preferred stock and 771,614 shares of Series E preferred stock held by Alta BioPharma Partners II, L.P. (which will convert into 982,891 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); and (b) 68,989 shares of Series C preferred stock and 28,386 shares of Series E preferred stock held by Alta Embarcadero BioPharma II, LLC (which will convert into 48,687 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split).

(5) Dr. Sabry purchased his shares of common stock in January 1998, at $0.015 per share. Our right to repurchase those shares lapsed as to all of the shares as of January 2002.

(6) Dr. Spudich purchased 250,000 of his shares of common stock in January 1998, at $0.015 per share, and 25,000 of his shares in June 1999, at $0.20 per share. Our right to repurchase those shares lapsed as to all of the shares as of January 2002 and September of 2002, respectively. Dr. Spudich subsequently transferred an aggregate of 35,000 shares of common stock.

(7) Represents: (a) 6,000 shares of Series A preferred stock and 1,380 shares of Series B preferred stock held by Sevin Rosen Bayless Management Company (which will convert into 3,690 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (b) 2,080,188 shares of Series A preferred stock, 956,086 shares of Series B preferred stock and 195,158 shares of Series C preferred stock held by Sevin Rosen Fund VI L.P. (which will convert into 1,615,716 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (c) 163,812 shares of Series A preferred stock, 75,291 shares of Series B preferred stock and 15,368 shares of Series C preferred stock held by Sevin Rosen VI Affiliates Fund L.P. (which will convert into 127,235 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (d) 825,263 shares of Series C preferred stock and 686,000 shares of Series E preferred stock held by Sevin Rosen Fund VIII L.P. (which will convert into 755,631 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (e) 16,842 shares of Series C preferred stock and 14,000 shares of Series E preferred stock held by Sevin Rosen VIII Affiliates Fund L.P. (which will convert into 15,421 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (f) 1,251,900 shares of Series E preferred stock held by Sevin Rosen Fund VII L.P. (which will convert into 625,950 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); and (g) 48,100 shares of Series E preferred stock held by Sevin Rosen VII Affiliates Fund L.P. (which will convert into 24,050 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split). Stephen Dow is a general partner of the general partner of each of these entities except for Sevin Rosen Bayless Management Company, of which he is a Vice President. Mr. Dow disclaims beneficial ownership of these shares except to the extent of his proportionate partnership

interest in these shares.

(8) Represents: (a) 2,137,500 shares of Series A preferred stock and 982,758 shares of Series B preferred stock held by Mayfield IX (which will convert into 1,560,129 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (b) 285,790 shares of Series C preferred stock held by Cell Trust (which will convert into 142,895 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (c) 14,658 shares of Series C preferred stock and 18,629 shares of Series E preferred stock held by Mayfield Associates Fund IV, L.P. (which will convert into 16,643 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (f) 27,410 shares of Series E preferred stock held by Cell Trust II (which will convert into 13,705 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (g) 112,500 shares of Series A preferred stock and 51,724 shares of Series B preferred stock held by Mayfield Associates Fund IV, A California Limited Partnership (which will convert into 82,112 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (h) 278,499 shares of Series C preferred stock and 353,961 shares of Series E preferred stock held by Mayfield IX, L.P. (which will convert into 316,230 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); and (i) 52,632 shares of Series C preferred stock and 5,449 shares of Series E preferred stock held by The A. Grant III & Jeanette Yvonne Heidrich Community Property Trust (which will convert into 29,040 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split). A. Grant Heidrich is a general partner of this entity or is a member of a limited liability company that serves as a general partner. Mr. Heidrich disclaims beneficial ownership of these shares except to the extent of his proportionate partnership or membership interest in these shares.

(9) Represents: (a) 2,893,799 shares of Series C preferred stock and 1,561,993 shares of Series E preferred stock held by Credit Suisse First Boston Equity Partners, L.P. (which will convert into 2,227,896 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (b) 808,891 shares of Series C preferred stock and 436,617 shares of Series E preferred stock held by Credit Suisse First Boston Equity Partners (Bermuda), L.P. (which will convert into 622,754 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (c) 288,000 shares of Series C preferred stock held by EMA Private Equity Fund 2000, L.P. (which will convert into 144,000 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); (d) 217,263 shares of Series C preferred stock held EMA Partners Fund 2000, L.P. (which will convert into 108,631 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split); and (e) 2,574 shares of Series C preferred stock and 1,390 shares of Series E preferred stock held by Credit Suisse First Boston U.S. Executive Advisors, L.P. (which will convert into 1,982 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split). Michael Schmertzler is a Managing Director of Aries Advisors, LLC, the sub-advisor to Credit Suisse First Boston Equity Partners, L.P. Mr. Schmertzler disclaims beneficial ownership of these shares except to the extent of his proportionate partnership or membership interest in these shares.

(10) Represents: 344,827 shares of Series B preferred stock (which will convert into 172,413 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split) and 3,500 shares of common stock. Dr. Rutter purchased 3,500 shares of common stock in December 2003 at $0.20 per share. Dr. Rutter subsequently transferred an aggregate of 3,500 shares of common stock. Our right to repurchase those shares lapsed as to all of the shares as of May 2003.

(11) At the completion of the offering all of these shares, except for shares constituting 4.99% of the outstanding common stock of the Company upon the closing of this offering (after giving effect to the issuance of the shares in this offering, including shares issued (if any) at the closing pursuant to exercise of the over-allotment option) of these shares will be deposited in a voting trust having Wells Fargo Bank, N.A. as the trustee. Under the terms of the voting trust agreement, the trustee has the power to vote these shares as it believes in its sole judgment is in the best interests of the stockholders of Cytokinetics. In addition, the trustee is required to vote the shares to prevent the election of more than one CSFB affiliate as a director of Cytokinetics. Each entity which deposits shares will retain the power to transfer or sell its shares to itself or other third parties so long as the transferee is not affiliated with CSFB or is otherwise considered an eligible transferee under the terms of the voting trust agreement. The voting trust agreement will expire in April 2014 or such earlier time as CSFB ceases to be an affiliate of Cytokinetics.

Strategic Alliance Agreement with GlaxoSmithKline

In June 2001, we entered into a strategic alliance agreement with Glaxo Group Limited, a wholly-owned subsidiary of GSK. In the agreement, GSK agreed to pay Cytokinetics an upfront cash payment of $14.0 million. GSK has also committed to reimburse our FTEs conducting research in connection with the strategic alliance and to make additional precommercialization milestone payments and pay royalties based on product sales. As part of such transaction, Glaxo Wellcome International B.V., another wholly-owned subsidiary of GSK, purchased 2,333,334 shares of our Series D preferred stock at price per share of $6.00 and an aggregate price of $14,000,004 (which will convert into 1,204,149 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split). Pursuant to the terms of the stock purchase agreement, GSK has certain restrictions on its ability to buy and sell our securities for up to three years following this offering. As of December 31, 2003, we have recognized a total of $7.0 million, $3.2 million and $19.7 million in licensing fees, milestone payments, and FTE and project reimbursements respectively, from GSK under this strategic alliance. In the future, we may also receive significant precommercialization milestone payments, as well as royalties on product sales.

Investment of GlaxoSmithKline in Series E Preferred Stock Financing

In connection with our March and April 2003 Series E preferred stock financing, Glaxo Group Limited purchased 600,000 shares of Series E preferred stock at $5.00 per share for an aggregate purchase price of $3,000,000 (which will convert into 300,000 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split).

Investment of GlaxoSmithKline in Concurrent Private Placement

In March 2004, Glaxo Group Limited entered into a stock purchase agreement whereby it will purchase 583,333 shares of common stock at the offering price of $12.00 per share in a private placement to close immediately prior to this offering.

Investment of Credit Suisse Group Series C and Series E Preferred Stock Financing

In connection with our November 2000 Series C and March and April 2003 Series E preferred stock financings, affiliates of Credit Suisse Group purchased an aggregate of 4,210,527 shares of Series C preferred stock at $4.75 per share and 2,000,000 shares of Series E preferred stock at $5.00 per share for an aggregate purchase price of $20,000,003 and $10,000,000, respectively. An affiliate of Credit Suisse Group, of which Credit Suisse First Boston LLC is an indirect wholly owned subsidiary, one of the underwriters in the offering made by this prospectus, is either the general manager, managing general partner or investment manager of each of these entities. At the completion of the offering all of these shares, except for shares constituting 4.99% of the outstanding common stock of the Company upon the closing of this offering (after giving effect to the issuance of the shares in this offering, including shares issued (if any) at the closing pursuant to exercise of the over-allotment option) of these shares will be deposited in a voting trust having Wells Fargo Bank, N.A. as the trustee. Under the terms of the voting trust agreement, the trustee has the power to vote these shares as it believes in its sole judgment is in the best interests of the stockholders of

Cytokinetics. In addition, the trustee is required to vote the shares to prevent the election of more than one CSFB affiliate as a director of Cytokinetics. Each entity which deposits shares will retain the power to transfer or sell its shares to itself or other third parties so long as the transferee is not affiliated with CSFB or is otherwise considered an eligible transferee under the terms of the voting trust agreement. The voting trust agreement will expire in April 2014 or such earlier time as CSFB ceases to be an affiliate of Cytokinetics.

Licensing Arrangement

Dr. James Spudich, one of our directors, is a Professor of Biochemistry and Developmental Biology at Stanford University. As such, he may receive compensation from the university in respect of inventions and intellectual property he has assigned to it, including certain patent rights which we licensed from the university in April 1998. We have paid technology licensing fees under this agreement, for which Dr. Spudich received no compensation. In the future, we may make additional payments upon achievement of milestones or sales of products we develop using the licensed patents.

Cash Bonus Agreements with Management

We have entered into Cash Bonus Agreements with certain of our executive officers. Robert I. Blum has an agreement dated September 1, 2002, amended and restated on December 1, 2003 whereby we agree to pay Mr. Blum cash bonuses in the amount of $9,000, $9,000, $40,100, $38,300, $36,500 and $3,600 on December 15, 2003 and June 30, 2004, 2005, 2006, 2007 and 2008, respectively, provided that Mr. Blum remains an employee in good standing.

We have entered into a Cash Bonus Agreement with David J. Morgans dated September 1, 2002, amended and restated on December 1, 2003, whereby we agree to pay Dr. Morgans cash bonuses in the amount of $7,400, $7,400, $33,100, $31,600, $30,200 and $3,000 on December 15, 2003 and June 30, 2004, 2005, 2006, 2007 and 2008, respectively, provided that Dr. Morgans remains an employee in good standing.

We have entered into a Cash Bonus Agreement with Jay K. Trautman dated September 1, 2002, amended and restated on December 1, 2003, whereby we agree to pay Dr. Trautman cash bonuses in the amount of $19,300, $19,300, $86,200, $82,300, $78,500 and $7,700 on December 15, 2003 and June 30, 2004, 2005, 2006, 2007 and 2008, respectively, provided that Dr. Trautman remains an employee in good standing.

Loans to Management

In connection with the employment of Robert I. Blum, we provided a letter of credit dated October 6, 1998, in the amount of $150,000 and with an interest rate of 6.65% per annum, secured by a certificate of deposit, as security for a personal loan obligation of Mr. Blum. We agreed to make all interest payments on the loan. As of December 31, 2003, the amount of the loan is $150,000, and we made interest payments totaling $9,256, $8,987 and $8,625 in 2001, 2002 and 2003, respectively.

On July 12, 2002, we provided Mr. Blum with a loan, secured by shares of our common stock held by Mr. Blum, per a promissory note dated July 12, 2002, in the amount of $100,000 and an interest rate of 5.75% per annum. Accrued interest is due and payable on July 12, 2003 and 2004. Accrued interest and twenty percent of the original principal balance is due on July 12, 2005, 2006, and 2007. Accrued interest and forty percent of the original principal balance is due on July 12, 2008.

In connection with the employment of David J. Morgans, Ph.D., we provided Dr. Morgans and Sandra Morgans with unsecured loans per promissory notes, dated May 20, 2002 and October 18, 2000, in the amounts of $37,400 and $150,000 and interest rates of 4.88% per annum, and 5.8%

per annum, respectively. The total loan amounts, in conjunction with accrued interest, are forgivable over the course of Dr. Morgans' employment with us.

On July 12, 2002, we provided Dr. Morgans with a loan, secured by shares of our common stock held by Dr. Morgans, per a promissory note, dated July 12, 2002, in the amount of $82,600 and an interest rate of 5.75% per annum. Accrued interest is due and payable on July 12, 2003 and 2004. Accrued interest and twenty percent of the original principal balance is due on July 12, 2005, 2006, and 2007. Accrued interest and forty percent of the original principal balance is due on July 12, 2008.

In connection with the employment of Jay K. Trautman, Ph.D., we provided Dr. Trautman with a loan secured by shares of our common stock held by Dr. Trautman, per a promissory note, dated July 12, 2002, in the amount of $215,000 and an interest rate of 5.75% per annum. Accrued interest is due and payable on July 12, 2003 and 2004. Accrued interest and twenty percent of the original principal balance is due on July 12, 2005, 2006, and 2007. Accrued interest and forty percent of the original principal balance is due on July 12, 2008.

In connection with the employment of James H. Sabry, M.D., Ph.D., we provided Dr. Sabry and Sandra J. Spence with an unsecured loan per a promissory note, dated November 12, 2001, in the amount of $200,000 and an interest rate of 5.18% per annum. The total loan amount, in conjunction with accrued interest, is forgivable over the course of Dr. Sabry's employment with us.

Other Transactions

We have a verbal understanding with Dr. William J. Rutter, whereby Dr. Rutter agreed to spend an average of one day per week at Cytokinetics providing general business consulting and become a member of the board effective May 1999. In exchange for these services, we granted Dr. Rutter an option to purchase 62,500 shares of Common Stock at an exercise price of $0.20. The option was granted and approved at the July 27, 1999 board meeting.

On February 13, 2003, Dr. Charles Homcy became a member of the board of directors. In exchange for these services, we granted Dr. Homcy an option to purchase 30,000 shares of Common Stock at an exercise price of $1.20. The option was granted and approved at the March 19, 2003 board meeting.

On March 3, 2003, we entered into a consulting agreement with Dr. Charles Homcy, whereby Dr. Homcy agreed to provide Cytokinetics consulting in the specialized field of drug discovery and development. In exchange for these services, we granted Dr. Homcy an option to purchase 12,500 shares of Common Stock at an exercise price of $1.20 per share. The option was granted and approved at the May 21, 2003 board meeting.

On July 10, 2002, we granted to Dr. James A. Spudich an option to purchase 10,000 shares of our common stock at an exercise price of $1.20 per share in connection with his services on our scientific advisory board. Such options vest monthly over a two-year period.

PRINCIPAL STOCKHOLDERS

The following table sets forth information known to us with respect to the beneficial ownership of our common stock as of January 15, 2004 and as adjusted to reflect the sale of common stock offered hereby and in the private placement by:

- each stockholder known by us to own beneficially more than five percent of our common stock;
- each of the named executive officers listed in the Summary Compensation Table;
- each of our directors; and
- all of our directors and the named executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. Shares of common stock subject to stock options and warrants currently exercisable or exercisable within 60 days are deemed to be outstanding for computing the percentage ownership of the person holding these options and the percentage ownership of any group of which the holder is a member, but are not deemed outstanding for computing the percentage of any other person. Except as indicated by footnote, and subject to community property laws where applicable, the persons named in the table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them. Some of the shares of common stock held by our directors, officers and consultants are subject to repurchase rights in our favor. For a discussion of these repurchase rights, see "Related Party Transactions."

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned Prior to The Offering	Percent of Shares Beneficially Owned	
		Before Offering(1)	After Offering and Private Placement
5% Stockholders			
Entities affiliated with Sevin Rosen Funds(2) Two Galleria Tower 13455 Noel Road Dallas, TX 75240	3,167,694	16.2%	12.2%
Entities affiliated with Credit Suisse First Boston(3)(18) Eleven Madison Ave New York, NY 10010	3,105,263	15.9%	12.0%
Vulcan Ventures, Inc.(17) 505 Union Station, 505 Fifth Ave. South, Suite 900 Seattle, WA 98104	2,314,700	11.9%	8.9%
Entities affiliated with Mayfield(4) 2800 Sand Hill Road Suite 250 Menlo Park, CA 94025	2,131,714	10.9%	8.2%
Glaxo Group Limited Glaxo Wellcome House Berkeley Avenue Greenford Middlesex England UB6 ONN	1,504,149	7.7%	8.1%

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned Prior to The Offering	Percent of Shares Beneficially Owned	
		Before Offering(1)	After Offering and Private Placement
Biomedicine, L.P.(18) Cayman National Bldg., 4th Floor Elgin Ave P.O. Box 1790 George Town Grand Cayman Cayman Islands	1,067,331	5.5%	4.1%
Entities affiliated with Alta Biopharma Group(5) One Embarcadero Center Suite 4050 San Francisco, CA 94111	1,031,579	5.3%	4.0%
Executive Officers and Directors			
James H. Sabry, M.D., Ph.D(6)	937,500	4.6%	3.6%
Robert I. Blum(7)	554,425	2.8%	2.1%
David J. Morgans, Jr., Ph.D(8)	199,500	1.0%	*
Jay K. Trautman, Ph.D(9)	90,000	*	*
Stephen Dow(10) Two Galleria Tower 13455 Noel Road Dallas, TX 75240	3,167,694	16.2%	12.2%
A. Grant Heidrich, III(11) Mayfield Fund 2800 Sand Hill Road Suite 250 Menlo Park, CA 94025	2,160,755	11.1%	8.3%
William J. Rutter, Ph.D.(12) One Market Suite 1475 Steuart Tower San Francisco, CA 94105	231,413	1.2%	*
Michael Schmertzler(13)(18) Eleven Madison Ave New York, NY 10010	3,105,263	15.9%	12.0%
James A. Spudich, Ph.D.(14) Stanford School of Medicine Beckman Center Room B405 Stanford, CA 94305-5307	250,000	1.3%	1.0%
Charles Homcy, M.D.(15) Portola Pharmaceuticals 270 East Grand Avenue South San Francisco, CA 94080	42,500	*	*
All directors and named executive officers as a group (10 persons)	10,739,050	51.2%	41.4%

* Represents beneficial ownership of less than one percent (1%) of the outstanding shares of our common stock.

(1) Percentage ownership before the offering is based on the 19,528,865 shares of common stock outstanding on January 15, 2004, after giving effect to the conversion of all of our preferred stock into shares of our common stock.

(2) Represents: (a) 3,690 shares of common stock held by Sevin Rosen Bayless Management Company; (b) 1,615,716 shares of common stock held by Sevin Rosen VI L.P.; (c) 127,235 shares of common stock held by Sevin Rosen Fund VI Affiliates Fund L.P.; (d) 755,631 shares of common stock held by Sevin Rosen Fund VIII L.P.; (e) 15,421 shares of common stock held by Sevin Rosen VIII Affiliates Fund L.P.; (f) 625,950 shares of common stock held by Sevin Rosen Fund VII L.P.; and (g) 24,050 shares of common stock held by Sevin Rosen VII Affiliates Fund L.P.

(3) Represents: (a) 2,227,896 shares of common stock held by Credit Suisse First Boston Equity Partners, L.P.; (b) 622,754 shares of common stock held by Credit Suisse First Boston Equity Partners (Bermuda), L.P.; (c) 144,000 shares of common stock held by EMA Private Equity Fund 2000, L.P.; (d) 108,631 shares of common stock held EMA Partners Fund 2000, L.P.; and (e) 1,982 shares of common stock held by Credit Suisse First Boston U.S. Executive Advisors, L.P. An affiliate of Credit Suisse Group, of which Credit Suisse First Boston LLC is an indirect wholly-owned subsidiary, is either the general partner, managing general partner or investment manager of each of those entities. Credit Suisse Group and Credit Suisse First Boston LLC each disclaims beneficial ownership of the shares owned by such investment partnerships to the extent attributable to partnership interests therein held by persons other than Credit Suisse Group and its affiliates.

(4) Represents: (a) 1,876,359 shares of common stock held by Mayfield IX; (b) 98,755 shares of common stock held by Mayfield Associates Fund IV, L.P.; (c) 142,895 shares of common stock held by Cell Trust; and (d) 13,705 shares of common stock held by Cell Trust II.

(5) Represents: (a) 982,891 shares of common stock held by Alta BioPharma Partners II, L.P.; and (b) 48,687 shares of common stock held by Alta Embarcadero BioPharma II, LLC. Farah Champsi, Managing Director, has voting and investment power with respect to these shares.

(6) Represents: (a) 250,000 shares of common stock held by Dr. Sabry; and (b) options granted to Dr. Sabry to purchase 687,500 shares of common stock that are immediately exercisable. 341,042 shares underlying the option would remain subject to our repurchase right upon termination of Dr. Sabry's employment.

(7) Represents: (a) 92,500 shares of common stock held by Mr. Blum; (b) 10,000 shares of common stock held by The Brittany Blum 2003 Irrevocable Trust; (c) 10,000 shares of common stock held by The Bridget Blum 2003 Irrevocable Trust; and (d) options granted to Mr. Blum to purchase 441,925 shares of common stock that are immediately exercisable. 298,696 shares underlying the option would remain subject to our repurchase right upon termination of Mr. Blum's employment.

(8) Represents (a) 17,500 shares of common stock held by Dr. Morgans and (b) options granted to Dr. Morgans to purchase 182,000 shares of common stock that underlying the option immediately exercisable. 95,855 shares underlying the option would remain subject to our repurchase right upon termination of Dr. Morgans' employment.

(9) Represents: (a) 60,000 shares of common stock held by Dr. Trautman, 29,531 shares of which are subject to our right of repurchase; and (b) options granted to Dr. Trautman to purchase 30,000 shares of common stock that are immediately exercisable. 30,000 shares underlying the option would remain subject to our repurchase right upon termination of Dr. Trautman's employment.

(10) Represents: (a) 3,690 shares of common stock held by Sevin Rosen Bayless Management Company; (b) 1,615,716 shares of common stock held by Sevin Rosen VI L.P.; (c) 127,235 shares of common stock held by Sevin Rosen Fund VI Affiliates Fund L.P.; (d) 755,631 shares of common stock held by Sevin Rosen Fund VIII L.P.; (e) 15,421 shares of common stock held by Sevin Rosen VIII Affiliates Fund L.P.; (f) 625,950 shares of common stock held by Sevin Rosen Fund VII L.P.; and (g) 24,050 shares of common stock held by Sevin Rosen VII Affiliates

Fund L.P. Stephen Dow is a general partner of the general partner of each of these entities except for Sevin Rosen Bayless Management Company, of which he is a Vice President. Mr. Dow disclaims beneficial ownership of these shares except to the extent of his proportionate partnership interest in these shares.

(11) Represents: (a) 1,876,359 shares of common stock held by Mayfield IX; (b) 98,755 shares of common stock held by Mayfield Associates Fund IV; (c) 142,895 shares of common stock held by Cell Trust; (d) 13,705 shares of common stock held by Cell Trust II; and (d) 58,081 shares of common stock held by The A. Grant III & Jeanette Yvonne Heidrich Community Property Trust. A. Grant Heidrich is a Managing Director of Mayfield IX Management, L.L.C., the General Partner of Mayfield IX and Mayfield Associates Fund IV. Mr. Heidrich disclaims beneficial ownership of the shares held by affiliates of Mayfield, except to the extent of his proportionate partnership interest therein.

(12) Represents: (a) 115,266 shares of common stock owned by the William J. Rutter Revocable Trust; (b) 57,147 shares of common stock held by Rutter Investments, L.P.; and (c) options granted to Dr. Rutter to purchase 59,000 shares of common stock that are immediately exercisable.

(13) Represents: (a) 2,227,896 shares of common stock held by Credit Suisse First Boston Equity Partners, L.P.; (b) 622,754 shares of common stock held by Credit Suisse First Boston Equity Partners (Bermuda), L.P.; (c) 144,000 shares of common stock held by EMA Private Equity Fund 2000, L.P.; (d) 108,631 shares of common stock held EMA Partners Fund 2000, L.P.; and (e) 1,982 shares of common stock held by Credit Suisse First Boston U.S. Executive Advisors, L.P. Michael Schmertzler is a Managing Director of Aries Advisors, LLC, the sub-advisor to Credit Suisse First Boston Equity Partners, L.P. Mr. Schmertzler disclaims beneficial ownership of these shares except to the extent of his proportionate partnership or membership interest in shares.

(14) Represents: (a) 240,000 shares of common stock held by held by Dr. Spudich; and (b) options granted to Dr. Spudich to purchase 10,000 shares of common stock that are immediately exercisable. 1,667 shares underlying the option would remain subject to our repurchase right upon termination of Dr. Spudich's employment.

(15) Represents options granted to Dr. Homcy to purchase 42,500 shares of common stock that are immediately exercisable. 28,125 shares underlying the option would remain subject to repurchase right upon termination of Dr. Homcy's employment.

(16) Michael Kranda, Director of Biotechnology Venture Investments, has voting and investment power with respect to these shares.

(17) Philip J. Sutcliffe has voting and investment power with respect to these shares.

(18) At the completion of the offering all of these shares, except for shares constituting 4.99% of the outstanding common stock of the Company upon the closing of this offering (after giving effect to the issuance of the shares in this offering, including shares issued (if any) at the closing pursuant to exercise of the over-allotment option) of these shares will be deposited in a voting trust having Wells Fargo Bank, N.A. as the trustee. Under the terms of the voting trust agreement, the trustee has the power to vote these shares as it believes in its sole judgment is in the best interests of the stockholders of Cytokinetics. In addition, the trustee is required to vote the shares to prevent the election of more than one CSFB affiliate as a director of Cytokinetics. Each entity which deposits shares will retain the power to transfer or sell its shares to itself or other third parties so long as the transferee is not affiliated with CSFB or is otherwise considered an eligible transferee under the terms of the voting trust agreement. The voting trust agreement will expire in April 2014 or such earlier time as CSFB ceases to be an affiliate of Cytokinetics.

Except as otherwise noted above, the address of each person listed on the table is c/o Cytokinetics, Incorporated, 280 East Grand Avenue, South San Francisco, CA 94080.

DESCRIPTION OF CAPITAL STOCK

General

We are authorized to issue 120,000,000 shares of common stock, $0.001 par value, and 10,000,000 shares of undesignated preferred stock, $0.001 par value.

Common Stock

Assuming the conversion of all of our preferred stock into 17,099,637 shares of common stock, as of January 15, 2004, we had 19,528,865 shares of common stock outstanding that were held of record by approximately 139 stockholders.

The holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock are entitled to receive ratably any dividends that may be declared from time to time by the board of directors out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock then outstanding. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable, and the shares of common stock to be issued upon the closing of this offering will be fully paid and nonassessable.

Preferred Stock

Upon the closing of this offering, our board of directors will have the authority, without action by our stockholders, to designate and issue up to 10,000,000 shares of preferred stock in one or more series. The board of directors may also designate the rights, preferences and privileges of each series of preferred stock; any or all of which may be greater than the rights of the common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of the common stock until the board of directors determines the specific rights of the holders of the preferred stock. However, these effects might include:

- restricting dividends on the common stock;
- diluting the voting power of the common stock;
- impairing the liquidation rights of the common stock; and
- delaying or preventing a change in control of our company without further action by the stockholders.

We have no present plans to issue any shares of preferred stock.

Warrants

As of January 15, 2004, we had the following warrants outstanding to purchase a total of 190,991 shares of our capital stock:

- 100,000 shares of our common stock at an exercise price of $0.58 per share, terminating five years after the date of our initial public offering;
- 67,500 shares of our Series A preferred stock, which are convertible into 33,750 shares of our common stock, at an exercise price of $2.00 per share, terminating 2005;
- 100,000 shares of our Series B preferred stock, which are convertible into 50,000 shares of our common stock, at an exercise price of $5.80 per share, terminating 2006; and

- 14,483 shares of our Series B preferred stock, which are convertible into 7,241 shares of our common stock, at an exercise price of $5.80 per share, terminating 2006.

Holders of Registration Rights Can Require Us to Register Shares of Our Stock for Resale

Following this offering and the private placement, the holders of 17,099,636 shares of common stock issuable upon conversion of preferred stock, 583,333 shares of common stock sold to an affiliate of GSK for cash proceeds of $7 million at a purchase price equal to the assumed initial public offering price of $12.00 per share, and 190,991 shares of common stock issuable upon the exercise of warrants or conversion of preferred stock underlying warrants or their permitted transferees are entitled to rights with respect to registration of these shares under the Securities Act of 1933, as amended. These rights are provided under the terms of our agreement with the holders of registrable securities. Under these registration rights, holders of the then outstanding registrable securities may require on two occasions that we register their shares for public resale. The first such registration requires the election of the holders of registrable securities holding at least 51% of such registrable securities, and the second such registration requires the election of the holders of registrable securities holding at least twenty-five percent of such registrable securities. We are obligated to register these shares only if the requesting holders request the registration of at least 20% of the registrable securities held by such requesting holders. In addition, 12 months after the effective date of the first registration of our securities, holders of at least thirty percent of the registrable securities resulting from the conversion of shares of our Series C preferred stock may require on two occasions that we register their shares for public resale. We are obligated to register these shares resulting from the conversion of our Series C preferred stock only if the requesting holders request the registration of at least thirty percent of the registrable securities held by such requesting holders that resulted from the conversion of our Series C preferred stock. In addition, holders of registrable securities may require that we register their shares for public resale on Form S-3 or similar short-form registration, if we are eligible to use Form S-3 or similar short-form registration, and the value of the securities to be registered is at least $500,000. If we elect to register any of our shares of common stock for any public offering, the holders of registrable securities are entitled to include shares of common stock in the registration. However we may reduce the number of shares proposed to be registered in view of market conditions. We will pay all expenses in connection with any registration, other than underwriting discounts and commissions.

Anti-Takeover Effects of Some Provisions of Delaware Law

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

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

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

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

- on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66% of the outstanding voting stock which is not owned by the interested stockholder.

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

Anti-Takeover Effects of Provisions of Our Charter Documents

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

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

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

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

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

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is .

Nasdaq Stock Market Listing

We have applied to have our common stock listed on the Nasdaq National Market for quotation under the symbol "CYTK".

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our stock. Future sales of substantial amounts of our common stock in the public market following this offering or the possibility of these sales occurring could adversely affect prevailing market prices for our common stock or could impair our ability to raise capital through an offering of equity securities.

After this offering and the private placement, we will have outstanding 25,912,198 shares of common stock, based upon shares outstanding as of January 15, 2004. All of the shares sold in this offering will be freely tradable without restriction under the Securities Act except for any shares purchased by our "affiliates" as that term is defined in Rule 144 under the Securities Act. The remaining 19,528,865 shares of common stock held by existing stockholders are "restricted" shares as that term is defined in Rule 144 under the Securities Act. We issued and sold the restricted shares in private transactions in reliance upon exemptions from registration under the Securities Act. Restricted shares may be sold in the public market only if they are registered under the Securities Act or if they qualify for an exemption from registration, such as Rule 144 or 701 under the Securities Act, which are summarized below.

Our officers, directors and some of our stockholders, including business partners, who collectively hold an aggregate of 7,335,423 shares, and the underwriters have entered into lock-up agreements in connection with this offering. These lock-up agreements provide that, with limited exceptions, our officers, directors and other stockholders have agreed not to offer, sell, contract to sell, grant any option to purchase or otherwise dispose of any of our shares for a period of 180 days after the effective date of this offering. Goldman, Sachs & Co. may, in its sole discretion and at any time without prior notice, release all or any portion of the shares subject to these lock-up agreements.

Taking into account the lock-up agreements, the number of shares, other than shares sold in the offering, that will be available for sale in the public market under the provisions of Rules 144 and 701, will be as follows:

- 381,066 shares that become eligible for sale at various times between the date of this offering and the date 90 days after the effective date of this offering;
- an additional 18,565,765 shares that become eligible for sale beginning 180 days after the effective date of this offering;
- an additional shares that become eligible for sale upon exercise of vested options 90 days after the date of this prospectus and an additional shares that become eligible for sale upon the exercise of vested options 180 days after the date of this prospectus; and
- an additional 479,972 shares that become eligible for sale at various times thereafter upon the expiration of applicable holding periods.

Following the expiration of the lock-up period, shares issued upon exercise of options granted by us prior to the completion of this offering will also be available for sale in the public market pursuant to Rule 701 under the Securities Act unless those shares are held by one of our affiliates, directors or officers.

Rule 701 permits resale of shares in reliance upon Rule 144 but without compliance with restrictions of Rule 144, including the holding period requirement. In general, under Rule 144 as currently in effect, a person, or persons whose shares are aggregated, who has beneficially owned restricted shares for at least one year, including the holding period of any prior owner except an

affiliate, would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- one percent of the number of shares of common stock then outstanding, which will equal approximately 259,121 shares immediately after the offering, or

- the average weekly trading volume of the common stock during the four calendar weeks preceding the filing of a Form 144 with respect to such sale.

Sales under Rule 144 are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us. Under Rule 144(k), a person who is not deemed to have been an affiliate of our company at any time during the three months preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years including the holding period of any prior owner except an affiliate, is entitled to sell the shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144.

Rule 701, as currently in effect, permits our employees, officers, directors or consultants who purchased shares under a written compensatory plan or contract to resell these shares in reliance upon Rule 144 but without compliance with specific restrictions. Rule 701 provides that affiliates may sell their Rule 701 shares under Rule 144 without complying with the holding period requirement and that non-affiliates may sell these shares in reliance on Rule 144 without complying with the holding period, public information, volume limitation or notice provisions of Rule 144.

We intend to file, shortly after the effectiveness of this offering, a registration statement on Form S-8 under the Securities Act covering all shares of common stock reserved for issuance under the stock plans and subject to outstanding options under our 1997 Stock Option/ Stock Issuance Plan. See “Management — Stock Plans”. Shares of common stock issued upon exercise of options under the Form S-8 will be available for sale in the public market, subject to Rule 144 volume limitations applicable to affiliates and subject to the contractual restrictions described above. As of January 15, 2004, options to purchase 2,186,732 shares of common stock were outstanding. Beginning 90 and 180 days after the effective date of this offering, approximately shares and shares, respectively, issuable upon the exercise of vested stock options will become eligible for sale in the public market, if the options are exercised.

Following this offering and the private placement, the holders of an aggregate of 17,099,636 shares of outstanding common stock, 583,333 shares of common stock sold to an affiliate of GSK for cash proceeds of $7 million at a purchase price equal to the assumed initial public offering price of $12.00 per share and 190,991 shares of common stock issuable upon the exercise of warrants or conversion of preferred stock underlying warrants have the right to require us to register their shares for sale upon meeting specific requirements. See “Description of Capital Stock — Registration Rights” for additional information regarding registration rights.

MATERIAL UNITED STATES FEDERAL TAX CONSIDERATIONS

FOR NON-UNITED STATES HOLDERS OF COMMON STOCK

This section summarizes certain material United States federal income and estate tax considerations relating to the ownership and disposition of common stock. This summary does not provide a complete analysis of all potential tax considerations. The information provided below is based on existing authorities. These authorities may change, possibly retroactively, or the IRS might interpret the existing authorities differently. In either case, the tax considerations of owning or disposing of common stock could differ from those described below. For purposes of this summary, a "non-U.S. holder" is any holder other than a citizen or resident of the United States, a corporation created or organized under the laws of the United States or any political subdivision thereof, a trust that is (i) subject to the primary supervision of a United States court and the control of one of more U.S. persons or (ii) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person or an estate whose income is subject to U.S. income tax regardless of source. If a partnership is a beneficial owner of common stock, the tax treatment of a partner in the partnership will depend upon the status of the partner and the activities of the partnership. The summary generally does not address tax considerations that may be relevant to particular investors because of their specific circumstances (such as U.S. expatriates, insurance companies, tax-exempt organizations, dealers in securities, banks or other financial institutions, "controlled foreign corporations," "passive foreign investment companies," "foreign personal holding companies," corporations that accumulate earnings to avoid United States federal income tax and investors that hold our common stock as part of a hedge, straddle or conversion transaction), or because they are subject to special rules. Finally, the summary does not describe the effects of any applicable foreign, state, or local laws.

INVESTORS CONSIDERING THE PURCHASE OF COMMON STOCK SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL INCOME AND ESTATE TAX LAWS TO THEIR PARTICULAR SITUATIONS AND THE CONSEQUENCES OF FOREIGN, STATE, OR LOCAL LAWS, AND TAX TREATIES.

Dividends

Payments on the common stock will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and will first be applied against and reduce a holder's adjusted basis in the common stock, but not below zero, and then the excess, if any, will be treated as gain from the sale of the common stock.

Amounts treated as dividends paid to a non-U.S. holder on our common stock will generally be subject to U.S. withholding tax at a 30 percent rate. The withholding tax might not apply, however, or might apply at a reduced rate, under the terms of an applicable income tax treaty between the United States and the non-U.S. holder's country of residence. A non-U.S. holder must demonstrate its entitlement to treaty benefits by certifying its, among other facts, nonresident status. A non-U.S. holder can meet this certification requirement by providing a Form W-8BEN or appropriate substitute form to us or our paying agent. If the holder holds the stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to the agent. The holder's agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries. For payments made to a foreign partnership or other foreign flowthrough entity, the certification requirements generally apply to the partners or other owners, and the foreign partnership or foreign intermediary will also be required to comply with additional certification requirements. Special rules, described below, apply if a dividend is effectively connected with a U.S. trade or business conducted by the non-U.S. holder.

Sale of Common Stock

Non-U.S. holders will generally not be subject to U.S. federal income tax on any gains realized on the sale, exchange, or other disposition of common stock. This general rule, however, is subject to several exceptions. For example, the gain would be subject to U.S. federal income tax if:

- the gain is effectively connected with the conduct by the non-U.S. holder of a U.S. trade or business (in which case the special rules described below apply);
- the non-U.S. holder was a citizen or resident of the United States and thus is subject to special rules that apply to expatriates;
- the non-U.S. holder is an individual who holds his or her common stock as a capital asset (generally, an asset held for investment purposes) and who is present in the United States for a period or periods aggregating 183 days or more during the taxable year in which the sale or disposition occurs and other conditions are met; or
- the rules of the Foreign Investment in Real Property Tax Act (or FIRPTA) (described below) treat the gain as effectively connected with a U.S. trade or business.

The FIRPTA rules may apply to a sale, exchange or other disposition of common stock if we are, or were within the shorter of five years before the transaction or the non-U.S. holder's holding period for the common stock, a "U.S. real property holding corporation" (or USRPHC). In general, we would be a USRPHC if interests in U.S. real estate comprised most of our assets. We do not believe that we are a USRPHC or that we will become one in the future. Even if we become a USRPHC, as long as our common stock is regularly traded on an established securities market, however, such common stock will be subject to U.S. federal income tax under the FIRPTA rules only if the non-U.S. holder actually or constructively held more than 5 percent of such regularly traded common stock.

Dividends or Gain Effectively Connected With a U.S. Trade or Business

If any dividend on common stock, or gain from the sale, exchange or other disposition of common stock, is effectively connected with a U.S. trade or business conducted by the non-U.S. holder, then the dividend or gain will be subject to U.S. federal income tax at the regular graduated rates. If the non-U.S. holder is eligible for the benefits of a tax treaty between the United States and the holder's country of residence, any "effectively connected" dividend or gain would generally be subject to U.S. federal income tax only if it is also attributable to a permanent establishment or fixed base maintained by the holder in the United States. Payments of dividends that are effectively connected with a U.S. trade or business, and therefore included in the gross income of a non-U.S. holder, will not be subject to the 30 percent withholding tax. To claim exemption from withholding, the holder must certify its qualification, which can be done by filing a Form W-8ECI. If the non-U.S. holder is a corporation, that portion of its earnings and profits that is effectively connected with its U.S. trade or business would generally be subject to a "branch profits tax." The branch profits tax rate is generally 30 percent, although an applicable income tax treaty might provide for a lower rate.

U.S. Federal Estate Tax

The estates of nonresident alien individuals are generally subject to U.S. federal estate tax on property with a U.S. situs. Because we are a U.S. corporation, our common stock will be U.S. situs property and therefore will be included in the taxable estate of a nonresident alien decedent. The U.S. federal estate tax liability of the estate of a nonresident alien may be affected by a tax treaty between the United States and the decedent's country of residence.

Backup Withholding and Information Reporting

The Code and the Treasury regulations require those who make specified payments to report the payments to the IRS. Among the specified payments are dividends and proceeds paid by brokers to their customers. The required information returns enable the IRS to determine whether the recipient properly included the payments in income. This reporting regime is reinforced by "backup withholding" rules. These rules require the payors to withhold tax from payments subject to information reporting if the recipient fails to cooperate with the reporting regime by failing to provide his taxpayer identification number to the payor, furnishing an incorrect identification number, or repeatedly failing to report interest or dividends on his returns. The withholding tax rate is currently 28 percent. The backup withholding rules do not apply to payments to corporations, whether domestic or foreign.

Payments to non-U.S. holders of dividends on common stock will generally not be subject to backup withholding, and payments of proceeds made to non-U.S. holders by a broker upon a sale of common stock will not be subject to information reporting or backup withholding, in each case so long as the non-U.S. holder certifies its nonresident status. Some of the common means of certifying nonresident status are described under "— Dividends." We must report annually to the IRS any dividends paid to each non-U.S. holder and the tax withheld, if any, with respect to such dividends. Copies of these reports may be made available to tax authorities in the country where the non-U.S. holder resides.

Any amounts withheld from a payment to a holder of common stock under the backup withholding rules can be credited against any U.S. federal income tax liability of the holder.

THE PRECEDING DISCUSSION OF U.S. FEDERAL INCOME TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY AND IT IS NOT TAX ADVICE. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE PARTICULAR U.S. FEDERAL, STATE, LOCAL, AND FOREIGN TAX CONSEQUENCES OF PURCHASING, HOLDING, AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAWS.

UNDERWRITING

Cytokinetics and the underwriters named below have entered into an underwriting agreement with respect to the shares being offered. Subject to certain conditions, each underwriter has severally agreed to purchase the number of shares indicated in the following table. Goldman, Sachs & Co., Credit Suisse First Boston LLC, Pacific Growth Equities, LLC and Lazard Frères & Co. LLC are the representatives of the underwriters.

Underwriters	Number of Shares
Goldman, Sachs & Co.	
Credit Suisse First Boston LLC	
Pacific Growth Equities, LLC	
Lazard Frères & Co. LLC	
Total	5,800,00

The underwriters are committed to take and pay for all of the shares being offered, if any are taken, other than the shares covered by the option described below unless and until this option is exercised.

If the underwriters sell more shares than the total number set forth in the table above, the underwriters have an option to buy up to an additional 870,000 shares from Cytokinetics to cover such sales. They may exercise that option for 30 days. If any shares are purchased pursuant to this option, the underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

The following tables show the per share and total underwriting discounts and commissions to be paid to the underwriters by Cytokinetics. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Paid by Cytokinetics	
	No Exercise	Full Exercise
Per Share	$	$
Total	$	$

Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount of up to $ per share from the initial public offering price. Any such securities dealers may resell any shares purchased from the underwriters to certain other brokers or dealers at a discount of up to $ per share from the initial public offering price. If all the shares are not sold at the initial public offering price, the representatives may change the offering price and the other selling terms.

Subject to limited exceptions including the private placement of up to $7.0 million of the Company's common stock issued to an affiliate of GlaxoSmithKline immediately prior to the completion of the offering, Cytokinetics, its directors, officers and stockholders have agreed with the underwriters not to dispose of or hedge any of their common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior written consent of the representatives. This agreement does not apply to Cytokinetics with respect to options or shares of its common stock issued pursuant to any existing employee benefit plans or to new shares of Cytokinetics' common stock issued or sold in connection with any corporate strategic development transaction or any merger or acquisition transaction up to an aggregate amount of ten percent (10%) of the outstanding shares of Cytokinetics' common stock following completion of the

offering of shares offered by this prospectus. See “Shares Eligible for Future Sale” for a discussion of certain transfer restrictions.

Prior to the offering, there has been no public market for the shares. The initial public offering price has been negotiated among Cytokinetics and the representatives. Among the factors to be considered in determining the initial public offering price of the shares, in addition to prevailing market conditions, will be Cytokinetics’ historical performance, estimates of the business potential and earnings prospects of Cytokinetics, an assessment of Cytokinetics’ management and the consideration of the above factors in relation to market valuation of companies in related businesses.

An application has been made to quote the common stock on the Nasdaq National Market under the symbol “CYTK”.

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Shorts sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. “Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares from Cytokinetics in the offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase additional shares pursuant to the option granted to them. “Naked” short sales are any sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions may have the effect of preventing or retarding a decline in the market price of Cytokinetics’ stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued at any time. These transactions may be effected on the Nasdaq National Market, in the over-the-counter market or otherwise.

Each underwriter has represented, warranted and agreed that (i) it has not offered or sold and, prior to the expiry of a period of six months from the Closing date, will not offer or sell any shares to persons in the United Kingdom except to persons whose ordinary activities involve them acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or otherwise in circumstances which have not resulted and will not result in an offer to the public in the United Kingdom within the meaning of the Public Offers of Securities Regulations 1995; (ii) it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000 (“FSMA”)) received by it in connection with the issue or sale of any shares in circumstances in which section 21(1) of the FSMA does not apply to the Issuer; and (iii) it has complied and will comply with

all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

The shares may not be offered or sold, transferred or delivered, as part of their initial distribution or at any time thereafter, directly or indirectly, to any individual or legal entity in the Netherlands other than to individuals or legal entities who or which trade or invest in securities in the conduct of their profession or trade, which includes banks, securities intermediaries, insurance companies, pension funds, other institutional investors and commercial enterprises which, as an ancillary activity, regularly trade or invest in securities.

The shares being offered may not be offered or sold by means of any document other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent, or in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32) of Hong Kong, and no advertisement, invitation or document relating to the shares being offered may be issued, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares being offered which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made thereunder.

This prospectus has not been and will not be registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each syndicate member acknowledges that the shares may not be offered or sold, or be made the subject of an invitation for subscription or purchase, nor may this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares being offered be circulated or distributed, whether directly or indirectly, to the public or any member of the public in Singapore other than (i) to an institutional investor or other person specified Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "Securities and Futures Act") (ii) to a sophisticated investor, and in accordance with the conditions, specified in Section 275 of the Securities and Futures Act, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the Securities and Futures Act.

Each underwriter has acknowledged and agreed that the shares being offered have not been registered under the Securities and Exchange Law of Japan and are not being offered or sold and may not be offered or sold, directly or indirectly, in Japan or to or for the account of any resident of Japan, except (1) pursuant to an exemption from the registration requirements of the Securities and Exchange Law of Japan and (ii) in compliance with any other applicable requirements of Japanese law. As part of this offering, the underwriters may offer securities in Japan to a list of 49 offerees in accordance with the above provisions.

The underwriters do not expect sales to discretionary accounts to exceed five percent of the total number of shares offered.

Cytokinetics estimates that its share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately $.

Cytokinetics has agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

At the completion of the offering all of these shares, except for shares constituting 4.99% of the outstanding common stock of the Company upon the closing of this offering (after giving effect to the issuance of the shares in this offering, including shares issued (if any) at the closing pursuant to exercise of the over-allotment option) of these shares will be deposited in a voting trust having Wells Fargo Bank, N.A. as the trustee. Under the terms of the voting trust agreement, the trustee has the power to vote these shares as it believes in its sole judgment is in the best interests of the stockholders of Cytokinetics. In addition, the trustee is required to vote the shares to prevent the

election of more than one CSFB affiliate as a director of Cytokinetics. Each entity which deposits shares will retain the power to transfer or sell its shares to itself or other third parties so long as the transferee is not affiliated with CSFB or is otherwise considered an eligible transferee under the terms of the voting trust agreement. The voting trust agreement will expire in April 2014 or such earlier time as CSFB ceases to be an affiliate of Cytokinetics.

In connection with the Company's Series C and Series E preferred stock financings, affiliates of Credit Suisse Group purchased an aggregate of 4,210,527 shares of Series C preferred stock and 2,000,000 shares of Series E preferred stock for an aggregate purchase price of $20,000,003 and $10,000,000, respectively (which are convertible into 3,105,263 shares of common stock upon consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split). Because Credit Suisse First Boston LLC is an underwriter and, as a result of its affiliation with Credit Suisse Group, may receive more than 10% of the entire net proceeds in this offering, the underwriters may be deemed to have a "conflict of interest" under Rule 2710(c)(8) of the Conduct Rules of the National Association of Securities Dealers, Inc. Accordingly, this offering will be made in compliance with the applicable provisions of Rule 2720 of the conduct rules. Rule 2720 requires that the initial public offering price can be no higher than that recommended by a "qualified independent underwriter," as defined by the NASD. Goldman, Sachs & Co. has served in that capacity and performed due diligence investigations and reviewed and participated in the preparation of the registration statement of which this Prospectus forms a part. Goldman, Sachs & Co. has received $10,000 from the Company as compensation for such role.

A prospectus in electronic format will be made available on the websites maintained by one or more of the underwriters. The underwriters may agree to allocate a number of shares to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters that may make Internet distributions on the same basis as other allocations.

VALIDITY OF SECURITIES

The validity of the common stock offered hereby will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California, and for the underwriters by Latham & Watkins LLP, Menlo Park, California. A member of Wilson Sonsini Goodrich & Rosati and an investment partnership comprised of current and former members of Wilson Sonsini Goodrich & Rosati beneficially own an aggregate of 8,620 shares of our common stock.

EXPERTS

The financial statements as of December 31, 2002 and 2003 and for each of the three years in the period ended December 31, 2003 included in this Prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the Securities and Exchange Commission, a registration statement on Form S-1 under the Securities Act with respect to the common stock offered hereby. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information with respect to Cytokinetics and the common stock offered hereby, you should refer to the registration statement and to the exhibits and schedules filed therewith. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. A copy of the registration statement and the exhibits and schedules therewith may be inspected without charge at the public reference room maintained by the SEC located at 450 Fifth Street, N.W., Washington, D.C. 20549. Copies of all or any portion of the registration statement may be obtained from such offices upon payment of prescribed fees. The public may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. The SEC maintains a website at http://www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC.

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Index to Financial Statements

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

REPORT OF INDEPENDENT AUDITORS

To the Board of Directors and Stockholders of

Cytokinetics, Incorporated
(a development stage enterprise):

The reverse stock split transaction described in Note 13 to the financial statements has not been consummated at the date of our opinion when it has been consummated, we will be in a position to issue the following report:

"In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of Cytokinetics, Incorporated (a development stage enterprise) at December 31, 2002 and 2003, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2003 and, cumulatively, for the period from August 5, 1997 (date of inception) to December 31, 2003 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion."

/s/ PRICEWATERHOUSECOOPERS LLP

San Jose, California

March 10, 2004, except for Note 13
as to which the date is , 2004

Table of Contents

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Balance Sheets

(in thousands, except share and per share data)

	December 31,		Pro forma Stockholders' Equity at December 31,
	2002	2003	2003
			(Note 10) (unaudited)
Assets			
Current assets:			
Cash and cash equivalents	$ 16,388	$ 10,991	
Short-term investments	10,425	24,197	
Accounts receivable	8	74	
Related party accounts receivable	8	189	
Prepaids and other current assets	1,117	1,625	
Total current assets	27,946	37,076	
Long-term investments	3,648	7,857	
Property and equipment, net	9,742	8,870	
Related party notes receivable	1,146	1,146	
Restricted cash	13,106	7,199	
Other assets	580	725	
Total assets	$ 56,168	$ 62,873	
Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)			
Current liabilities:			
Accounts payable	$ 1,609	$ 1,589	
Accrued liabilities	2,241	3,060	
Short-term portion of equipment financing lines	2,415	2,008	
Short-term portion of deferred revenue	3,110	2,800	
Total current liabilities	9,375	9,457	
Long-term portion of equipment financing lines	7,077	8,075	
Long-term portion of deferred revenue	7,000	4,200	
Total liabilities	23,452	21,732	
Commitments (Note 7)			
Convertible preferred stock, $0.001 par value:			
Authorized: 37,300,000 shares			
Issued and outstanding: 26,108,859 shares in 2002, 34,124,308 shares in 2003 and none pro forma (unaudited) (Note 10)			
(Liquidation preference: $94,300 in 2002 and $134,377 in 2003)	93,304	133,172	$ —
	93,304	133,172	—
Stockholders' equity (deficit):			
Common stock, $0.001 par value:			
Authorized: 61,500,000 shares			
Issued and outstanding: 1,926,596 shares in 2002, 2,307,258 shares in 2003 and 19,411,240 shares pro forma (unaudited) (Note 10)	2	2	19
Additional paid-in capital	809	5,646	138,801
Deferred stock-based compensation	(50)	(3,651)	(3,651)
Accumulated other comprehensive income	40	46	46

Deficit accumulated during the development stage	(61,389)	(94,074)	(94,074)
Total stockholders' equity (deficit)	(60,588)	(92,031)	$ 41,141
Total liabilities, convertible preferred stock and stockholders' equity (deficit)	$ 56,168	$ 62,873	

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

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Statements of Operations

(in thousands, except per share data)

	Years Ended December 31,			Period from August 5, 1997 (date of inception) to December 31,
	2001	2002	2003	2003
Revenues:				
Research and development revenues from related party	$ 6,764	$ 8,470	$ 7,703	$ 22,937
Research and development and grant revenues	302	126	74	502
License revenues from related party	1,400	2,800	2,800	7,000
Total revenues	8,466	11,396	10,577	30,439
Operating expenses:				
Research and development (1)	20,961	28,424	34,004	100,817
General and administrative (1)	5,897	6,953	9,163	28,136
Total operating expenses	26,858	35,377	43,167	128,953
Operating loss	(18,392)	(23,981)	(32,590)	(98,514)
Interest and other income	3,232	2,232	2,395	9,271
Interest and other expense	(714)	(1,331)	(2,490)	(4,831)
Net loss	$(15,874)	$(23,080)	$(32,685)	$ (94,074)
Net loss per share:				
Basic and diluted	$ (11.18)	$ (13.25)	$ (17.10)	
Weighted-average number of shares used in per share calculations:				
Basic and diluted	1,420	1,742	1,911	
Pro forma net loss per share:				
Basic and diluted (unaudited) (Note 10)			$ (1.81)	
Weighted-average number of shares used in pro forma per share calculations:				
Basic and diluted (unaudited) (Note 10)			18,029	
(1) Includes the following stock-based compensation charges:				
Research and development	$ 86	$ 4	$ 609	$ 922
General and administrative	27	2	317	347
	$ 113	$ 6	$ 926	$ 1,269

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

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Statements of Stockholder's Deficit

(in thousands, except share and per share data)

	Common Stock		Additional Paid-In	Deferred Stock-Based	Accumulated Other Comprehensive	Deficit Accumulated During the Development	Total Stockholders'
	Shares	Amount	Capital	Compensation	Income (Loss)	Stage	Deficit
Issuance of common stock upon exercise of stock options for cash at $0.015 per share	147,625	$ —	$ 2	$ —	$ —	$ —	$ 2
Issuance of common stock to founders at $0.015 per share in exchange for cash in January 1998.	563,054	1	7	—	—	—	8
Net loss	—	—	—	—	—	(2,015)	(2,015)
Balances, December 31, 1998.	710,679	1	9	—	—	(2,015)	(2,005)
Issuance of common stock upon exercise of stock options for cash at $0.015-$0.58 per share	287,500	—	69	—	—	—	69
Issuance of warrants, valued using Black- Scholes model	—	—	41	—	—	—	41
Deferred stock-based compensation	—	—	237	(237)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	123	—	—	123
Components of comprehensive loss:							
Unrealized loss on investments	—	—	—	—	(8)	—	(8)
Net loss	—	—	—	—	—	(7,341)	(7,341)
Total comprehensive loss	—	—	—	—	—	—	(7,349)
Balances, December 31, 1999	998,179	1	356	(114)	(8)	(9,356)	(9,121)
Issuance of common stock upon exercise of stock options for cash at $0.015-$0.58 per share	731,661	1	194	—	—	—	195
Deferred stock-based compensation	—	—	93	(93)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	101	—	—	101
Components of comprehensive loss:							
Net change in unrealized gain (loss) on investments	—	—	—	—	86	—	86
Net loss	—	—	—	—	—	(13,079)	(13,079)
Total comprehensive loss	—	—	—	—	—	—	(12,993)
Balances, December 31, 2000	1,729,840	2	643	(106)	78	(22,435)	(21,818)
Issuance of common stock upon exercise of stock options for cash at $0.015-$1.20 per share	102,480	—	56	—	—	—	56
Repurchase of common stock	(33,334)	—	(19)	—	—	—	(19)
Compensation expense for acceleration of options	—	—	20	—	—	—	20
Deferred stock-based compensation	—	—	45	(45)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	93	—	—	93
Components of comprehensive loss:							
Net change in unrealized gain on investments	—	—	—	—	190	—	190
Net loss	—	—	—	—	—	(15,874)	(15,874)
Total comprehensive loss	—	—	—	—	—	—	(15,684)

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

	Common Stock		Additional Paid-In Capital	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage	Total Stockholders' Deficit
	Shares	Amount					
Balances, December 31, 2001	1,798,986	2	745	(58)	268	(38,309)	(37,352)
Issuance of common stock upon exercise of stock options for cash at $0.015-$1.20 per share	131,189	—	68	—	—	—	68
Repurchase of common stock	(3,579)	—	(2)	—	—	—	(2)
Deferred stock-based compensation	—	—	(2)	2	—	—	—
Amortization of deferred compensation	—	—	—	6	—	—	6
Components of comprehensive loss:							
Net change in unrealized gain on investments	—	—	—	—	(228)	—	(228)
Net loss	—	—	—	—	—	(23,080)	(23,080)
Total comprehensive loss	—	—	—	—	—	—	(23,308)
Balances, December 31, 2002	1,926,596	2	809	(50)	40	(61,389)	(60,588)
Issuance of common stock upon exercise of stock options for cash at $0.20-$1.20 per share	380,662	—	310	—	—	—	310
Stock-based compensation	—	—	158	—	—	—	158
Deferred stock-based compensation	—	—	4,369	(4,369)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	768	—	—	768
Components of comprehensive loss:							
Net change in unrealized gain on investments	—	—	—	—	6	—	6
Net loss	—	—	—	—	—	(32,685)	(32,685)
Total comprehensive loss	—	—	—	—	—	—	(32,679)
Balances, December 31, 2003	2,307,258	$ 2	$ 5,646	$ (3,651)	$ 46	$ (94,074)	$ (92,031)

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

Table of Contents

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Statements of Cash Flows

(in thousands)

	Years Ended December 31,			Period from August 5, 1997 (date of inception) to December 31,
	2001	2002	2003	2003
Cash flows from operating activities:				
Net loss	$(15,874)	$(23,080)	$(32,685)	$ (94,074)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	1,614	2,849	3,181	8,895
Loss on disposal of equipment	156	14	224	394
Gain on sale of investments	(84)	—	—	(84)
Allowance for doubtful accounts	386	(195)	—	191
Non-cash expense related to warrants issued for equipment financing lines and facility lease	7	7	—	41
Non-cash interest expense	—	—	59	59
Non-cash compensation expense for acceleration of options	20	—	—	20
Stock-based compensation	93	6	926	1,249
Changes in operating assets and liabilities:				
Accounts receivable	—	—	(66)	(74)
Related party accounts receivable	(1,261)	1,054	(181)	(380)
Prepaids and other assets	(444)	(342)	(33)	(1,150)
Accounts payable	1,280	(1,173)	498	1,589
Accrued liabilities	132	1,222	819	3,060
Other assets	(406)	(175)	(145)	(725)
Deferred revenue	12,600	(2,490)	(3,110)	7,000
Net cash used in operating activities	(1,781)	(22,303)	(30,513)	(73,989)
Cash flows from investing activities:				
Increase (decrease) in restricted cash	(6,011)	(6,870)	5,907	(7,199)
Purchases of property and equipment	(3,808)	(6,570)	(3,051)	(18,183)
Proceeds from sale of equipment	24	—	—	24
Issuance of notes receivable	(200)	(750)	—	(1,146)
Purchases of investments	(65,422)	—	(54,971)	(171,231)
Proceeds from sales and maturities of investments	51,889	36,768	36,995	139,307
Net cash provided by (used in) investing activities	(23,528)	22,578	(15,120)	(58,428)
Cash flows from financing activities:				
Proceeds from issuance of preferred stock, net of issuance costs	13,842	(50)	39,868	133,172
Proceeds from issuance of common stock	56	68	310	708
Repurchase of common stock	(19)	(2)	—	(21)
Proceeds from equipment financing lines	3,545	6,373	1,971	13,802
Repayment of equipment financing lines	(396)	(1,520)	(1,913)	(4,253)
Net cash provided by financing activities	17,028	4,869	40,236	143,408
Net increase (decrease) in cash and cash equivalents	(8,281)	5,144	(5,397)	10,991
Cash and cash equivalents, beginning of period	19,525	11,244	16,388	—
Cash and cash equivalents, end of period	$ 11,244	$ 16,388	10,991	$ 10,991
Supplemental disclosure of cash flow information:				
Cash paid for interest	$ 180	$ 697	$ 833	$ 1,709

Cash paid for taxes	$ 6	$ 63	$ 15	$ 84
Supplemental disclosure of significant non-cash investing and financing activities:				
Deferred stock-based compensation	$ 45	$ (2)	$ 4,369	$ 4,742
Purchases of property and equipment through accounts payable	$ 2,502	$ 518	$ —	$ 3,020
Penalty on restructuring of equipment financing lines	$ —	$ —	$ 475	$ 475

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

CYTOKINETICS, INCORPORATED

(A Development Stage Enterprise)

Notes to Financial Statements

Note 1 — Formation and Business of the Company:

Cytokinetics, Incorporated, (the "Company") was incorporated in 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, recruiting personnel and raising capital.

Note 2 — Summary of Significant Accounting Policies:

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments which potentially subject the Company to concentrations of risk consist principally of cash and cash equivalents, investments and accounts receivable. The Company's cash and cash equivalents are invested in deposits with two major banks in the United States. Deposits in these banks may exceed the amount of insurance provided on such deposits. The Company has not experienced any losses on its deposits of cash, cash equivalents, and investments.

The Company performs an ongoing credit evaluation of its' customers' financial conditions and generally does not require collateral to secure accounts receivable. The Company's exposure to credit risk associated with non-payment is affected principally by conditions or occurrences within GlaxoSmithKline ("GSK"). The Company historically has not experienced significant losses relating to accounts receivable from its primary customer. 96% of the Company's revenues for the year ended December 31, 2001 and 99% of the Company's revenues for both the years ended December 31, 2002 and 2003 were derived from GSK.

Drug candidates developed by the Company may require approvals or clearances from the Food and Drug Administration ("FDA") or other international regulatory agencies prior to commercialized sales. There can be no assurance that the Company's drug candidates will receive any of the required approvals or clearances. If the Company was denied approval or clearance or such approval was delayed, it may have a material adverse impact on the Company.

Cash and Cash Equivalents

Cash equivalents are stated at cost, which approximates market value. The Company considers all highly liquid investments with an original maturity of three months or less at the time of purchase to be cash equivalents.

Investments

Investments consist of US Corporate Bonds and commercial paper with maturities ranging from three months to two years. The Company has classified all investments as available-for-sale and, as a result, carries such amounts at fair value. Unrealized gains and losses are included in accumulated other comprehensive income (loss) in stockholders' equity until realized. Realized gains and losses on sales of all such securities are reported in earnings and computed using the specific identification

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

cost method. Realized gains or losses and charges for other-than-temporary declines in value, if any, on available-for-sale securities are reported in other income or expense as incurred. The Company periodically evaluates these investments for other-than-temporary impairment.

Fair Value of Financial Instruments

For financial instruments consisting of cash and cash equivalents, accounts payable and accrued liabilities included in the Company's financial statements, the carrying amounts are reasonable estimates of fair value due to their short maturities. Estimated fair values for marketable securities, which are separately disclosed elsewhere, are based on quoted market prices for the same or similar instruments. Based on borrowing rates currently available to the Company, the carrying value of the equipment financing lines approximate fair value.

Property and Equipment

Property and equipment are stated at cost and depreciated on a straight-line basis over the estimated useful lives of the related assets, which is generally three to five years. Amortization of leasehold improvements is computed using the straight-line method over the shorter of the remaining lease term or the estimated useful life of the related assets, typically five years. Upon sale or retirement of assets, the costs and related accumulated depreciation and amortization are removed from the balance sheet and the resulting gain or loss is reflected in operations. Maintenance and repairs are charged to operations as incurred.

Impairment of long-lived assets

In accordance with the provisions of Statement of Financial Accounting Standards Board ("SFAS") No. 144, "Accounting for the Impairment or Disposal of Long-lived Assets," the Company reviews long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Under SFAS No. 144, an impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition is less than its carrying amount. Impairment, if any, is measured as the amount by which the carrying amount of a long-lived asset exceeds its fair value. Through December 31, 2003, there have been no such impairments.

Revenue Recognition

The Company recognizes revenue in accordance with Securities and Exchange Commission Staff Accounting Bulletin, or SAB, No. 101, Revenue Recognition in Financial Statements, as amended by SAB Nos. 101A and 101B. SAB No. 101 requires that four basic criteria must be met before revenue can be recognized: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the fee is fixed and determinable; and collectibility is reasonably assured. Determination of whether persuasive evidence of an arrangement exists and whether delivery has occurred or services have been rendered are based on management's judgments regarding the fixed nature of the fee charged for research performed and milestones met, and the collectibility of those fees. Should changes in conditions cause management to determine these criteria are not met for certain future transactions, revenue recognized for any reporting period could be adversely affected.

Research and development revenues, which are earned under agreements with third parties for contract research and development activities, are recorded as the related expenses are incurred.

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

Charges to the third parties are based upon negotiated rates for full time equivalent employees of the Company and actual out-of-pocket costs. Rates for full time equivalent employees are intended to approximate the Company's anticipated costs. Milestone payments are non-refundable and recognized as revenue when earned, as evidenced by achievement of the specified milestones and the absence of ongoing performance obligations. Any amounts received in advance of performance are recorded as deferred revenue. None of the revenues recognized to date are refundable if the relevant research effort is not successful.

Grant revenues are recorded as research is performed. Grant revenues are not refundable.

License revenues received in connection with strategic alliance agreements are deferred and recognized on a straight-line basis over the term of the agreement.

Research and Development Expenditures

Research and development costs are charged to operations as incurred.

Income Taxes

The Company accounts for income taxes under the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

Net Loss Per Common Share

Basic net loss per share is computed by dividing net loss by the weighted average number of vested common shares outstanding during the period. Diluted net loss per share is computed by giving effect to all potential dilutive common shares, including options, common stock subject to repurchase, warrants and convertible preferred stock. A reconciliation of the numerator and denominator used in the calculation of basic and diluted net loss per share follows (in thousands):

	Years Ended December 31,		
	2001	2002	2003
Numerator:			
Net loss	$(15,874)	$(23,080)	(32,685)
Denominator:			
Weighted-average number of common shares outstanding	1,766	1,877	1,978
Less: Weighted-average shares subject to repurchase	(346)	(135)	(67)
Weighted-average number of common shares outstanding used in computing basic and diluted net loss per share	1,420	1,742	1,911

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

Anti-dilutive Securities

The following outstanding options, common stock subject to repurchase, convertible preferred stock and warrants were excluded from the computation of diluted net loss per common share for the periods presented because including them would have had an antidilutive effect (in thousands):

	Years Ended December 31,		
	2001	2002	2003
Convertible preferred stock (as if converted)	13,096	13,096	17,104
Options to purchase common stock	1,412	2,061	2,244
Common stock subject to repurchase	216	89	144
Warrants to purchase common stock	100	100	100
Warrants to purchase convertible preferred stock (as if converted)	84	84	91
	14,908	15,430	19,683

Stock-based Compensation

The Company accounts for stock-based employee compensation arrangements in accordance with the provisions of Accounting Principles Board Opinion No. 25 ("APB 25"), "Accounting for Stock Issued to Employees," Statement of Financial Accounting Standards No. 123 ("SFAS No. 123"), "Accounting for Stock-Based Compensation" and complies with the disclosure requirements of Statement of Financial Accounting Standards ("SFAS") No. 148, "Accounting for Stock-Based Compensation and Disclosure an Amendment of FASB Statement No. 123." Under APB 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. SFAS No. 123 defines a "fair value" based method of accounting for an employee stock option or similar equity investment.

The Company accounts for equity instruments issued to nonemployees in accordance with the provisions of SFAS No. 123 and Emerging Issues Task Force ("EITF") Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling Goods, or Services."

As the determination of fair value of all options granted to employees after such time the Company becomes a public company will include an expected volatility factor in addition to the factors described in the following table, the following results may not be representative of future periods.

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

The following table illustrates the effect on net loss if the Company had applied the fair value recognition provisions of SFAS 123 to stock-based employee compensation arrangements (in thousands):

	Years Ended December 31,		
	2001	2002	2003
Net loss, as reported	$(15,874)	$(23,080)	$(32,685)
Add: Stock-based employee compensation expense included in reported net loss	20	—	536
Deduct: Total stock-based employee compensation determined under fair value based method for all awards	(88)	(79)	(619)
Adjusted net loss	$(15,942)	$(23,159)	$(32,768)
Net loss per common share, basic and diluted:			
As reported	$ (11.18)	$ (13.25)	$ (17.10)
Adjusted	$ (11.23)	$ (13.29)	$ (17.15)

The value of each option granted is estimated on the date of grant using the minimum value method with the following weighted average assumptions:

	Years Ended December 31,		
	2001	2002	2003
Risk-free interest rate	6.33%	2.78%	2.80%
Expected life (in years)	5	5	5
Dividend yield	0.00%	0.00%	0.00%

Based on the above assumptions, the weighted average estimated minimum values of options granted were $0.30, $0.53 and $4.67 per share for the years ended December 31, 2001, 2002 and 2003, respectively.

Recent Accounting Pronouncements

In January 2003, the Financial Accounting Standards Board ("FASB") issued FASB Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51." FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. During December 2003, the FASB issued FIN 46R, a revision to FIN 46. FIN 46R provides a broad deferral of the latest date by which all public entities must apply FIN 46 to certain variable interest entities, to the first reporting period ending after March 15, 2004. We do not expect the adoption of FIN 46 to have a material impact upon our financial position, cash flows or results of operations.

In May, 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." SFAS No. 150 establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability or an asset in some circumstances. Many of those instruments were previously classified as equity. SFAS No. 150 is effective for financial instruments entered into or modified after May 31, 2003, and

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. It is to be implemented by reporting the cumulative effect of a change in an accounting principle for financial instruments created before the issuance date of SFAS No. 150 and still existing at the beginning of the interim period of adoption. While the effective date of certain elements of SFAS No. 150 has been deferred, we do not expect the adoption of SFAS No. 150 to have a material impact upon our financial position, cash flows or results of operations.

Note 3 — Investments:

The amortized cost and fair value of short-term and long-term investments at December 31, 2002 and 2003 are as follows (in thousands):

	December 31, 2002				
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Maturity Dates
US Corporate Bonds	$ 9,147	$ 32	$ (10)	$ 9,169	01/03 - 11/03
Foreign Corporate Bonds	1,253	3	—	1,256	02/03
Total short-term investments	$10,400	$ 35	$ (10)	$10,425	
US Corporate Bonds	$ 3,633	$ 15	$ —	$ 3,648	02/04
Total long-term investments	$ 3,633	$ 15	$ —	$ 3,648	

	December 31, 2003				
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Maturity Dates
US Corporate Bonds	$24,182	$ 16	$ (1)	$24,197	1/04 - 8/04
Total short-term investments	24,182	16	(1)	24,197	
US Corporate Bonds	7,826	31	—	7,857	7/05 - 8/05
Total long-term investments	$ 7,826	$ 31	$ —	$ 7,857	

There were no realized gains or losses in 2002 or 2003.

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

Note 4 — Balance Sheet Components (in thousands):

	December 31,	
	2002	2003
Property and equipment, net:		
Computer and laboratory equipment	$13,830	$15,531
Furniture and fixtures	387	246
Leasehold improvements	982	823
	15,199	16,600
Less: Accumulated depreciation and amortization	(5,457)	(7,730)
	$ 9,742	$ 8,870

	December 31,	
	2002	2003
Accrued liabilities:		
Payroll related	$ 928	$1,348
Consulting and professional fees	452	464
Other accrued expenses	861	1,248
	$2,241	$3,060

Note 5 — Related Party Transactions:

In 1998, the Company entered into a licensing agreement with certain universities where the Company's founding scientists are also affiliates of the universities. The Company agreed to pay technology license fees, as well as milestone payments for technology developed under the licensing agreement. The Company is also obligated to make minimum royalty payments, as specified in the agreement commencing the year of product market introduction or upon an agreed upon anniversary of the licensing agreement. In 2001, 2002 and 2003, $125,000, $56,000 and $45,000 was paid to the universities under this agreement, respectively.

In 2001, the Company entered into a strategic alliance agreement with the holders of Series D Convertible Preferred Stock. In the agreement, the stockholders agreed to pay the Company an upfront licensing fee of $14,000,000 for rights to certain technologies. In addition, the stockholders agreed to pay the Company milestone payments regarding performance and developments within agreed upon projects. In conjunction with these projects, the stockholders agreed to reimburse the Company's costs associated with the strategic alliance. In 2001, the Company received $14,000,000 for the licensing fee, which is being recognized ratably over the term of the agreement. For the year ended December 31, 2001, $1,400,000 was recognized as license revenue under this agreement and for each of the years ended December 31, 2002 and 2003, $2,800,000 has been recognized as license revenue under this agreement. At December 31, 2002 and 2003, license revenue of $9,800,000 and $7,000,000, respectively, was deferred. The Company also received and recognized as revenue $2,000,000, $1,000,000 and $200,000 in performance milestone payments and $4,764,000, $7,470,000 and $7,488,000 in FTE and other reimbursements for the years ended December 31, 2001, 2002 and 2003 respectively, as no ongoing performance obligations exist.

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

In 2001 and 2002, the Company extended loans for $200,000 and $100,000, respectively, to officers of the Company. The loans accrue interest at 5.18% and 5.75% and mature on November 12, 2010 and July 12, 2008, respectively. In 2002 the Company extended loans totaling $650,000 to various executives and employees of the Company. The loans accrue interest at rates ranging from 4.88% to 5.80% and will mature at various dates between 2005 and 2011. Certain of the loans will be forgiven if the officers or executives remain with the Company through the maturation of their respective loans. The Company did not extend any loans to executives or employees of the Company in 2001 or 2003. At December 31, 2003, $1.1 million is included in related party notes receivable.

The Company co-signed a loan with a major bank in the United States on the behalf of an executive of the Company. The Company has a restricted cash investment in the amount of $150,000 to collateralize the note in case of officer default (included in restricted cash), and agreed to make all interest payments on the loan. As of December 31, 2003, the amount of the loan is $150,000, and the Company made interest payments totaling $8,000, $9,000 and $9,000 in 2001, 2002 and 2003 respectively.

Note 6 — Equipment Financing Line:

In September of 1998, the Company obtained an equipment line of credit. The Company could borrow an amount not to exceed $1,500,000, available in minimum installments of $250,000 until September 1999, upon which the line expired. In 1999, the Company made three draws on this line of credit for $663,000, $253,000 and $370,000 with effective interest rates of 13.24%, 13.3% and 13.09%, respectively. All of these loans are payable in 48 monthly installments with an additional 15% ending balloon payment. In connection with this line the Company issued warrants (Note 8).

In December 1999, the Company obtained an additional equipment line of credit. The Company could borrow an amount not to exceed $5,000,000, available until December 2000, upon which the line expired. In 2000, the Company made two draws on this line of credit for $549,000 and $78,000 with effective interest rates of 13.17% and 15.18%, respectively. These loans are payable in 48 and 36 monthly installments, respectively, with an additional 15% ending balloon payment. In connection with this line, the Company issued warrants (Note 8).

In January 2001, the Company entered into a new financing agreement under which the Company may borrow up to $6,000,000 through a financing line of credit. In 2001, the Company made four draws on this line of credit for $1,702,000, $140,000, $997,000, and $706,000 with effective interest rates of 10.34%, 10.4%, 10.34%, and 10.4%, respectively, and with financing terms of 60 months, 36 months, 60 months, and 36 months, respectively. In 2002, the Company made one additional draw on this line of credit for $2,448,000 with an effective interest rate of 10.34% and with financing terms of 60 months. In connection with this line, the Company is obligated to maintain a $5,550,000 letter of credit as collateral against the line of credit (Note 7).

In July 2002, the Company entered into a new financing agreement under which the Company may borrow up to $7,500,000 through a financing line of credit. In 2002, the Company made three draws on this line of credit for $1,568,000, $1,821,000, and $535,000 with effective interest rates of 8.77%, 7.61%, and 7.64%, respectively, and with financing terms of 60 months for all draws. In connection with this line, the Company is obligated to maintain a $7,500,000 letter of credit as collateral against the line of credit (Note 7).

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

In March 2003, the Company executed an additional draw of approximately $1,110,000 on the July 2002 line of credit with an effective interest rate of 7.59% and a term of 60 months. In May 2003, the Company refinanced the outstanding balance of approximately $4,800,000 under the January 2001 line of credit and drew an additional $248,000, with an interest rate of 7.56% and a term of 60 months. In October 2003, the Company refinanced the outstanding balance of approximately $9,300,000 under the January 2001 line of credit (as previously refinanced) and the July 2002 line of credit, with an interest rate of 4.25% and a term of 60 months. In November 2003, the Company executed an additional draw of $614,000 on the $7,500,000 line of credit with an effective interest rate of 4.25% and a term of 60 months. In connection with this line, the Company is obligated to maintain a security deposit as collateral (Note 7).

Minimum equipment lease line principal payments are as follows (in thousands):

2004	2,008
2005	1,933
2006	2,017
2007	2,104
2008	2,021
Total minimum principal payments	$10,083

Note 7 — Commitments:

Leases

The Company leases office space and equipment under noncancelable operating leases with various expiration dates through 2013. Rent expense was $2,250,000, $2,220,000, $2,200,100 and $8,450,500 for the years ended December 31, 2001, 2002 and 2003, and for the period from August 5, 1997 (date of inception) through December 31, 2003, respectively. The terms of the facility lease provide for rental payments on a graduated scale. The Company recognizes rent expense on a straight-line basis over the lease period, and has deferred the rent expense paid but not incurred.

During 2001, the Company subleased a portion of their building. Sublease income for the year ended December 31, 2001 was $313,000 which has been offset against rent expense.

Future minimum lease payments under noncancelable operating leases are as follows (in thousands):

Year Ending December 31,	Operating Leases
2004	$ 1,689
2005	1,656
2006	1,552
2007	1,598
2008 through end of lease	8,698
	$ 15,193

Restricted Cash

During 1999, $75,000 of cash was pledged as collateral for the corporate employee credit cards issued to employees for travel and other expenses and is classified as restricted cash on the balance sheet. During 2001, this amount was increased by $10,500 due to the increase in

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

headcount. During 2003, the Company changed credit card issuers and this collateral is no longer required.

The Company also had a restricted certificate of deposit in the amount of $150,000 during 2003 and 2002 (see Note 5) pledged as collateral on a loan.

In 2001, the Company purchased a $6,000,000 certificate of deposit to collateralize a letter of credit in conjunction with an equipment financing line (see Note 6). This amount was classified as restricted cash at December 31, 2001. In October 2002, the Company renegotiated the terms of the letter of credit and pledged $5,550,000 of its investment account to collateralize the renegotiated letter of credit. The balance pledged shall automatically be reduced by $90,000 each month until October 31, 2003. At December 31, 2002, $5,370,000 was included in restricted cash. Due to debt restructuring during 2003, this certificate of deposit is no longer required.

The Company further pledged $7,500,000 of its investment account in July 2002 to collateralize a new letter of credit in conjunction with the new financing line obtained on July 1, 2002 (Note 6). The balance pledged shall automatically be reduced by $125,000 each month until December 31, 2003. At December 31, 2002 $7,500,000 was included in restricted cash. Due to debt restructuring during 2003, this certificate of deposit is no longer required.

In October 2003, the Company entered into a debt restructure with GE Capital (Note 6). Per the terms of the Security Pledge agreements, the Company was required to pledge $7,049,000, which is included in restricted cash at December 31, 2003.

Note 8 — Convertible Preferred Stock:

Under the Company's Certificate of Incorporation, the Company's Convertible Preferred Stock is issuable in series.

In April 1998, the Company sold 5,300,000 shares of Series A Convertible Preferred Stock at $1.00 per share to new investors for net cash proceeds of $5,269,000.

In August 1999, the Company sold 6,896,545 shares of Series B Convertible Preferred Stock at $2.90 per share to new and existing investors for net cash proceeds of $19,336,000.

In November 2000, the Company sold 11,578,980 shares of Series C Convertible Preferred Stock at $4.75 per share to new and existing investors for net cash proceeds of $54,857,000.

In July 2001, the Company sold 2,333,334 shares of Series D Convertible Preferred Stock at $6.00 per share to new investors for net cash proceeds of $13,842,000.

In March and April 2003, the Company sold 8,015,449 shares of Series E Convertible Preferred Stock at $5.00 per share to new and existing investors for net cash proceeds of $39,868,000.

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

As of December 31, 2001 and 2002, the Convertible Preferred Stock comprised (in thousands, except share and per share data):

	Number of Shares Authorized	Number of Shares Issued and Outstanding	Proceeds, Net of Issuance Cost	Liquidation Preference per Share	Annual Dividends per Share
Series A	5,550,000	5,300,000	$ 5,269	$ 1.00	$ 0.10
Series B	7,000,000	6,896,545	19,336	$ 2.90	$ 0.29
Series C	12,250,000	11,578,980	54,857	$ 4.75	$ 0.475
Series D	2,500,000	2,333,334	13,842	$ 6.00	$ 0.60
	27,300,000	26,108,859	$ 93,304		

As of December 31, 2003, the Convertible Preferred Stock comprised (in thousands, except share and per share data):

	Number of Shares Authorized	Number of Shares Issued and Outstanding	Proceeds, Net of Issuance Cost	Liquidation Preference per Share	Annual Dividends per Share
Series A	5,550,000	5,300,000	$ 5,269	$ 1.00	$ 0.10
Series B	7,000,000	6,896,545	19,336	$ 2.90	$ 0.29
Series C	12,250,000	11,578,980	54,857	$ 4.75	$ 0.475
Series D	2,500,000	2,333,334	13,842	$ 6.00	$ 0.60
Series E	10,000,000	8,015,449	39,868	$ 5.00	$ 0.50
	37,300,000	34,124,308	$ 133,172		

The holders of Convertible Preferred Stock have various rights and preferences as follows:

Voting

Each share of Series A, Series B, Series C, Series D and Series E Convertible Preferred Stock has voting rights equal to an equivalent number of shares of Common Stock into which it is convertible and votes together as one class with the Common Stock.

Dividends

Holders of Convertible Preferred Stock are entitled to receive noncumulative dividends at the rates specified above when and if declared by the Board of Directors. The holders of Series A, Series B, Series C, Series D and Series E Convertible Preferred Stock will also be entitled to participate in dividends on Common Stock, when and if declared by the Board of Directors, based on the number of shares of Common Stock held on an as-if converted basis. Such dividends shall not be cumulative. No dividends on Convertible Preferred Stock or Common Stock have been declared by the Board from inception through December 31, 2003.

Liquidation

In the event of any liquidation, dissolution or winding up of the Company, including a merger, acquisition or sale of assets where the beneficial owners of the Company's Common Stock and Convertible Preferred Stock own less than 50% of the resulting voting power of the surviving entity, the holders of Convertible Preferred Stock are entitled to receive an amount equal to the liquidation preference specified above plus any declared but unpaid dividends prior to and in preference to any

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

distribution to the holders of Common Stock. If, upon the occurrence of such event, the assets and funds thus distributed among the holders of the Convertible Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then the entire assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of the Convertible Preferred Stock in proportion to the per share preferential amount each such holder is otherwise entitled to receive. A change of control or sale of substantially all of the assets of the Company is considered to be a liquidation event; accordingly, the Convertible Preferred Stock is considered redeemable under generally accepted accounting principles and therefore classified as temporary equity.

Conversion

Each share of Convertible Preferred Stock, at the option of the holder, is convertible into the number of fully paid and nonassessable shares of Common Stock which results from dividing the conversion price per share in effect for the shares of such series of Convertible Preferred Stock at the time of conversion into the original issue price per share of such series of Convertible Preferred Stock. The initial conversion price per share of Series A, Series B, Series C, Series D and Series E Convertible Preferred Stock shall be the original issue price. The initial conversion price of Series A, Series B, Series C, Series D and Series E Convertible Preferred Stock is subject to adjustment from time to time, as described in the Company's Restated Certificate of Incorporation.

Conversion is automatic for the holders of Series A, Series B, Series C, Series D and Series E Convertible Preferred Stock at the then effective conversion rate immediately upon the closing of a firm commitment underwritten initial public offering pursuant to an effective registration statement under the Securities Act of 1933 covering the offer and sale of common stock in which the aggregate proceeds raised equals or exceeds $40,000,000. If the aggregate proceeds are less than $40,000,000 conversion is automatic upon the approval of at least 51% of the then outstanding shares of Preferred Stock, with all series voting together as a single class. The Company has reserved 17,099,624 shares of Common Stock for issuance upon conversion of Convertible Preferred Stock.

The Company's Convertible Preferred Stock is subject to an antidilution conversion price adjustment feature which was triggered for Series D when the Company issued Series E for a consideration per share less than the initial conversion price for Series D. The conversion price for Series D shall be adjusted downward from its initial conversion price. As of December 31, 2003 the Company has issued 8,015,449 shares of Series E Convertible Preferred Stock for consideration of $5.00 per share.

As of December 31, 2003 each share of Series A, Series B, Series C and Series E Convertible Preferred stock is convertible into common stock on a 2-for-1 basis and each share of Series D Convertible Preferred Stock is convertible into common stock on a 1.93-for1 basis.

Warrants for Convertible Preferred Stock

In connection with an equipment line of credit, the Company issued a warrant to purchase 67,500 shares of Series A Convertible Preferred Stock for $1.00 per share in September 1999. The Company valued the warrants by using the Black-Scholes pricing model in fiscal 1999 when the line was drawn upon using the full term of seven years, a risk-free interest rate of 6.33%, a dividend yield of 0%, and volatility of 60%. The fair value was netted against the equipment line and charged to interest expense over the life of the equipment line. The amount charged to interest expense was

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

$7,000, $7,000, none and $30,000 for the years ended December 31, 2001, 2002, 2003 and for the period from August 5, 1997 (date of inception) through December 31, 2003, respectively.

In connection with obtaining Series B Convertible Preferred Stock financing in August 1999, the Company agreed to issue warrants to purchase Series B Convertible Preferred Stock at $2.90 per share. The Company determined in July 2001 that the number of shares issuable under the warrant was 100,000 shares. The warrant was valued at $467,000 using the Black-Scholes pricing model using the contractual term of seven years, a risk-free interest rate of 5.37%, a dividend yield of 0%, and volatility of 60%. As the warrant relates to preferred stock issuance costs, the valuation was recorded as an issuance cost as an offset to Convertible Preferred Stock.

In connection with an equipment line of credit, the Company issued a warrant to purchase shares of Series B Convertible Preferred Stock at $2.90 per share. The Company determined in February 2004 that the number of shares issuable under the warrant is 14,483 shares. The value of the warrant was calculated using the Black-Scholes pricing model and was deemed insignificant.

Upon the effective date of the registration statement for the Company's initial public offering of its equity securities, the shares purchaseable under these warrants will be shares of the Company's common stock, in the same number that the holder otherwise would have been entitled to purchase had this warrant remained exercisable for shares of Convertible Preferred Stock.

Note 9 — Stockholders' Deficit:

Common Stock

The Company's Certificate of Incorporation, as amended, authorize the Company to issue 61,500,000 shares of $0.001 par value Common Stock. A portion of the shares sold are subject to a right of repurchase by the Company at the original purchase price of the stock subject to vesting, which is generally over a four year period from the earlier of the grant date or employee hire date, as applicable, until vesting is complete. As of December 31, 2003, 144,327 shares had been exercised under the employee stock option plan and are subject to repurchase. At December 31, 2003, in accordance with the provisions of EITF Issue No. 00-23 "Issues Related to the Accounting for Stock Compensation under APB 25 and FIN 44," the Company recorded the refundable exercise price related to the unvested shares which are subject to repurchase as a liability of $95,000.

In connection with the building lease, the Company issued warrants to purchase 100,000 shares of Common Stock for $0.58 per share in July 1999. The Company valued the warrants by using the Black-Scholes pricing model in 1999 using the contractual term of five years, a risk-free interest rate of 6.33%, a dividend yield of 0%, and volatility of 60%. The fair value was capitalized in other assets and amortized over the life of the building lease, which expired in August 2000. The amount charged to rent expense was $11,000 from August 5, 1997 (date of inception) through December 31, 2003.

Stock Option Plans

In 1997, the Company adopted the 1997 Stock Option/ Stock Issuance Plan (the "Plan"). The Plan provides for the granting of stock options to employees and consultants of the Company. Options granted under the Plan may be either incentive stock options or nonqualified stock options. Incentive stock options ("ISO") may be granted only to Company employees (including officers and directors who are also employees). Nonqualified stock options ("NSO") may be granted to Company employees and consultants. The Company has reserved 4,416,172 shares of Common Stock for issuance under the Plan.

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

Options under the Plan may be granted for periods of up to ten years and at prices no less than 85% of the estimated fair value of the shares on the date of grant as determined by the Board of Directors, provided, however, that (i) the exercise price of an ISO and NSO shall not be less than 100% and 85% of the estimated fair value of the shares on the date of grant, respectively, and (ii) with respect to any 10% shareholder, the exercise price of an ISO or NSO shall not be less than 110% of the estimated fair market value of the shares on the date of grant and the term of the grant shall not exceed five years. Options may be exercisable immediately and are subject to repurchase options held by the Company which lapse over a maximum period of ten years at such times and under such conditions as determined by the Board of Directors. To date, options granted generally vest over four or five years (generally 25% after one year and monthly thereafter). Activity under the Plan is as follows:

	Options Available for Grant	Options Outstanding and Exercisable	Weighted Average Exercise Price per Share
Options authorized	1,461,945	—	$ —
Options granted	(833,194)	833,194	0.10
Options exercised	—	(147,625)	0.015
Options canceled	—	—	—
Balances at December 31, 1998	628,751	685,569	0.12
Options granted	(545,250)	545,250	0.22
Options exercised	—	(287,500)	0.24
Options canceled	13,125	(13,125)	0.20
Balances at December 31, 1999	96,626	930,194	0.24
Increase in authorized shares	1,704,227	—	—
Options granted	(967,500)	967,500	0.58
Options exercised	—	(731,661)	0.26
Options canceled	68,843	(68,843)	0.28
Balances at December 31, 2000	902,196	1,097,190	0.52
Options granted	(525,954)	525,954	1.12
Options exercised	—	(102,480)	0.54
Options canceled	109,154	(109,154)	0.26
Balances at December 31, 2001	485,396	1,411,510	0.74
Increase in authorized shares	1,250,000	—	
Options granted	(932,612)	932,612	1.20
Options exercised	—	(131,189)	0.64
Options canceled	152,322	(152,322)	0.78
Balances at December 31, 2002	955,106	2,060,611	0.94
Options granted	(613,764)	613,764	1.38
Options exercised	—	(380,662)	1.02
Options canceled	49,313	(49,313)	0.88
Balances at December 31, 2003	390,655	2,244,400	1.06

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

The options outstanding and currently exercisable by exercise price at December 31, 2003 are as follows:

	Options Outstanding at December 31, 2003		
Exercise Price	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Number Vested
$0.20	72,250	5.56	72,250
$0.58	560,388	6.69	406,235
$1.00	85,243	7.12	61,007
$1.20	1,384,594	8.67	448,774
$2.00	141,925	9.96	0
	2,244,400		998,266

As of December 31, 2003 the weighted average exercise price of outstanding, exercisable and vested options was $1.06 per share. As of December 31, 2002, there were 704,780 options outstanding, exercisable and vested at a weighted average exercise price of $0.37 per share.

Stock-based Compensation

In anticipation of the Company's initial public offering, the Company has determined that, for financial reporting purposes, the estimated value of its common stock was in excess of the exercise prices. Accordingly, for stock options issued to employees, the Company has recorded deferred stock-based compensation, and is amortizing the related expense on a straight line basis over the service period, which is generally four years. During the year ended December 31, 2003, the Company recorded deferred stock compensation in the amount of $4.0 million. During the year ended December 31, 2003, the Company recorded amortization of stock-based compensation of $536,000 in connection with options granted to employees.

In 2001, the Company accelerated the vesting of options to two employees in connection with related severance packages. The acceleration was accounted for in accordance with FIN No. 44 "Accounting for Certain Transactions Involving Stock Compensation" as a one-time charge to the statement of operations. The charge for the year ended December 31, 2001 was $20,000. The charge was equal to the intrinsic value difference between the exercise price of the accelerated options and the fair value of the common stock on the date of acceleration.

Stock-based compensation expense related to stock options granted to non-employees is recognized, on a straight-line basis, as the stock options are earned. The Company believes that the fair value of the stock options is more reliably measurable than the fair value of the services

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

received. The fair value of the stock options granted is calculated at each reporting date using the Black-Scholes option-pricing model as prescribed by SFAS No. 123 using the following assumptions:

	Years Ended December 31,	
	2002	2003
Risk-free interest rate	4.48%	3.35%
Expected life (in years)	10	10
Dividend yield	0.00%	0.00%
Volatility	70%	70%

Based on the above assumptions, the weighted average fair values of options granted were $4.13 and $6.96 per share for the years ended December 31, 2002 and 2003, respectively. There were no options granted to non-employees in 2001.

The stock-based compensation expense will fluctuate as the fair market value of the common stock fluctuates. From August 5, 1997 (date of inception) to December 31, 2003, the Company has recorded $736,000 of deferred stock-based compensation related to options granted to non-employees. In connection with the grant of stock options to non-employees, the Company has recorded $93,000, $6,000 and $390,000 of stock-based compensation expense in 2001, 2002 and 2003, respectively, and $713,000 for the period from August 5, 1997 (date of inception) through December 31, 2003.

Note 10 — Pro Forma Common Shares Outstanding and Pro Forma Net Loss Per Share (Unaudited)

The pro forma common shares outstanding at December 31, 2003, the pro forma weighted-average common shares outstanding during the year ended December 31, 2002 and the pro forma weighted-average common shares outstanding during the year ended December 31, 2003 reflect the automatic conversion of all shares of convertible preferred stock outstanding into 17,103,982 shares of common stock as if such conversion had occurred on January 1, 2003 or the date of issuance, if later, in connection with the Company's contemplated initial public offering.

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

A reconciliation of the numerator and denominator used in the calculation of pro forma net loss per share follows (in thousands):

	Year Ended December 31, 2003
Numerator:	
Net loss	$(32,685)
Denominator:	
Weighted-average number of shares outstanding used in computing basic net loss per share	1,911
Adjustments to reflect the effect of the assumed conversion of the preferred stock from the date of issuance	16,118
Weighted-average number of shares used in computing basic and diluted pro forma net income per share	18,029

Note 11 — Employee Benefit Plans:

The Company sponsors a 401(k) defined contribution plan covering all employees. There were no employer contributions in 2001, 2002 or 2003.

Note 12 — Taxes:

The Company did not record an income tax provision in the years ended December 31, 2001, 2002 and 2003 since the Company had a net taxable loss in each of those periods.

Deferred tax assets and liabilities consist of the following (in thousands):

	December 31, 2002	December 31, 2003
Deferred tax assets:		
Fixed assets	$ 1,814	$ 997
Reserves and accruals	6,333	5,166
Net operating loss carryforwards	16,119	29,829
Research and development credits	3,658	6,079
	27,924	42,071
Less: Valuation allowance	(27,924)	(42,071)
	$ —	$ —

Management believes that, based on a number of factors, it is more likely than not that the deferred tax assets will not be realized, such that a full valuation allowance has been recorded.

The Company has federal and state net operating loss carryforwards and tax credit carryforwards of approximately $81.0 million and $36.8 million at December 31, 2003. The federal and state operating loss carryforwards expire in 2018 and 2008, respectively, if not utilized.

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

The Tax Reform Act of 1986 limits the use of operating loss tax credit carryforwards in certain situations where charges occur in stock ownership of a company. In the event the Company has a change in ownership; utilization of the carryforwards could be restricted.

Note 13 — Subsequent Events:

Initial Public Offering

On January 21, 2004, the Board of Directors authorized management of the Company to file a registration statement with the Securities and Exchange Commission permitting the Company to sell shares of its common stock to the public. If the initial public offering is closed under the terms presently anticipated, all of the convertible preferred stock outstanding will automatically convert into shares of common stock. Unaudited pro forma stockholders' equity, as adjusted for the assumed conversion of the preferred stock, is set forth on the balance sheet.

Authorized number of shares

On January 21, 2004, the Board of Directors approved an amendment to the Company's amended and restated certificate of incorporation increasing the authorized number of shares to 130,000,000, of which 120,000,000 are designated as common stock and 10,000,000 are designated as preferred stock. The amendment is subject to stockholder approval and the closing of the Company's initial public offering.

2004 Equity Incentive Plan

On January 21, 2004, the Board of Directors adopted the 2004 Equity Incentive Plan ("the 2004 Plan"), subject to stockholder approval. The 2004 Plan provides for the granting of incentive stock options, nonstatutory stock options and restricted stock purchase rights and stock bonuses to employees, and consultants.

A total of 3,200,000 shares of common stock have been authorized for issuance pursuant to the 2004 Plan. On January 1, 2005, and annually thereafter, the authorized shares will automatically be increased by a number of shares equal to the lesser of:

- 3,000,000 shares;
- 3.5% of the outstanding shares on such date; or
- an amount determined by the Board of Directors.

Employee Stock Purchase Plan

On January 21, 2004, the Board of Directors adopted the 2004 Employee Stock Purchase Plan (the "Purchase Plan"), subject to shareholder approval. 1,000,000 shares of common stock were reserved for issuance pursuant to the Purchase Plan.

Stock Split

On March 9, 2004, the Company's Board of Directors approved a one for two reverse stock split of the Company's common stock. Stockholders' approval of the reverse stock split was obtained on March 10, 2004. The one for two reverse stock split will be effected immediately prior to the effectiveness of the Registration Statement. All share and per share amounts for the Company's

CYTOKINETICS, INCORPORATED
(A Development Stage Enterprise)

Notes to Financial Statements — (Continued)

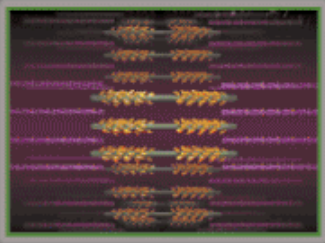
common stock for all periods presented in the accompanying financial statements have been retroactively adjusted to give effect to the stock split.

Restricted stock agreement

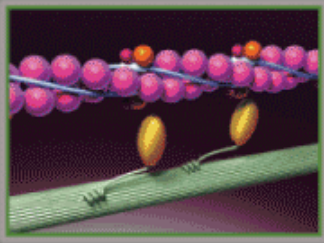
On March 10, 2004, the Company entered into an agreement to sell $7,000,000 of restricted common stock to an affiliate of GSK upon the completion of the initial public offering at a per share price equal to the per share initial public offering price.

Table of Contents

CARDIOVASCULAR PROGRAM



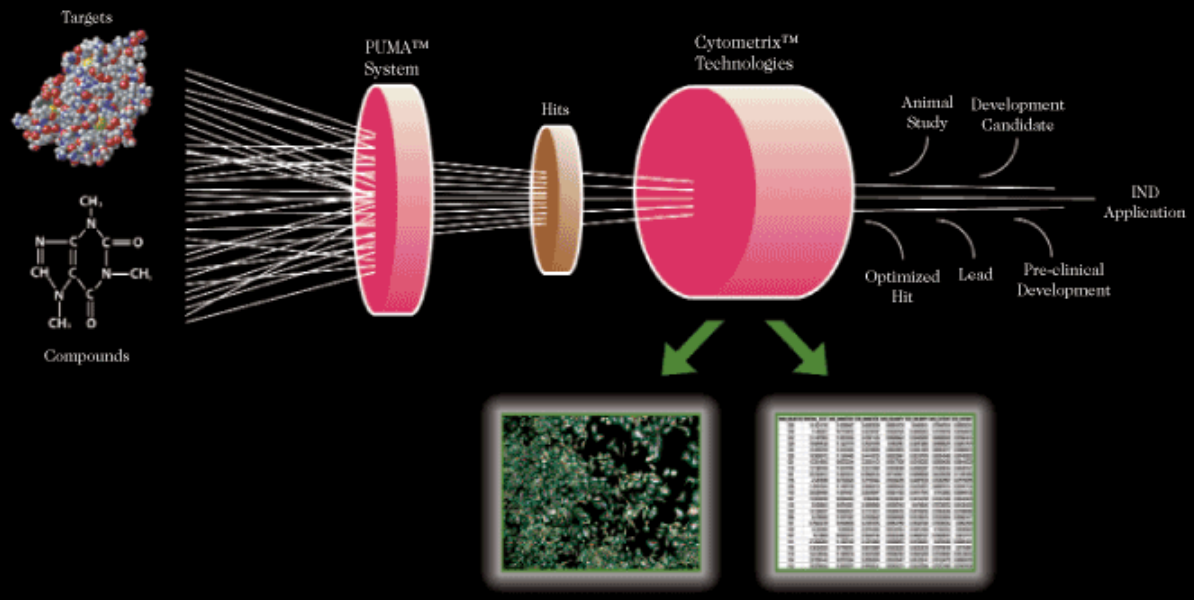
The cardiac sarcomere is the fundamental unit of muscle contraction in the heart



Cardiac myosin attaches to actin generating contractile force
(yellow = myosin, pink = actin)

Congestive heart failure is a disease characterized by compromised contractile function of the heart that impacts its ability to effectively pump blood throughout the body. In our cardiovascular program, we have discovered and optimized small molecule compounds that improve cardiac contractility by specifically targeting and activating cardiac myosin, a cytoskeletal protein essential for cardiac muscle contraction.

CELL BIOLOGY DRIVEN DRUG DISCOVERY PROCESS



We have developed proprietary automated technologies, including our PUMA™ system and Cytometrix™ technologies, to enable early identification and prioritization of compounds that are highly selective for their intended protein targets without other cellular effects, and may thereby be less likely to give rise to clinical side effects. The integrated use of these technologies enables us to efficiently focus our research efforts and resources on those compounds directed at novel cytoskeletal protein targets that are more likely to yield attractive drug candidates.

No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

TABLE OF CONTENTS

Through and including , 2004 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Shares

Cytokinetics, Incorporated

Common Stock

CYTOKINETICS

Goldman, Sachs & Co.

Credit Suisse First Boston
Pacific Growth Equities, LLC
Lazard

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. *Other Expenses of Issuance and Distribution.*

The following table sets forth the costs and expenses, other than the underwriting discounts, payable by the Registrant in connection with the sale of the securities being registered. All amounts are estimates except the SEC registration fee, the NASD filing fee and the Nasdaq/NMS listing fee.

SEC Registration Fee	$ 6,977.63
NASD Filing Fee	9,125.00
Nasdaq National Market Listing Fee	100,000.00
Printing Costs	300,000.00
Legal Fees and Expenses	750,000.00
Accounting Fees and Expenses	500,000.00
Blue Sky Fees and Expenses	*
Transfer Agent and Registrar Fees	*
Miscellaneous	*
Total	$ *

* to be completed by amendment

Item 14. *Indemnification of Directors and Officers.*

Section 145 of the Delaware General Corporation Law ("Section 145") permits indemnification of officers and directors of the Company under certain conditions and subject to certain limitations. Section 145 also provides that a corporation has the power to maintain insurance on behalf of its officers and directors against any liability asserted against such person and incurred by him or her in such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability under the provisions of Section 145.

Article IX of the Registrant's Bylaws provides for mandatory indemnification of its directors and officers and permissible indemnification of employees and other agents to the maximum extent not prohibited by the Delaware General Corporation Law. The rights to indemnity thereunder continue as to a person who has ceased to be a director, officer, employee or agent. In addition, expenses incurred by a director or executive officer in defending any civil, criminal, administrative or investigative action, suit or proceeding by reason of the fact that he or she is or was a director or officer of the Registrant (or was serving at the Registrant's request as a director or officer of another corporation) shall be paid by the Registrant in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that he or she is not entitled to be indemnified by the Registrant as authorized by the relevant section of the Delaware General Corporation Law.

As permitted by Section 102(b)(7) of the Delaware General Corporation Law, the Registrant's Certificate of Incorporation provides that, pursuant to Delaware law, its directors shall not be personally liable for monetary damages for breach of the directors' fiduciary duty as directors to the Registrant and its stockholders. This provision in the Certificate of Incorporation does not eliminate the directors' fiduciary duty, and in appropriate circumstances equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to the Registrant for acts or omission not in good faith or involving international misconduct, for knowing violations of law, for actions leading to improper personal benefit to the director, and for payment of

dividends or approval of Stock repurchases or redemptions that are unlawful under Section 174 of the Delaware General Corporation Law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

The Registrant has entered into indemnification agreements with each of its directors and executive officers. Generally, the indemnification agreements attempt to provide the maximum protection permitted by Delaware law as it may be amended from time to time. Moreover, the indemnification agreements provide for certain additional indemnification. Under such additional indemnification provisions, however, an individual will not receive indemnification for judgments, settlements or expenses if he or she is found liable to the Registrant (except to the extent the court determines he or she is fairly and reasonably entitled to indemnity for expenses), for settlements not approved by the Registrant or for settlements and expenses if the settlement is not approved by the court. The indemnification agreements provide for the Registrant to advance to the individual any and all reasonable expenses (including legal fees and expenses) incurred in investigating or defending any such action, suit or proceeding. In order to receive an advance of expenses, the individual must submit to the Registrant copies of invoices presented to him or her for such expenses. Also, the individual must repay such advances upon a final judicial decision that he or she is not entitled to indemnification.

The Registrant intends to enter into additional indemnification agreements with each of its directors and executive officers to effectuate these indemnity provisions and to purchase directors' and officers' liability insurance.

In addition to the foregoing, the Underwriting Agreement contains certain provisions by which the Underwriters have agreed to indemnify the Registrant, each person, if any, who controls the Registrant within the meaning of Section 15 of the Securities Act, each director of the Registrant, each officer of the Registrant who signs the Registration Statement, with respect to information furnished in writing by or on behalf of the Underwriters for use in the Registration Statement.

At present, there is no pending litigation or proceeding involving a director, officer, employee or other agent of the Registrant in which indemnification is being sought, nor is the Registrant aware of any threatened litigation that may result in a claim for indemnification by any director, officer, employee or other agent of the Registrant.

Item 15. *Recent Sales of Unregistered Securities.*

Since December 31, 2000, we have sold and issued the following securities:

Preferred Stock

(1) In July 2001, we sold an aggregate of 2,333,334 shares of our Series D preferred stock to an investor at a price of $6.00 per share for an aggregate purchase price of $14,000,004 (which will convert into 1,204,149 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split).

(2) In March and April 2003, we sold an aggregate of 8,015,449 shares of our Series E preferred stock to investors at a price of $5.00 per share for an aggregate purchase price of $40,077,245 (which will convert into 4,007,724 shares of common stock upon the consummation of this offering, as adjusted to reflect the 1-for-2 reverse stock split).

The sales of the above securities were deemed to be exempt from registration in reliance on Section 4(2) of the Securities Act or Regulation D promulgated thereunder as transactions by an issuer not involving any public offering. All recipients were either accredited or sophisticated investors, as those terms are defined in the Securities Act and the regulations promulgated thereunder. The recipients of securities in each such transaction represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the share certificates and other

instruments issued in such transactions. All recipients either received adequate information about us or had access, through employment or other relationships, to such information.

Stock Options and Stock Purchase Rights

(1) From December 31, 2000 through January 15, 2004, we granted stock options and stock purchase rights to acquire an aggregate of 2,136,644 shares of our common stock at prices ranging from $1.00 to $2.00 per share to employees, consultants and directors pursuant to our 1997 Stock Option/ Stock Issuance Plan.

(2) From December 31, 2000 through January 15, 2004, we issued an aggregate of 736,297 shares of our common stock to employees, consultants and directors pursuant to the exercise of stock options and stock purchase rights under our 1997 Stock Option/ Stock Issuance Plan, for aggregate consideration of $671,461.

The sales of the above securities were deemed to be exempt from registration in reliance on Rule 701 promulgated under Section 3(b) under the Securities Act as transactions pursuant to a compensatory benefit plan or a written contract relating to compensation.

Item 16. ***Exhibits and Financial Statement Schedules***

(a) Exhibits

Exhibit Number	Description	Sequential Page Number
1.1	Form of Underwriting Agreement.	
3.1†	Form of Amended and Restated Certificate of Incorporation of the Registrant to be filed after the closing of the offering made under this Registration Statement.	
3.2†	Form of Amended and Restated Bylaws of the Registrant to be in effect after the closing of the offering made under this Registration Statement.	
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.	

Exhibit Number	Description	Sequential Page Number
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.	
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation	
10.1	Form of Indemnification Agreement between the Registrant and each of its directors and officers.	
10.2†	1997 Stock Option/ Stock Issuance Plan.	
10.3†	2004 Equity Incentive Plan.	
10.4†	2004 Employee Stock Purchase Plan.	
10.5†	Build-to-Suit Lease, dated May 27, 1997, by and between Britannia Pointe Grand Limited Partnership and Metaxen, LLC.	
10.6†	First Amendment to Lease, dated April 13, 1998, by and between Britannia Pointe Grand Limited Partnership and Metaxen, LLC.	
10.7†	Sublease Agreement, dated May 1, 1998, by and between the Registrant and Metaxen LLC.	
10.8†	Sublease Agreement, dated March 1, 1999, by and between Metaxen, LLC and Exelixis Pharmaceuticals, Inc.	
10.9†	Assignment and Assumption Agreement and Consent, dated July 11, 1999, by and among Exelixis Pharmaceuticals, Metaxen, LLC, Xenova Group PLC and Britannia Pointe Grande Limited Partnership.	
10.10†	Second Amendment to Lease, dated July 11, 1999, by and between Britannia Pointe Grand Limited Partnership and Exelixis Pharmaceuticals, Inc.	
10.11†	First Amendment to Sublease Agreement, dated July 20, 1999, by and between the Registrant and Metaxen.	
10.12†	Agreement and Consent, dated July 20, 1999, by and among Exelixis Pharmaceuticals, Inc., the Registrant and Britannia Pointe Grand Limited Partnership.	
10.13†	Amendment to Agreement and Consent, dated July 31, 2000, by and between the Registrant, Exelixis, Inc., and Britannia Pointe Grande Limited Partnership.	
10.14†	Assignment and Assumption of Lease, dated September 28, 2000, by and between Exelixis, Inc. and the Registrant.	
10.15†	Sublease Agreement, dated September 28, 2000, by and between the Registrant and Exelixis, Inc.	
10.16†	Sublease Agreement, dated December 29, 1999, by and between the Registrant and COR Therapeutics, Inc.	
10.17(1)†	Collaboration and License Agreement, dated June 20, 2001, by and between the Registrant and Glaxo Group Limited.	
10.18(1)†	Memorandum, dated June 20, 2001, by and between the Registrant and Glaxo Group Limited.	
10.19(1)†	Letter Amendment to Collaboration Agreement, dated October 28, 2002, by and between the Registrant and Glaxo Group Limited.	

Exhibit Number	Description	Sequential Page Number
10.20(1)†	Letter Amendment to Collaboration Agreement, dated November 5, 2002, by and between the Registrant and Glaxo Group Limited.	
10.21(1)†	Letter Amendment to Collaboration Agreement, dated December 13, 2002, by and between the Registrant and Glaxo Group Limited.	
10.22(1)†	Letter Amendment to Collaboration Agreement, dated July 11, 2003, by and between the Registrant and Glaxo Group Limited.	
10.23(1)†	Letter Amendment to Collaboration Agreement, dated July 28, 2003, by and between the Registrant and Glaxo Group Limited.	
10.24(1)†	Letter Amendment to Collaboration Agreement, dated July 28, 2003, by and between the Registrant and Glaxo Group Limited.	
10.25(1)†	Letter Amendment to Collaboration Agreement, dated July 28, 2003, by and between the Registrant and Glaxo Group Limited.	
10.26†	Series D Preferred Stock Purchase Agreement, dated June 20, 2001, by and between the Registrant and Glaxo Wellcome International B.V.	
10.27†	Amendment No. 1 to Series D Preferred Stock Purchase Agreement, dated April 2, 2003, by and among the Registrant, Glaxo Wellcome International B.V. and Glaxo Group Limited.	
10.28(1)†	Exclusive License Agreement between The Board of Trustees of the Leland Stanford Junior University, The Regents of the University of California, and the Registrant dated April 21, 1998.	
10.29†	Modification Agreement between The Regents of the University of California, The Board of Trustees of the Leland Stanford Junior University and the Registrant, dated September 1, 2000.	
10.30(1)†	Collaboration and License Agreement, dated December 15, 2003, by and between AstraZeneca AB and the Registrant.	
10.31(1)†	Collaboration Agreement, dated December 28, 2001, by and between Exelixis, Inc. and the Registrant.	
10.32(1)†	First Letter Amendment of Collaboration Agreement, dated April 10, 2003, by and between Exelixis, Inc. and the Registrant.	
10.33†	Robert I. Blum Promissory Note, dated July 12, 2002.	
10.34†	David J. Morgans and Sandra Morgans Promissory Note, dated May 20, 2002.	
10.35†	David J. Morgans and Sandra Morgans Promissory Note, dated October 18, 2000.	
10.36†	David J. Morgans Promissory Note, dated July 12, 2002.	
10.37†	Jay K. Trautman Promissory Note, dated July 12, 2002.	
10.38†	James H. Sabry and Sandra J. Spence Promissory Note, dated November 12, 2001.	
10.39†	Robert I. Blum Cash Bonus Agreement, dated September 1, 2002.	
10.40†	Robert I. Blum Amended and Restated Cash Bonus Agreement, dated December 1, 2003.	
10.41†	David J. Morgans Cash Bonus Agreement, dated September 1, 2002.	
10.42†	David J. Morgans Amended and Restated Cash Bonus Agreement, dated December 1, 2003.	
10.43†	Jay K. Trautman Cash Bonus Agreement, dated September 1, 2002.	
10.44†	Jay K. Trautman Amended and Restated Cash Bonus Agreement, dated December 1, 2003.	

Exhibit Number	Description	Sequential Page Number
10.45	Common Stock Purchase Agreement, dated March 10, 2004, by and between the Registrant and Glaxo Group Limited.	
23.1	Consent of PricewaterhouseCoopers LLP, Independent Accountants.	
23.2*	Consent of Counsel (included in Exhibit 5.1).	
24.1	Power of Attorney (see Page II-7 of the original filing).	

* To be filed by amendment.

† Previously filed.

(1) Pursuant to a request for confidential treatment, portions of the Exhibit have been redacted from the publicly filed document and have been furnished separately to the SEC as required by Rule 406 under the Securities Act.

(b) *Financial statement schedules*

REPORT OF INDEPENDENT AUDITORS ON FINANCIAL STATEMENT SCHEDULE

To the Board of Directors of Cytokinetics, Incorporated:

Our audits of the financial statements referred to in our report dated March 10, 2004, except for Note 13, as to which the date is , 2004, appearing in the Amendment No. 1 to the Registration Statement on Form S-1 of Cytokinetics, Incorporated also included an audit of the Schedule II, Valuation and Qualifying Accounts, in this Form S-1. In our opinion, the financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related financial statements.

/s/ PRICEWATERHOUSECOOPERS LLP

San Jose, California

March 10, 2004

Schedule II

CYTOKINETICS, INCORPORATED

VALUATION AND QUALIFYING ACCOUNTS

	Balance at Beginning of Period	Additions (reductions) to Costs and Expenses	Write-offs	Balance at End of Period
Allowance for doubtful accounts:				
Year ended December 31, 2001	$ —	$ 386	$ —	$ 386
Year ended December 31, 2002	386	(195)	(191)	—
Year ended December 31, 2003	$ —	$ —	$ —	$ —

All other financial statement schedules have been omitted because the information required to be set forth herein is not applicable or is shown either in the financial statements or the notes thereto.

Item 17. ***Undertakings.***

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

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

The undersigned registrant hereby undertakes that:

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

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

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of South San Francisco, state of California, on March 11, 2004.

CYTOKINETICS, INCORPORATED

By: /s/ JAMES H. SABRY, M.D., PH.D.

James H. Sabry, M.D., Ph.D.
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
/s/ JAMES H. SABRY, M.D., PH.D. James H. Sabry, M.D., Ph.D.	Director, President and Chief Executive Officer *(Principal Executive Officer)*	March 11, 2004
/s/ ROBERT I. BLUM Robert I. Blum	Executive Vice President, Finance & Corporate Development and Chief Financial Officer *(Principal Financial and Accounting Officer)*	March 11, 2004
* Stephen Dow	Director	March 11, 2004
* A. Grant Heidrich, III	Director	March 11, 2004
* Charles Homcy, M.D.	Director	March 11, 2004
* William J. Rutter, Ph.D.	Director	March 11, 2004
* Michael Schmertzler	Director	March 11, 2004
* James A. Spudich, Ph.D.	Director	March 11, 2004
By: /s/ JAMES H. SABRY, M.D., PH.D. James H. Sabry, M.D., Ph.D. Attorney-in-Fact		

Table of Contents

EXHIBIT INDEX

Exhibit Number	Description
1.1	Form of Underwriting Agreement.
3.1†	Form of Amended and Restated Certificate of Incorporation of the Registrant to be filed after the closing of the offering made under this Registration Statement.
3.2†	Form of Amended and Restated Bylaws of the Registrant to be in effect after the closing of the offering made under this Registration Statement.
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.
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation
10.1	Form of Indemnification Agreement between the Registrant and each of its directors and officers.
10.2†	1997 Stock Option/ Stock Issuance Plan.
10.3†	2004 Equity Incentive Plan.
10.4†	2004 Employee Stock Purchase Plan.
10.5†	Build-to-Suit Lease, dated May 27, 1997, by and between Britannia Pointe Grand Limited Partnership and Metaxen, LLC.
10.6†	First Amendment to Lease, dated April 13, 1998, by and between Britannia Pointe Grand Limited Partnership and Metaxen, LLC.
10.7†	Sublease Agreement, dated May 1, 1998, by and between the Registrant and Metaxen LLC.
10.8†	Sublease Agreement, dated March 1, 1999, by and between Metaxen, LLC and Exelixis Pharmaceuticals, Inc.

Exhibit Number	Description
10.9†	Assignment and Assumption Agreement and Consent, dated July 11, 1999, by and among Exelixis Pharmaceuticals, Metaxen, LLC, Xenova Group PLC and Britannia Pointe Grande Limited Partnership.
10.10†	Second Amendment to Lease, dated July 11, 1999, by and between Britannia Pointe Grand Limited Partnership and Exelixis Pharmaceuticals, Inc.
10.11†	First Amendment to Sublease Agreement, dated July 20, 1999, by and between the Registrant and Metaxen.
10.12†	Agreement and Consent, dated July 20, 1999, by and among Exelixis Pharmaceuticals, Inc., the Registrant and Britannia Pointe Grand Limited Partnership.
10.13†	Amendment to Agreement and Consent, dated July 31, 2000, by and between the Registrant, Exelixis, Inc., and Britannia Pointe Grande Limited Partnership.
10.14†	Assignment and Assumption of Lease, dated September 28, 2000, by and between Exelixis, Inc. and the Registrant.
10.15†	Sublease Agreement, dated September 28, 2000, by and between the Registrant and Exelixis, Inc.
10.16†	Sublease Agreement, dated December 29, 1999, by and between the Registrant and COR Therapeutics, Inc.
10.17(1)†	Collaboration and License Agreement, dated June 20, 2001, by and between the Registrant and Glaxo Group Limited.
10.18(1)†	Memorandum, dated June 20, 2001, by and between the Registrant and Glaxo Group Limited.
10.19(1)†	Letter Amendment to Collaboration Agreement, dated October 28, 2002, by and between the Registrant and Glaxo Group Limited.
10.20(1)†	Letter Amendment to Collaboration Agreement, dated November 5, 2002, by and between the Registrant and Glaxo Group Limited.
10.21(1)†	Letter Amendment to Collaboration Agreement, dated December 13, 2002, by and between the Registrant and Glaxo Group Limited.
10.22(1)†	Letter Amendment to Collaboration Agreement, dated July 11, 2003, by and between the Registrant and Glaxo Group Limited.
10.23(1)†	Letter Amendment to Collaboration Agreement, dated July 28, 2003, by and between the Registrant and Glaxo Group Limited.
10.24(1)†	Letter Amendment to Collaboration Agreement, dated July 28, 2003, by and between the Registrant and Glaxo Group Limited.
10.25(1)†	Letter Amendment to Collaboration Agreement, dated July 28, 2003, by and between the Registrant and Glaxo Group Limited.
10.26†	Series D Preferred Stock Purchase Agreement, dated June 20, 2001, by and between the Registrant and Glaxo Wellcome International B.V.
10.27†	Amendment No. 1 to Series D Preferred Stock Purchase Agreement, dated April 2, 2003, by and among the Registrant, Glaxo Wellcome International B.V. and Glaxo Group Limited.
10.28(1)†	Exclusive License Agreement between The Board of Trustees of the Leland Stanford Junior University, The Regents of the University of California and the Registrant, dated April 21, 1998.
10.29†	Modification Agreement between The Regents of the University of California, The Board of Trustees of the Leland Stanford Junior University and the Registrant, dated September 1, 2000.
10.30(1)†	Collaboration and License Agreement, dated December 15, 2003, by and between AstraZeneca AB and the Registrant.

Exhibit Number	Description
10.31(1)†	Collaboration Agreement, dated December 28, 2001, by and between Exelixis, Inc. and the Registrant.
10.32(1)†	First Letter Amendment of Collaboration Agreement, dated April 10, 2003, by and between Exelixis, Inc. and the Registrant.
10.33†	Robert I. Blum Promissory Note, dated July 12, 2002.
10.34†	David J. Morgans and Sandra Morgans Promissory Note, dated May 20, 2002.
10.35†	David J. Morgans and Sandra Morgans Promissory Note, dated October 18, 2000.
10.36†	David J. Morgans Promissory Note, dated July 12, 2002.
10.37†	Jay K. Trautman Promissory Note, dated July 12, 2002.
10.38†	James H. Sabry and Sandra J. Spence Promissory Note, dated November 12, 2001.
10.39†	Robert I. Blum Cash Bonus Agreement, dated September 1, 2002.
10.40†	Robert I. Blum Amended and Restated Cash Bonus Agreement, dated December 1, 2003.
10.41†	David J. Morgans Cash Bonus Agreement, dated September 1, 2002.
10.42†	David J. Morgans Amended and Restated Cash Bonus Agreement, dated December 1, 2003.
10.43†	Jay K. Trautman Cash Bonus Agreement, dated September 1, 2002.
10.44†	Jay K. Trautman Amended and Restated Cash Bonus Agreement, dated December 1, 2003.
10.45	Common Stock Purchase Agreement, dated March 10, 2004, by and between the Registrant and Glaxo Group Limited
23.1	Consent of PricewaterhouseCoopers LLP, Independent Accountants.
23.2*	Consent of Counsel (included in Exhibit 5.1).
24.1	Power of Attorney (see Page II-7 of the original filing).

* To be filed by amendment.

† Previously filed.

(1) Pursuant to a request for confidential treatment, portions of the Exhibit have been redacted from the publicly filed document and have been furnished separately to the SEC as required by Rule 406 under the Securities Act.

Exhibit 1.1

CYTOKINETICS, INCORPORATED

COMMON STOCK, $0.001 PAR VALUE

UNDERWRITING AGREEMENT

[_____], 2004

Goldman, Sachs & Co.,
Credit Suisse First Boston LLC,
Pacific Growth Equities, LLC,
Lazard Freres & Co. LLC,
As representatives of the several Underwriters
named in Schedule I hereto,
c/o Goldman, Sachs & Co.
85 Broad Street,
New York, New York 10004

Ladies and Gentlemen:

Cytokinetics, Incorporated, a Delaware corporation (the "Company"), proposes, subject to the terms and conditions stated herein, to issue and sell to the Underwriters named in Schedule I hereto (the "Underwriters") an aggregate of [_____] shares (the "Firm Shares") and, at the election of the Underwriters, up to [_____] additional shares (the "Optional Shares") of common stock, $0.001 par value ("Stock") of the Company (the Firm Shares and the Optional Shares that the Underwriters elect to purchase pursuant to Section 2 hereof being collectively called the "Shares").

1. The Company represents and warrants to, and agrees with, each of the Underwriters that:

(a) A registration statement on Form S-1 (File No. 333-112261) (the "Initial Registration Statement") in respect of the Shares has been filed with the Securities and Exchange Commission (the "Commission"); the Initial Registration Statement and any post-effective amendment thereto, each in the form heretofore delivered to you, and, excluding exhibits thereto, to you for each of the other Underwriters, have been declared effective by the Commission in such form; other than a registration statement, if any, increasing the size of the offering (a "Rule 462(b) Registration Statement"), filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the "Securities Act"), which became effective upon filing, no other document with respect to the Initial Registration Statement has heretofore been filed with the Commission; and no stop order suspending the effectiveness of the Initial Registration Statement, any post-effective amendment thereto or the Rule 462(b) Registration Statement, if any, has been issued and no proceeding for that purpose has been initiated by the Commission (any preliminary prospectus included in the Initial Registration Statement or filed with the Commission pursuant to Rule 424(a) of the rules and regulations of the Commission under the Securities Act (the "Rules and Regulations") is hereinafter called a "Preliminary Prospectus"; the various parts of the Initial Registration Statement and the Rule 462(b) Registration

Statement, if any, including all exhibits thereto and including the information contained in the form of final prospectus filed with the Commission pursuant to Rule 424(b) under the Securities Act in accordance with Section 5(a) hereof and deemed by virtue of Rule 430A under the Securities Act to be part of the Initial Registration Statement at the time it was declared effective, each as amended at the time such part of the Initial Registration Statement became effective or such part of the Rule 462(b) Registration Statement, if any, became or hereafter becomes effective, are hereinafter collectively called the "Registration Statement"; such final prospectus, in the form first filed pursuant to Rule 424(b) under the Securities Act, is hereinafter called the "Prospectus";

(b) No order preventing or suspending the use of any Preliminary Prospectus has been issued by the Commission, and each Preliminary Prospectus, at the time of filing thereof, conformed in all material respects to the requirements of the Securities Act and the Rules and Regulations, and did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to any statements or omissions made in reliance upon and in conformity with information furnished in writing to the Company by an Underwriter through Goldman, Sachs & Co. expressly for use therein;

(c) The Registration Statement conforms, and the Prospectus and any further amendments or supplements to the Registration Statement or the Prospectus will conform, in all material respects to the requirements of the Securities Act and the Rules and Regulations and do not and will not, as of the applicable effective date as to the Registration Statement and any amendment thereto, and as of the applicable filing date as to the Prospectus and any amendment or supplement thereto, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; provided, however, that this representation and warranty shall (i) apply to the Prospectus in light of the circumstances under which they were made and (ii) not apply to any statements or omissions made in reliance upon and in conformity with information furnished in writing to the Company by an Underwriter through Goldman, Sachs & Co. expressly for use therein;

(d) The statistical, industry-related and market-related data included in the Registration Statement and the Prospectus are based on or derived from sources which the Company reasonably and in good faith believes are reliable and accurate, and such data agree with the sources from which they are derived;

(e) The Company has not sustained since the date of the latest audited financial statements included in the Prospectus any material loss or material interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth or contemplated in the Prospectus; and, since the respective dates as of which information is given in the Registration Statement and the Prospectus, there has not been any change in the capital stock or long-term debt of the Company or any material adverse change, or any development involving a prospective material adverse change, in or affecting the management, financial position, stockholders' equity or results of operations of the Company, otherwise than as set forth or contemplated in the Prospectus;

(f) The Company has good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by it, free and clear of all liens, encumbrances and defects except such as are described in the Prospectus or such as do not materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company; and any real property and buildings held under lease by the Company are held by it

under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere in any material respect with the use made of such real property and buildings by the Company;

(g) The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the state of Delaware, with power and authority (corporate and other) to own its properties and conduct its business as described in the Prospectus, and has been duly qualified as a foreign corporation for the transaction of business and is in good standing under the laws of each other jurisdiction in which it owns or leases properties or conducts any business so as to require such qualification, or is not reasonably likely to be subject to any material liability or disability by

reason of the failure to be so qualified in any such jurisdiction;

(h) The Company has no subsidiaries and does not own or control, directly or indirectly, any corporation, association or other entity;

(i) The Company has an authorized capitalization as set forth in the Prospectus, and all of the issued shares of capital stock of the Company have been duly authorized and validly issued, are fully paid and non-assessable and conform to the description of the Stock contained in the Prospectus;

(j) The unissued Shares to be issued and sold by the Company to the Underwriters hereunder have been duly authorized and, when issued and delivered against payment therefor as provided herein, will be validly issued and fully paid and non-assessable and will conform to the description of the Stock contained in the Prospectus;

(k) The issue and sale of the Shares by the Company and the compliance by the Company with all of the provisions of this Agreement and the consummation of the transactions herein contemplated will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any of the property or assets of the Company is subject, nor will such action result in any violation of the provisions of the Certificate of Incorporation or By-laws of the Company or any statute or any order, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its properties, except in any conflict, breach, violation or default which individually, or in the aggregate, would not have a material adverse effect on the condition (financial or otherwise), results of operations, business or prospects of the Company (a "Material Adverse Effect"); and no consent, approval, authorization, order, registration or qualification of or with any such court or governmental agency or body or self-regulatory organizations is required for the issue and sale of the Shares or the consummation by the Company of the transactions contemplated by this Agreement, except the registration under the Securities Act of the Shares and such consents, approvals, authorizations, registrations or qualifications as may be required under state securities or Blue Sky laws or applicable rules of the National Association of Securities Dealers, Inc. (the "NASD") and regulations in connection with the purchase and distribution of the Shares by the Underwriters;

(l) Except as disclosed in the Registration Statement and the Prospectus, no holder of any security of the Company has any rights to require registration of any security of the Company as part or on account of, or otherwise in connection with, the offer and sale of the Shares contemplated hereby, and any such rights so disclosed or otherwise have either been fully complied with by the Company or effectively waived by the holders thereof, and any such waivers remain in full force and effect;

(m) The Company has not prior to the date hereof, made any offer or sale of any securities which could be "integrated" for purposes of the Securities Act and the Rules and Regulations with the offer and sale of the Shares pursuant to the Registration Statement. Except as disclosed in the Registration Statement and the Prospectus, the Company has not sold or issued any securities during the six-month period preceding the date of the Prospectus, including but not limited to any sales pursuant to Rule 144A or Regulation D or S under the Securities Act and the Rules and Regulations, other than Stock issued pursuant to employee benefit plans, qualified stock option plans or the employee compensation plans or pursuant to outstanding options, rights or warrants as described in the Registration Statement and the Prospectus;

(n) The Company is not in violation of its Certificate of Incorporation or By-laws or in default in the performance or observance of any material obligation, agreement, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement, lease or other agreement or instrument to which it is a party or by which it or any of its properties may be bound

which would have a Material Adverse Effect;

(o) The statements set forth in the Prospectus under the captions "Management's Discussion and Analysis of Financial Condition and Results of Operations - Research and Development", "Business - Our Strategic Alliances", "Management - Stock Plans" and "Certain Relationships and Related Party Transactions", insofar as they purport to describe the agreements and benefit plans referred to therein, under the captions "Description of Capital Stock" and "Shares Eligible for Future Sale", insofar as they purport to constitute a summary of the terms of the Stock, under the captions "Business - Government Regulation", "United States Federal Tax Considerations for Non-United States Holders" and "Underwriting", insofar as they purport to describe the provisions of the laws and documents referred to therein, are accurate and are complete in all material respects;

(p) Other than as set forth in the Prospectus, there are no legal or governmental proceedings pending to which the Company is a party or of which any property of the Company is the subject which, if determined adversely to the Company, would have a Material Adverse Effect; and, to the Company's knowledge, no such proceedings are threatened;

(q) There are no contracts or other documents (including, without limitation, any voting agreement), which are required to be described in the Registration Statement and the Prospectus or filed as exhibits to the Registration Statement by the Securities Act and the Rules and Regulations and which have not been so described or filed;

(r) No relationship, direct or indirect, exists between or among the Company and any director, officer or stockholder of the Company which is required by the Securities Act and the Rules and Regulations to be described in the Registration Statement or the Prospectus which is not so described and described as required in material compliance with such requirement. There are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees of indebtedness by the Company to or for the benefit of any of the officers or directors of the Company or any of their respective family members, except as disclosed in the Registration Statement and the Prospectus. The Company has not, in violation of the Sarbanes-Oxley Act, directly or indirectly, extended or maintained credit, arranged for the extension of credit, or renewed an extension of credit, in the form of a personal loan to or for any director or executive officer of the Company;

(s) Except as disclosed in the Registration Statement and the Prospectus, there are no contracts, agreements or understandings between the Company and any person that would give rise to a valid claim against the Company or any Underwriter for a brokerage commission, finder's fee or

other like payment in connection with the transactions contemplated by this Agreement, the Registration Statement and the Prospectus or, to the Company's knowledge, any arrangements, agreements, understandings, payments or issuance with respect to the Company or any of its officers, directors, stockholders, partners, employees, or affiliates that may affect the Underwriters' compensation as determined by the NASD;

(t) Pursuant to the "safe harbor" provided to bona fide research and development companies under Rule 3a-8 of the Investment Company Act of 1940, as amended (the "Investment Company Act"), the Company is not and, after giving effect to the offering and sale of the Shares, will not be an "investment company", as such term is defined in the Investment Company Act;

(u) Neither the Company nor any of its affiliates does business with the government of Cuba or with any person or affiliate located in Cuba within the meaning of Section 517.075, Florida Statutes;

(v) PricewaterhouseCoopers LLP, who have certified certain financial statements of the Company, are independent public accountants as required by the

Securities Act and the Rules and Regulations;

(w) The Company has entered into contracts with insurers of recognized financial responsibility for insurance coverage against such losses and risks and in such amounts as the Company believes are prudent and customary in the business in which the Company is engaged; and the Company has no reason to believe that it will not be able to renew its existing insurance coverage at then prevailing rates applicable to similarly situated organizations as and when such coverage expires;

(x) The Company holds, except where the failure to do so would not have a Material Adverse Effect, and is operating in compliance in all respects with, all franchises, grants, authorizations, licenses, permits, easements, consents, certificates, approvals, clearances and orders of any federal, state or foreign governmental authority required for the ownership of the properties of the Company or the conduct of its business (including, but not limited to, those that may be required by the U.S. Food and Drug Administration, the U.S. Drug Enforcement Agency, and all corresponding regulatory agencies or bodies outside of the United States (collectively, "Government Licenses") and all such Government Licenses are valid and in full force and effect; the Company is has complied at all times in all material respects with all applicable federal, state, local and foreign laws, regulations, orders and decrees; the Company has not received, and has no reason to believe it will receive, any notice of proceedings relating to the suspension, revocation or modification of any Government Licenses nor has any reason to believe that any such Governmental Licenses will not be renewed in the ordinary course;

(y) Except as disclosed in the Registration Statement and Prospectus, the Company owns, possesses, licenses or has other rights to use the patents and patent applications, copyrights, trademarks, service marks, trade names, technology, know-how (including trade secrets and other unpatented and/or unpatentable proprietary rights) and other intellectual property (or could acquire such intellectual property upon commercially reasonable terms) necessary to conduct its business in the manner in which it is being conducted and in the manner in which it is contemplated to be conducted as set forth in the Prospectus (collectively, the "Company Intellectual Property"); except as disclosed in the Registration Statement and Prospectus, to the Company's knowledge, none of the patents owned or licensed by the Company is unenforceable or invalid, and, to the Company's knowledge, none of the patent applications owned or licensed by the Company would be unenforceable or invalid if issued as patents; the Company is not obligated to pay a royalty, grant a license, or provide other consideration to any third party in connection with the Company Intellectual

Property other than as disclosed in the Prospectus; except as disclosed in the Registration Statement and Prospectus, the Company has not received any notice of violation or conflict with rights of others with respect to the Company Intellectual Property; except as disclosed in the Registration Statement and Prospectus, there are no pending or to the Company's knowledge, threatened actions, suits, proceedings or claims by others that the Company is infringing any patent, trade secret, trade mark, service mark, copyright or other intellectual property or proprietary right; and except as disclosed in the Registration Statement and Prospectus, the products or processes of the Company referenced in the Prospectus do not, to the knowledge of the Company, violate or conflict with any intellectual property or proprietary right of any third person, or any discovery, invention, product or process that is the subject of a patent application filed by any third person;

(z) The studies, tests and preclinical and clinical trials conducted by or on behalf of the Company that are described in the Prospectus were and, if still pending, are being conducted in all material respects in accordance with experimental protocols, procedures and controls pursuant to accepted professional scientific standards and all applicable local, state and federal and foreign laws, rules, regulations and guidances, including, but not limited to, the Federal Food, Drug and Cosmetic Act and implementing regulations at 21

C.F.R. Parts 50, 54, 56, 58 and 312; the descriptions of the results of such studies, tests and trials contained in the Prospectus are accurate and complete in all material respects; the Company is not aware of any studies, tests or trails the results of which reasonably call into question the clinical trial results described or referred to in the Prospectus when viewed in the context in which such results are described and the clinical state of development; and the Company has not received any notices or correspondence from the U.S. Food and Drug Administration or any foreign, state or local governmental body exercising comparable authority requiring the termination, suspension or material modification of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company;

(aa) The Company has complied at all times in all material respects with all applicable Environmental Health and Safety Laws, holds all permits and licenses and has received all approvals under Environmental Health and Safety Laws necessary for the conduct of the business of the Company except where failure to do so would not have a Material Adverse Effect, and is in compliance in all material respects with its environmental permits; no property currently owned or operated by the Company (including soils, groundwater, surface water, buildings or other structures) is, to the knowledge of the Company, contaminated with any Hazardous Substance; no property formerly owned or operated by the Company was, to the knowledge of the Company, contaminated with any Hazardous Substance during or prior to such period of ownership or operation except as would not result in material liability to the Company; the Company, to its knowledge, is not subject to liability for any Hazardous Substance disposal or contamination on any third-party property; the Company is not aware of any past or present release or threat of release of any Hazardous Substance by the Company that would have a Material Adverse Effect; the Company has not received any notice, demand, letter, claim or request for information alleging that the Company may be in violation of or subject to liability under any Environmental Health and Safety Law. For the purposes of this section, "Environmental Health and Safety Law" shall mean any law, statute, ordinance, rule, regulation, order, decree, or requirement of any court or governmental agency or body having jurisdiction over the Company or any of its properties relating to: (i) the protection, investigation or restoration of the environment, health, safety, or natural resources, (ii) the handling, use, presence, disposal, release or threatened release of any Hazardous Substance, (iii) noise, odor, indoor air, employee exposure, wetlands, pollution, contamination or any injury or threat of injury to persons or property, or (iv) the handling, storage, shipment or production of pharmaceutical or biohazardous substances. For the purposes of this section, "Hazardous Substance" shall mean any substance that

is: (A) listed, classified or regulated pursuant to any Environmental Health and Safety Law, (B) any petroleum product or by-product, asbestos-containing material, lead-containing paint, polychlorinated biphenyls, radioactive material or radon, or (C) any other substance that may be the subject of regulatory action by any court or government agency or body having jurisdiction over the Company or any of its properties in connection with any Environmental Health and Safety Law; and

(bb) The Company maintains a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

2. Subject to the terms and conditions herein set forth, (a) the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at a purchase price per share of $[_____], the number of Firm Shares set forth

opposite the name of such Underwriter in Schedule I hereto and (b) in the event and to the extent that the Underwriters shall exercise the election to purchase Optional Shares as provided below, the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at the purchase price per share set forth in clause (a) of this Section 2, that portion of the number of Optional Shares as to which such election shall have been exercised (to be adjusted by you so as to eliminate fractional shares) determined by multiplying such number of Optional Shares by a fraction, the numerator of which is the maximum number of Optional Shares which such Underwriter is entitled to purchase as set forth opposite the name of such Underwriter in Schedule I hereto and the denominator of which is the maximum number of Optional Shares that all of the Underwriters are entitled to purchase hereunder.

The Company hereby grants to the Underwriters the right to purchase at their election up to [_____] Optional Shares, at the purchase price per share set forth in clause (a) of the paragraph above, for the sole purpose of covering sales of shares in excess of the number of Firm Shares, provided that the purchase price per Optional Share shall be reduced by an amount per share equal to any dividends or distributions declared by the Company and payable on the Firm Shares but not payable on the Optional Shares. Any such election to purchase Optional Shares may be exercised only by written notice from you to the Company, given within a period of 30 calendar days after the date of this Agreement, setting forth the aggregate number of Optional Shares to be purchased and the date on which such Optional Shares are to be delivered, as determined by you but in no event earlier than the First Time of Delivery (as defined in Section 4 hereof) or, unless you and the Company otherwise agree in writing, earlier than two or later than ten business days after the date of such notice.

3. Upon the authorization by you of the release of the Firm Shares, the several Underwriters propose to offer the Firm Shares for sale upon the terms and conditions set forth in the Prospectus.

4. (a) The Shares to be purchased by each Underwriter hereunder, in definitive form, and in such authorized denominations and registered in such names as Goldman, Sachs & Co. may request upon at least forty-eight hours' prior notice to the Company shall be delivered by or on behalf of the Company to Goldman, Sachs & Co., through the facilities of the Depository Trust Company ("DTC"), for the account of such Underwriter, against payment by or on behalf of

such Underwriter of the purchase price therefor by wire transfer of Federal (same-day) funds to the account specified by the Company to Goldman, Sachs & Co. at least forty-eight hours in advance. The Company will cause the certificates representing the Shares to be made available for checking and packaging at least twenty-four hours prior to the Time of Delivery (as defined below) with respect thereto at the office of DTC or its designated custodian (the "Designated Office"). The time and date of such delivery and payment shall be, with respect to the Firm Shares, 9:30 A.M., New York City time, on [_____], 2004 or such other time and date as Goldman, Sachs & Co. and the Company may agree upon in writing, and, with respect to the Optional Shares, 9:30 A.M., New York time, on the date specified by Goldman, Sachs & Co. in the written notice given by Goldman, Sachs & Co. of the Underwriters' election to purchase such Optional Shares, or such other time and date as Goldman, Sachs & Co. and the Company may agree upon in writing. Such time and date for delivery of the Firm Shares is herein called the "First Time of Delivery", such time and date for delivery of the Optional Shares, if not the First Time of Delivery, is herein called the "Second Time of Delivery", and each such time and date for delivery is herein called a "Time of Delivery".

(b) The documents to be delivered at each Time of Delivery by or on behalf of the parties hereto pursuant to Section 7 hereof, including the cross receipt for the Shares and any additional documents requested by the Underwriters pursuant to Section 7(l) hereof, will be delivered at the

offices of Latham & Watkins LLP, 505 Montgomery Street, Suite 1900, San Francisco, CA 94111 (the "Closing Location"), and the Shares will be delivered at the Designated Office, all at such Time of Delivery. A meeting will be held at the Closing Location at 2:00 P.M., California time, on the New York Business Day next preceding such Time of Delivery, at which meeting the final drafts of the documents to be delivered pursuant to the preceding sentence will be available for review by the parties hereto. For the purposes of this Section 4, "New York Business Day" shall mean each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in New York are generally authorized or obligated by law or executive order to close.

(c) The Company hereby confirms its engagement of Goldman, Sachs & Co. as, and Goldman, Sachs & Co. hereby confirms its agreement with the Company to render services as, a "qualified independent underwriter" within the meaning of Rule 2720(b)(15) of the NASD with respect to the offering and sale of the Shares. Goldman, Sachs & Co., in its capacity as qualified independent underwriter and not otherwise, is referred to herein as the "QIU". As compensation for the services of the QIU hereunder, the Company agrees to pay the QIU $10,000 on the first Time of Delivery.

5. The Company agrees with each of the Underwriters:

(a) To prepare the Prospectus in a form approved by you and to file such Prospectus pursuant to Rule 424(b) under the Securities Act not later than the Commission's close of business on the second business day following the execution and delivery of this Agreement, or, if applicable, such earlier time as may be required by Rule 430A(a)(3) under the Securities Act; to make no further amendment or any supplement to the Registration Statement or Prospectus which shall be disapproved by you promptly after reasonable notice thereof; to advise you, promptly after it receives notice thereof, of the time when any amendment to the Registration Statement has been filed or becomes effective or any supplement to the Prospectus or any amended Prospectus has been filed and to furnish you with copies thereof; to advise you, promptly after it receives notice thereof, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus

or prospectus, of the suspension of the qualification of the Shares for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding for any such purpose, or of any request by the Commission for the amending or supplementing of the Registration Statement or Prospectus or for additional information; and, in the event of the issuance of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus or prospectus or suspending any such qualification, promptly to use its best efforts to obtain the withdrawal of such order;

(b) Promptly from time to time to take such action as you may reasonably request to qualify the Shares for offering and sale under the securities laws of such jurisdictions as you may reasonably request and to comply with such laws so as to permit the continuance of sales and dealings therein in such jurisdictions for as long as may be necessary to complete the distribution of the Shares, provided that in connection therewith the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction;

(c) Prior to 10:00 A.M., New York City time, on the New York Business Day next succeeding the date of this Agreement and from time to time, to furnish the Underwriters with written and electronic copies of the Prospectus in New York City in such quantities as you may reasonably request, and, if the delivery of a prospectus is required at any time prior to the expiration of nine months after the time of issue of the

Prospectus in connection with the offering or sale of the Shares and if at such time any event shall have occurred as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made when such Prospectus is delivered, not misleading, or, if for any other reason it shall be necessary during such period to amend or supplement the Prospectus in order to comply with the Securities Act and the Rules and Regulations, to notify you and upon your request to prepare and furnish without charge to each Underwriter and to any dealer in securities as many written and electronic copies as you may from time to time reasonably request of an amended Prospectus or a supplement to the Prospectus which will correct such statement or omission or effect such compliance, and in case any Underwriter is required to deliver a prospectus in connection with sales of any of the Shares at any time nine months or more after the time of issue of the Prospectus, upon your request but at the expense of such Underwriter, to prepare and deliver to such Underwriter as many written and electronic copies as you may request of an amended or supplemented Prospectus complying with Section 10(a)(3) of the Securities Act;

(d) To make generally available to its securityholders as soon as practicable, but in any event not later than eighteen months after the effective date of the Registration Statement (as defined in Rule 158(c) under the Securities Act), an earnings statement of the Company (which need not be audited) complying with Section 11(a) of the Securities Act and the Rules and Regulations (including, at the option of the Company, Rule 158);

(e) During the period beginning from the date hereof and continuing to and including the date 180 days after the date of the Prospectus, not to offer, sell, contract to sell, pledge or otherwise dispose of, except as provided hereunder any securities of the Company that are substantially similar to the Shares, including but not limited to any securities that are convertible into or exchangeable for, or that represent the right to receive, Stock or any such substantially similar securities (other than (i) pursuant to any employee stock option plan or stock ownership plan existing on the date of this Agreement, (ii) upon the conversion or

exchange of convertible or exchangeable securities outstanding as of the date hereof, (iii) up to $7.0 million of the Company's common stock issued to GlaxoSmithKline immediately prior to the completion of the offering and sale of the Shares at a per share price equal to the per share price of the Shares or (iv) new shares of the Company's common stock issued or sold in connection with any corporate strategic development transaction or any merger or acquisition transaction up to an aggregate amount of ten percent (10%) of the outstanding shares of the Company's common stock following completion of the offering and sale of the Shares, provided that any recipient of such shares agrees to be bound by the provisions of this Section 5(e)), without your prior written consent;

(f) To make available to its stockholders as soon as practicable after the end of each fiscal year an annual report (including a balance sheet and statements of income, stockholders' equity and cash flows of the Company certified by independent public accountants) and, as soon as practicable after the end of each of the first three quarters of each fiscal year (beginning with the fiscal quarter ending after the effective date of the Registration Statement), to make available to its stockholders consolidated summary financial information of the Company for such quarter;

(g) During a period of three years from the effective date of the Registration Statement, to make available to you copies of all reports or other communications (financial or other) furnished to stockholders, and to make available to you (i) as soon as they are available, copies of any

reports and financial statements furnished to or filed with the Commission or any national securities exchange on which any class of securities of the Company is listed; and (ii) such additional, non-confidential information concerning the business and financial condition of the Company as you may from time to time reasonably request (such financial statements to be on a consolidated basis to the extent the accounts of the Company are consolidated in reports furnished to its stockholders generally or to the Commission);

(h) To use the net proceeds received by it from the sale of the Shares pursuant to this Agreement in the manner specified in the Prospectus under the caption "Use of Proceeds;"

(i) To use its best efforts to list for quotation the Shares on the National Association of Securities Dealers Automated Quotations National Market System ("NASDAQ");

(j) To file with the Commission such information on Form 10-Q or Form 10-K as may be required by Rule 463 under the Securities Act;

(k) If the Company elects to rely upon Rule 462(b), the Company shall file a Rule 462(b) Registration Statement with the Commission in compliance with Rule 462(b), and the Company shall at the time of filing either pay to the Commission the filing fee for the Rule 462(b) Registration Statement or give irrevocable instructions for the payment of such fee pursuant to Rule 111(b) under the Securities Act; and

(l) Upon request of any Underwriter, to furnish, or cause to be furnished, to such Underwriter an electronic version of the Company's trademarks, servicemarks and corporate logo for use on the website, if any, operated by such Underwriter for the purpose of facilitating the on-line offering of the Shares (the "License"); provided, however, that the License shall be used solely for the purpose described above, is granted without any fee and may not be assigned or transferred.

6. The Company covenants and agrees with the several Underwriters that the Company will pay or cause to be paid the following: (i) the fees, disbursements and expenses of the Company's

counsel and accountants in connection with the registration of the Shares under the Securities Act and all other expenses in connection with the preparation, printing and filing of the Registration Statement, any Preliminary Prospectus and the Prospectus and amendments and supplements thereto and the mailing and delivering of copies thereof to the Underwriters and dealers; (ii) the cost of printing or producing any agreement among the Underwriters in connection with this Agreement ("Agreement among Underwriters"), this Agreement, the Blue Sky Memorandum, closing documents (including any compilations thereof) and any other documents in connection with the offering, purchase, sale and delivery of the Shares; (iii) all expenses in connection with the qualification of the Shares for offering and sale under state securities laws as provided in Section 5(b) hereof, including the fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky survey (iv) all fees and expenses in connection with listing the Shares on the NASDAQ; (v) the filing fees incident to, and the fees and disbursements of counsel for the Underwriters in connection with, securing any required review by the National Association of Securities Dealers, Inc. of the terms of the sale of the Shares; (vi) the cost of preparing stock certificates; (vii) the cost and charges of any transfer agent or registrar; (viii) the fees and expenses of the QIU; and (ix) all other costs and expenses incident to the performance of its obligations hereunder which are not otherwise specifically provided for in this Section. It is understood, however, that, except as provided in this Section, and Sections 8 and 11 hereof, the Underwriters will pay all of their own costs and expenses, including the fees of their counsel, stock transfer taxes on resale of any of the Shares by them, and any advertising expenses connected with any offers they may make.

7. The obligations of the Underwriters hereunder, as to the Shares to be delivered at each Time of Delivery, shall be subject, in their discretion, to the condition that all representations and warranties and other statements of the Company herein are, at and as of such Time of Delivery, true and correct, the condition that the Company shall have performed all of its obligations hereunder theretofore to be performed, and the following additional conditions:

(a) The Prospectus shall have been filed with the Commission pursuant to Rule 424(b) within the applicable time period prescribed for such filing by the Rules and Regulations and in accordance with Section 5(a) hereof; if the Company has elected to rely upon Rule 462(b), the Rule 462(b) Registration Statement shall have become effective; no stop order suspending the effectiveness of the Registration Statement or any part thereof shall have been issued and no proceeding for that purpose shall have been initiated or threatened by the Commission; and all requests for additional information on the part of the Commission shall have been complied with to your reasonable satisfaction;

(b) Latham & Watkins LLP, counsel for the Underwriters, shall have furnished to you their written opinion, dated such Time of Delivery, in the form attached here to as Annex II(a);

(c) Wilson Sonsini Goodrich & Rosati, Professional Corporation, counsel for the Company, shall have furnished to you their written opinion, dated such Time of Delivery, in form attached hereto as Annex II(b);

(d) Swiss Law Group, LLC, special patent counsel for the Company, shall have furnished to you their written opinion, dated such Time of Delivery, in form attached hereto as Annex II(c);

(e) Townsend and Townsend and Crew LLP, special patent counsel for the Company, shall have furnished to you their written opinion, dated such Time of Delivery, in form attached hereto as Annex II(d);

(f) Beyer, Weaver & Thomas, special patent counsel for the Company, shall have furnished to you their written opinion, dated such Time of Delivery, in form attached hereto as Annex II(e);

(g) David Lowin, special patent counsel for the Company, shall have furnished to you their written opinion, dated such Time of Delivery, in form attached hereto as Annex II(e);

(h) On the date of the Prospectus at a time prior to the execution of this Agreement, at 9:30 A.M., New York City time, on the effective date of any post-effective amendment to the Registration Statement filed subsequent to the date of this Agreement and also at each Time of Delivery, PricewaterhouseCoopers LLP shall have furnished to you a letter or letters, dated the respective dates of delivery thereof, in form and substance satisfactory to you, to the effect set forth in Annex I hereto (the executed copy of the letter delivered prior to the execution of this Agreement is attached as Annex I(a) hereto and a draft of the form of letter to be delivered on the effective date of any post-effective amendment to the Registration Statement and as of each Time of Delivery is attached as Annex I(b) hereto);

(i) (i) The Company shall not have sustained since the date of the latest audited financial statements included in the Prospectus any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth or contemplated in the Prospectus, and (ii) since the respective dates as of which information is given in the Prospectus there shall not have been any change in the capital stock or long-term debt of the Company

or any change, or any development involving a prospective change, in or affecting the management, financial position, stockholders' equity or results of operations of the Company, otherwise than as set forth or contemplated in the Prospectus, the effect of which, in any such case described in clause (i) is in the reasonable judgment of the Representatives, and in any such case described in clause (ii) is in the judgment of the Representatives, so material and adverse as to make it impracticable or inadvisable to proceed with the public offering or the delivery of the Shares being delivered at such Time of Delivery on the terms and in the manner contemplated in the Prospectus;

(j) On or after the date hereof (i) no downgrading shall have occurred in the rating accorded the Company's debt securities, if any, by any "nationally recognized statistical rating organization", as that term is defined by the Commission for purposes of Rule 436(g)(2) under the Securities Act, and (ii) no such organization shall have publicly announced that it has under surveillance or review, with possible negative implications, its rating of any of the Company's debt securities, if any;

(k) On or after the date hereof there shall not have occurred any of the following: (i) a suspension or material limitation in trading in securities generally on the New York Stock Exchange or on NASDAQ; (ii) a suspension or material limitation in trading in the Company's securities on NASDAQ; (iii) a general moratorium on commercial banking activities declared by either Federal, New York or California State authorities or a material disruption in commercial banking or securities settlement or clearance services in the United States; (iv) the outbreak or escalation of hostilities involving the United States or the declaration by the United States of a national emergency or war or (v) the occurrence of any other calamity or crisis or any change in financial, political or economic conditions in the United States or elsewhere, if the effect of any such event specified in clause (iv) or (v) in the reasonable judgment of the Representatives makes it impracticable or inadvisable to proceed with the public offering or

the delivery of the Shares being delivered at such Time of Delivery on the terms and in the manner contemplated in the Prospectus;

(l) The Shares to be sold at such Time of Delivery shall have been duly listed for quotation on NASDAQ;

(m) The Company has obtained and delivered to the Underwriters executed copies of an agreement from at least [_____]% of the stockholders of the Company, substantially to the effect set forth in Annex III hereto;

(n) The Company shall have complied with the provisions of Section 5(c) hereof with respect to the furnishing of prospectuses on the New York Business Day next succeeding the date of this Agreement; and

(o) The Company shall have furnished or caused to be furnished to you at such Time of Delivery certificates of officers of the Company reasonably satisfactory to you as to the accuracy of the representations and warranties of the Company herein at and as of such Time of Delivery, as to the performance by the Company of all of its obligations hereunder to be performed at or prior to such Time of Delivery, as to the matters set forth in subsections (a) and (e) of this Section and as to such other matters as you may reasonably request.

8. (a) The Company will indemnify and hold harmless each Underwriter against any losses, claims, damages or liabilities, joint or several, to which such Underwriter may become subject, under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in any Preliminary Prospectus, the Registration Statement or the Prospectus, or any amendment or supplement

thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse each Underwriter for any legal or other expenses reasonably incurred by such Underwriter in connection with investigating or defending any such action or claim as such expenses are incurred; provided, however, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in any Preliminary Prospectus, the Registration Statement or the Prospectus or any such amendment or supplement in reliance upon and in conformity with written information furnished to the Company by any Underwriter through Goldman, Sachs & Co. expressly for use therein.

(b) Each Underwriter will indemnify and hold harmless the Company against any losses, claims, damages or liabilities to which the Company may become subject, under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in any Preliminary Prospectus, the Registration Statement or the Prospectus, or any amendment or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in any Preliminary Prospectus, the Registration Statement or the Prospectus or any such amendment or supplement in reliance upon and in conformity with written information furnished to the Company by such Underwriter through Goldman, Sachs & Co. expressly for use therein; and will reimburse the Company for any legal or other expenses reasonably incurred by the Company in connection with investigating or defending any such action or claim as such expenses are incurred.

(c) Promptly after receipt by an indemnified party under subsection (a) or (b) above of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party shall not relieve it from any liability which it may have to any indemnified party otherwise than under such subsection. In case any such action shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party (who shall not, except with the consent of the indemnified party, be counsel to the indemnifying party), and, after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal expenses of other counsel or any other expenses, in each case subsequently incurred by such indemnified party, in connection with the defense thereof other than reasonable costs of investigation. No indemnifying party shall, without the written consent of the indemnified party, effect the settlement or compromise of, or consent to the entry of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified party is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (i) includes an unconditional release of the indemnified party from all liability arising out of such action or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any indemnified party.

(d) If the indemnification provided for in this Section 8 is unavailable to or insufficient to hold harmless an indemnified party under subsection (a) or (b) above in respect of any losses, claims, damages or liabilities (or actions

in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering of the Shares. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law or if the indemnified party failed to give the notice required under subsection (c) above, then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and the Underwriters on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities (or actions in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company bear to the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company on the one hand or the Underwriters on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this subsection (d) were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable

considerations referred to above in this subsection (d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above in this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this subsection (d), no Underwriter shall be required to contribute any amount in excess of the total underwriting discounts and commissions received by such Underwriter. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this subsection (d) to contribute are several in proportion to their respective underwriting obligations and not joint.

(e) The obligations of the Company under this Section 8 shall be in addition to any liability which the Company may otherwise have and shall extend, upon the same terms and conditions, to each person, if any, who controls any Underwriter within the meaning of the Securities Act; and the obligations of the Underwriters under this Section 8 shall be in addition to any liability which the respective Underwriters may otherwise have and shall extend, upon the same terms and conditions, to each officer and director of the Company (including any person who, with his or her consent, is named in the Registration Statement as about to become a director of the Company) and to each person, if any, who controls the Company within the meaning of the Securities Act.

(f) The Company will indemnify and hold harmless Goldman, Sachs & Co., in its capacity as QIU, against any losses, claims, damages or liabilities, joint or several, to which the QIU may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon (i) an untrue statement or alleged untrue statement of a material fact contained in any Preliminary Prospectus, the Registration Statement or the Prospectus, or any amendment or supplement thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading or (iii) any act or omission to act or any alleged act or omission to

act by Goldman, Sachs & Co. as QIU in connection with any transaction contemplated by this Agreement or undertaken in preparing for the purchase, sale and delivery of the Shares, except as to this clause (iii) to the extent that any such loss, claim, damage or liability results from the gross negligence or bad faith of Goldman, Sachs & Co. in performing the services as QIU, and will reimburse the QIU for any legal or other expenses reasonably incurred by the QIU in connection with investigating or defending any such action or claim as such expenses are incurred.

(g) Promptly after receipt by the QIU under subsection (f) above of notice of the commencement of any action, the QIU shall, if a claim in respect thereof is to be made against the Company under such subsection, notify the Company in writing of the commencement thereof; but the omission so to notify the Company shall not relieve it from any liability which it may have to the QIU otherwise than under such subsection. In case any such action shall be brought against the QIU and it shall notify the Company of the commencement thereof, the Company shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to the QIU (who shall not, except with the consent of the QIU, be counsel to the Company), and, after notice from the indemnifying party to the QIU of its election so to assume the defense thereof, the indemnifying party shall not be liable to the QIU under such subsection for any legal expenses of other counsel or any other expenses, in each case subsequently incurred by the QIU, in connection with the defense thereof other than reasonable costs of investigation. The Company shall not, without the written consent of the indemnified party, effect the settlement or compromise of, or consent to the entry of any judgment

with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the QIU is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (i) includes an unconditional release of the QIU from all liability arising out of such action or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of QIU.

(h) If the indemnification provided for in this Section 8 is unavailable to or insufficient to hold harmless Goldman, Sachs & Co., in its capacity as QIU, under subsection (f) above in respect of any losses, claims, damages or liabilities (or actions in respect thereof) referred to therein, then the Company shall contribute to the amount paid or payable by the QIU as a result of such losses, claims, damages or liabilities (or actions in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the QIU on the other from the offering of the Shares. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law or if the QIU failed to give the notice required under subsection (b) above, then the Company shall contribute to such amount paid or payable by the QIU in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and the QIU on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities (or actions in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the QIU on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company, as set forth in the table on the cover page of the Prospectus, bear to the fee payable to the QIU pursuant to Section 3 hereof. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company on the one hand or the QIU on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the QIU agree that it would not be just and equitable if contributions pursuant to this subsection (h) were determined by pro rata allocation or by any other method of allocation which does not take

account of the equitable considerations referred to above in this subsection (h). The amount paid or payable by the QIU as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above in this subsection (h) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

(i) The obligations of the Company under this Section 8 shall be in addition to any liability which the Company may otherwise have and shall extend, upon the same terms and conditions, to each person, if any, who controls the QIU within the meaning of the Act.

9. (a) If any Underwriter shall default in its obligation to purchase the Shares which it has agreed to purchase hereunder at a Time of Delivery, you may in your discretion arrange for you or another party or other parties to purchase such Shares on the terms contained herein. If within thirty-six hours after such default by any Underwriter you do not arrange for the purchase of such Shares, then the Company shall be entitled to a further period of thirty-six hours within which to procure another party or other parties satisfactory to you to purchase such Shares on such terms. In the event that, within the respective prescribed periods, you notify the Company that you have so arranged for the purchase of such Shares, or the Company notifies you that it has so arranged for the purchase of such Shares, you or the Company shall have the right to postpone such Time of Delivery

for a period of not more than seven days, in order to effect whatever changes may thereby be made necessary in the Registration Statement or the Prospectus, or in any other documents or arrangements, and the Company agrees to file promptly any amendments to the Registration Statement or the Prospectus which in your opinion may thereby be made necessary. The term "Underwriter" as used in this Agreement shall include any person substituted under this Section with like effect as if such person had originally been a party to this Agreement with respect to such Shares.

(b) If, after giving effect to any arrangements for the purchase of the Shares of a defaulting Underwriter or Underwriters by you and the Company as provided in subsection (a) above, the aggregate number of such Shares which remains unpurchased does not exceed one-eleventh of the aggregate number of all the Shares to be purchased at such Time of Delivery, then the Company shall have the right to require each non-defaulting Underwriter to purchase the number of shares which such Underwriter agreed to purchase hereunder at such Time of Delivery and, in addition, to require each non-defaulting Underwriter to purchase its pro rata share (based on the number of Shares which such Underwriter agreed to purchase hereunder) of the Shares of such defaulting Underwriter or Underwriters for which such arrangements have not been made; but nothing herein shall relieve a defaulting Underwriter from liability for its default.

(c) If, after giving effect to any arrangements for the purchase of the Shares of a defaulting Underwriter or Underwriters by you and the Company as provided in subsection (a) above, the aggregate number of such Shares which remains unpurchased exceeds one-eleventh of the aggregate number of all the Shares to be purchased at such Time of Delivery, or if the Company shall not exercise the right described in subsection (b) above to require non-defaulting Underwriters to purchase Shares of a defaulting Underwriter or Underwriters, then this Agreement (or, with respect to the Second Time of Delivery, the obligations of the Underwriters to purchase and of the Company to sell the Optional Shares) shall thereupon terminate, without liability on the part of any non-defaulting Underwriter or the Company, except for the expenses to be borne by the Company and the Underwriters as provided in Section 6 hereof and the indemnity and contribution agreements in Section 8 hereof; but nothing herein shall relieve a defaulting Underwriter from liability for its default.

10. The respective indemnities, agreements, representations, warranties and other statements of the Company and the several Underwriters, as set forth in this Agreement or made by or on behalf of them, respectively, pursuant to this Agreement, shall remain in full force and effect, regardless of any investigation (or any statement as to the results thereof) made by or on behalf of any Underwriter or any controlling person of any Underwriter, or the Company, or any officer or director or controlling person of the Company, and shall survive delivery of and payment for the Shares.

11. If this Agreement shall be terminated pursuant to Section 9 hereof, the Company shall not then be under any liability to any Underwriter except as provided in Sections 6 and 8 hereof; but, if for any other reason, any Shares are not delivered by or on behalf of the Company as provided herein, the Company will reimburse the Underwriters through you for all out-of-pocket expenses approved in writing by you, including fees and disbursements of counsel, reasonably incurred by the Underwriters in making preparations for the purchase, sale and delivery of the Shares not so delivered, but the Company shall then be under no further liability to any Underwriter except as provided in Sections 6 and 8 hereof.

12. In all dealings hereunder, you shall act on behalf of each of the Underwriters, and the parties hereto shall be entitled to act and rely upon any statement, request, notice or agreement on behalf of any Underwriter made or given by you jointly or by Goldman, Sachs & Co. on behalf of you as the representatives.

All statements, requests, notices and agreements hereunder shall be in writing, and if to the Underwriters shall be delivered or sent by mail, telex or facsimile transmission to you as the representatives in care of Goldman, Sachs & Co., 85 Broad Street, New York, New York 10004, Attention: Registration Department; and if to the Company shall be delivered or sent by mail to the address of the Company set forth in the Registration Statement, Attention: Secretary; provided, however, that any notice to an Underwriter pursuant to Section 8(c) hereof shall be delivered or sent by mail, telex or facsimile transmission to such Underwriter at its address set forth in its Underwriters' Questionnaire, or telex constituting such Questionnaire, which address will be supplied to the Company by you upon request. Any such statements, requests, notices or agreements shall take effect upon receipt thereof.

13. This Agreement shall be binding upon, and inure solely to the benefit of, the Underwriters, the Company and, to the extent provided in Sections 8 and 10 hereof, the officers and directors of the Company and each person who controls the Company or any Underwriter, and their respective heirs, executors, administrators, successors and assigns, and no other person shall acquire or have any right under or by virtue of this Agreement. No purchaser of any of the Shares from any Underwriter shall be deemed a successor or assign by reason merely of such purchase.

14. Time shall be of the essence of this Agreement. As used herein, the term "business day" shall mean any day when the Commission's office in Washington, D.C. is open for business. As used herein, the terms "you" and "your" refer to Goldman, Sachs & Co. on behalf of the Underwriters.

15. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK.

16. This Agreement may be executed by any one or more of the parties hereto in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same instrument.

17. The Company is authorized, subject to applicable law, to disclose any and all aspects of this potential transaction that are necessary to support any U.S. federal income tax benefits expected to be claimed with respect to such

transaction, and all materials of any kind (including tax opinions and other tax analyses) related to those benefits, without the Underwriters imposing any limitation of any kind.

If the foregoing is in accordance with your understanding, please sign and return to us eight (8) counterparts hereof, and upon the acceptance hereof by you, on behalf of each of the Underwriters, this letter and such acceptance hereof shall constitute a binding agreement between each of the Underwriters and the Company. It is understood that your acceptance of this letter on behalf of each of the Underwriters is pursuant to the authority set forth in a form of Agreement among Underwriters, the form of which shall be submitted to the Company for examination upon request, but without warranty on your part as to the authority of the signers thereof.

Very truly yours,

Cytokinetics, Incorporated

By:
.....
Name:
Title:

Accepted as of the date hereof:

Goldman, Sachs & Co.
Credit Suisse First Boston LLC
Pacific Growth Equities, LLC
Lazard Freres & Co. LLC

By:
.....
(Goldman, Sachs & Co.)

On behalf of each of the Underwriters

SCHEDULE I

UNDERWRITER	TOTAL NUMBER OF FIRM SHARES TO BE PURCHASED	NUMBER OF OPTIONAL SHARES TO BE PURCHASED IF MAXIMUM OPTION EXERCISED
Goldman, Sachs & Co.		
Credit Suisse First Boston LLC		
Pacific Growth Equities, LLC		
Lazard Freres & Co. LLC		
Total		

ANNEX I

FORM OF COMFORT LETTER

Pursuant to Section 7(d) of the Underwriting Agreement, PricewaterhouseCoopers LLP shall furnish letters to the Underwriters to the effect that:

(i) They are independent certified public accountants with respect to the Company within the meaning of the Securities Act and the applicable published rules and regulations thereunder;

(ii) In their opinion, the financial statements and any supplementary financial information and schedules (and, if applicable, pro forma financial information) examined by them and included in the Prospectus or the Registration Statement comply as to form in all material respects with the applicable accounting requirements of the Securities Act and the related published rules and regulations thereunder; and, if applicable, they have made a review in accordance with standards established by the American Institute of Certified Public Accountants of the unaudited interim financial statements, selected financial data, pro forma financial information, and/or condensed financial statements derived from audited financial statements of the Company for the periods specified in such letter, as indicated in their reports thereon, copies of which have been separately furnished to the representatives of the Underwriters (the "Representatives") and are attached hereto;

(iii) They have made a review in accordance with standards established by the American Institute of Certified Public Accountants of the unaudited condensed statements of income, balance sheets and consolidated statements of cash flows included in the Prospectus as indicated in their reports thereon copies of which have been separately furnished to the Representatives and are attached hereto and on the basis of specified procedures including inquiries of officials of the Company who have responsibility for financial and accounting matters regarding whether the unaudited condensed financial statements referred to in paragraph (vi)(A)(i) below comply as to form in all material respects with the applicable accounting requirements of the Securities Act and the related published rules and regulations, nothing came to their attention that cause them to believe that the unaudited condensed financial statements do not comply as to form in all material respects with the applicable accounting requirements of the Securities Act and the related published rules and regulations;

(iv) The unaudited selected financial information with respect to the results of operations and financial position of the Company for the five most recent fiscal years included in the Prospectus agrees with the corresponding amounts (after restatements where applicable) in the audited financial statements for such five fiscal years which were included or incorporated by reference in the Company's Annual Reports on Form 10-K for such fiscal years;

(v) They have compared the information in the Prospectus under selected captions with the disclosure requirements of Regulation S-K and on the basis of limited procedures specified in such letter nothing came to their attention as a result of the foregoing procedures that caused them to believe that this information does not conform in all material respects with the disclosure requirements of Items 301, 302, 402 and 503(d), respectively, of Regulation S-K;

(vi) On the basis of limited procedures, not constituting an examination in accordance with generally accepted auditing standards, consisting of a reading of the unaudited financial statements and other information referred to below, a reading of the latest available interim

financial statements of the Company, inspection of the minute books of the Company since the date of the latest audited financial statements included in the Prospectus, inquiries of officials of the Company responsible for financial and accounting matters and such other inquiries and procedures as may be specified in such letter, nothing came to their attention that caused them to believe that:

(A) (i) the unaudited statements of income, balance sheets and

statements of cash flows included in the Prospectus do not comply as to form in all material respects with the applicable accounting requirements of the Securities Act and the related published rules and regulations, or (ii) any material modifications should be made to the unaudited condensed statements of income, balance sheets and statements of cash flows included in the Prospectus for them to be in conformity with generally accepted accounting principles;

(B) any other unaudited income statement data and balance sheet items included in the Prospectus do not agree with the corresponding items in the unaudited financial statements from which such data and items were derived, and any such unaudited data and items were not determined on a basis substantially consistent with the basis for the corresponding amounts in the audited financial statements included in the Prospectus;

(C) the unaudited financial statements which were not included in the Prospectus but from which were derived any unaudited condensed financial statements referred to in clause (A) and any unaudited income statement data and balance sheet items included in the Prospectus and referred to in clause (B) were not determined on a basis substantially consistent with the basis for the audited financial statements included in the Prospectus;

(D) any unaudited pro forma condensed financial statements included in the Prospectus do not comply as to form in all material respects with the applicable accounting requirements of the Securities Act and the published rules and regulations thereunder or the pro forma adjustments have not been properly applied to the historical amounts in the compilation of those statements;

(E) as of a specified date not more than five days prior to the date of such letter, there have been any changes in the capital stock (other than issuances of capital stock upon exercise of options and stock appreciation rights, upon earn-outs of performance shares and upon conversions of convertible securities, in each case which were outstanding on the date of the latest financial statements included in the Prospectus) or any increase in the long-term debt of the Company, or any decreases in net current assets or stockholders' equity or other items specified by the Representatives, or any increases in any items specified by the Representatives, in each case as compared with amounts shown in the latest balance sheet included in the Prospectus, except in each case for changes, increases or decreases which the Prospectus discloses have occurred or may occur or which are described in such letter; and

(F) for the period from the date of the latest financial statements included in the Prospectus to the specified date referred to in clause (E) there were any decreases in net revenues or operating profit or the total or per share amounts of net income or other items specified by the Representatives, or any increases in any items specified

by the Representatives, in each case as compared with the comparable period of the preceding year and with any other period of corresponding length specified by the Representatives, except in each case for decreases or increases which the Prospectus discloses have occurred or may occur or which are described in such letter; and

(vii) In addition to the examination referred to in their report(s) included in the Prospectus and the limited procedures, inspection of minute books, inquiries and other procedures referred to in paragraphs (iii) and (vi) above, they have carried out certain specified procedures,

not constituting an examination in accordance with generally accepted auditing standards, with respect to certain amounts, percentages and financial information specified by the Representatives, which are derived from the general accounting records of the Company, which appear in the Prospectus, or in Part II of, or in exhibits and schedules to, the Registration Statement specified by the Representatives, and have compared certain of such amounts, percentages and financial information with the accounting records of the Company and have found them to be in agreement.

ANNEX III

CYTOKINETICS, INCORPORATED

LOCK-UP AGREEMENT

_____, 2004

Goldman, Sachs & Co.
Credit Suisse First Boston LLC
Pacific Growth Equities, LLC
Lazard Freres & Co. LLC
c/o Goldman, Sachs & Co.
85 Broad Street
New York, NY 10004

Re: Cytokinetics, Incorporated - Lock-Up Agreement

Ladies and Gentlemen:

The undersigned understands that Goldman, Sachs & Co., Credit Suisse First Boston LLC, Pacific Growth Equities, LLC and Lazard Freres & Co. LLC, as representatives (the "Representatives"), propose to enter into an underwriting agreement (the "Underwriting Agreement") on behalf of the several Underwriters named in Schedule I to such agreement (collectively, the "Underwriters"), with Cytokinetics, Incorporated, a Delaware corporation (the "Company"), providing for a public offering of the Common Stock of the Company (the "Shares") pursuant to a Registration Statement on Form S-1 to be filed with the Securities and Exchange Commission (the "SEC").

In consideration of the agreement by the Underwriters to offer and sell the Shares, and of other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the undersigned agrees that, during the period beginning from the date of the final Prospectus covering the public offering of the Shares and continuing to and including the date 180 days after the date of such final Prospectus, the undersigned will not offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any shares of Common Stock of the Company, or any options or warrants to purchase any shares of Common Stock of the Company, or any securities convertible into, exchangeable for or that represent the right to receive shares of Common Stock of the Company, whether now owned or hereinafter acquired, owned directly by the undersigned (including holding as a custodian) or with respect to which the undersigned has beneficial ownership within the rules and regulations of the SEC (collectively the "Undersigned's Shares").

The foregoing restriction is expressly agreed to preclude the undersigned from engaging in any hedging or other transaction which is designed to or which reasonably could be expected to lead to or result in a sale or disposition of the Undersigned's Shares even if such Shares would be disposed of by someone other than the undersigned. Such prohibited hedging or other transactions would include without limitation any short sale or any purchase, sale or grant of any right (including without limitation

any put or call option) with respect to any of the Undersigned's Shares or with respect to any security that includes, relates to, or derives any significant part of its value from such Shares.

Notwithstanding the foregoing, the undersigned may transfer the Undersigned's Shares (i) as a bona fide gift or gifts, (ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, (iii) if the undersigned is a corporation, limited liability company or partnership, to any wholly-owned subsidiary of such entity or pursuant to a distribution to a shareholder, member or partner, respectively, of such entity, (iv) by will or intestate succession, (v) that are acquired from the Company in the public offering or in the public market on or after the date of the final Prospectus provided that any such transfer does not result in any public filing or other public disclosure obligation by the undersigned or the Company or (vi) with the prior written consent of Goldman, Sachs & Co. on behalf of the Underwriters. For purposes of this Lock-Up Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin. Notwithstanding the foregoing, it shall be a condition to any transfer contemplated by clause (i), (ii), (iii) or (iv) above that the transferee execute an agreement stating that the transferee is receiving and holding such capital stock subject to the provisions of this Agreement and there shall be no further transfer of such capital stock except in accordance with this Agreement, and provided further that any such transfer shall not involve a disposition for value. The undersigned now has, and, except as contemplated by clause (i), (ii), (iii), (iv) and (v) above, for the duration of this Lock-Up Agreement will have, good and marketable title to the Undersigned's Shares, free and clear of all liens, encumbrances, and claims whatsoever. The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the Undersigned's Shares except in compliance with the foregoing restrictions.

The undersigned understands that the Company and the Underwriters are relying upon this Lock-Up Agreement in proceeding toward consummation of the offering. The undersigned further understands that this Lock-Up Agreement is irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors, and assigns.

Very truly yours,

Exact Name of Shareholder

Authorized Signature

Title

Exhibit 4.3

LOAN AND SECURITY AGREEMENT

THIS AGREEMENT (the "Agreement"), dated as of September 25, 1998 (the "Closing Date") is entered into by and between Cytokinetics, Incorporated, a Delaware corporation having a principal place of business at 280 East Grand Avenue, South San Francisco, CA 94080 (the "Borrower") and Comdisco, Inc., a Delaware corporation having a principal place of business at 6111 North River Road, Rosemont, Illinois 60018 (the "Lender"). In consideration of the mutual agreements contained herein, the parties hereto agree as follows:

WHEREAS, Borrower has requested Lender to make available to Borrower a loan in the aggregate principal amount of up to ONE MILLION FIVE HUNDRED THOUSAND and 00/100 DOLLARS ($1,500,000.00) (as the same may from time to time be amended, modified, supplemented or revised, the "Loan"), which shall be available in minimum installments of TWO HUNDRED FIFTY THOUSAND and 00/100 DOLLARS ($250,000) each (the "Advance") on various dates prior to September 25, 1999 ("Advance Date(s)"), which would be evidenced by Secured Promissory Note(s) executed by Borrower substantially in the form of EXHIBIT A hereto (as the same may from time to time be amended, modified, supplemented or restated the "Note(s)");

NOW, THEREFORE, it is agreed:

SECTION 1. THE LOAN

1.1 Subject to the terms and conditions set forth herein, Lender shall lend to Borrower the aggregate original principal amount of ONE MILLION FIVE HUNDRED THOUSAND AND 00/100 DOLLARS ($1,500,000) together with interest at the rate of eight and one quarter percent (8.25%) per annum due and payable in monthly installments as set forth in the Note

1.2 Upon the occurrence of and during an Event of Default (as defined herein), interest shall thereafter be calculated at a rate of five percent (5%) in excess of the rate that would otherwise be applicable ("Default Rate"). All such interest shall be due and payable in arrears, on the first day of the following month.

1.3 Notwithstanding any provision in this Agreement, the Note, or any other "Loan Document" (as defined herein), it is not the parties' intent to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law which a court of competent jurisdiction shall deem applicable hereto (which under the laws of the State of Illinois shall be deemed to be the laws relating to permissible rates of interest on commercial loans) (the "Maximum Rate"). If the Borrower actually pays Lender an amount of interest, chargeable on the total aggregate principal Secured Obligations of Borrower under this Agreement and the Note (as said rate is calculated over a period of time that is the longer of (i) the time from the date of this Agreement through the maturity time as set forth on the Note, or (ii) the entire period of time that any principal is outstanding on the Note), which amount of interest exceeds interest calculated at the Maximum Rate on said principal chargeable over said period of time, then such excess interest actually paid by Borrower shall be applied first, to the payment of principal outstanding on the Note; second, after all principal is repaid, to the payment of Lender's out of pocket costs, expenses, and professional fees which are owed by Borrower to Lender under this Agreement or the Loan Documents; and third, after all principal, costs, expenses, and professional fees owed by Borrower to Lender are repaid, the excess (if any) shall be refunded to Borrower.

1.4 In the event any interest is not paid when due hereunder, delinquent interest shall be added to principal and shall bear interest on interest, compounded at the rate set forth in Section 1.1

1.5 Upon and during the continuation of an Event of Default hereunder (as defined herein), all Secured Obligations, including principal, interest, compounded interest, and reasonable professional fees, shall bear interest at a rate per annum equal to the Default Rate.

1.6 Borrower shall have the option to prepay the Note, in whole or in part, at any time after the date hereof by paying the principal amount together with all accrued and unpaid interest with respect to such principal amount, as of the date of such prepayment and the Balloon Payment as described in the Note together with a prepayment premium equal to the difference, if any, between (x) the amount being prepaid and (y) the present value, discounted at the Treasury Rate, of each installment of principal and interest being prepaid discounted to the date of prepayment. If the amount in (x) is greater than the amount in (y), no prepayment premium shall be due. The "Treasury Rate" shall mean the then prevailing yield on US Treasury Constant Maturities for the most recent business day, as quoted in the Federal Reserve Statistical Release H15, as of the date of prepayment for an obligation of comparable maturity to the maturity date of the Note.

SECTION 2. SECURITY INTEREST

As security for the payment of all indebtedness ("Indebtedness") of the Borrower to the Lender hereunder and under the Note, as the same may be renewed, extended for any period or rearranged, and the performance by the Borrower of its other obligations hereunder (the Indebtedness and such other obligations being hereinafter sometimes collectively referred to as the "Secured Obligations"), the Borrower hereby assigns to the Lender, and grants to the Lender a first priority security interest in, all the Borrower's right, title, and interest in and to the following property ("Collateral"): (i) the equipment and other property (the "Equipment") described in Exhibit B attached hereto; and (ii) all proceeds, products, replacements, additions to, substitutions for and accessions to any and all Equipment including, without limitation, the proceeds applicable to the insurance referred to in Section 4 hereof.

Equipment shall consist of computers, workstations, peripherals, instrumentation, electronic test equipment, office furniture, certain types of microscopy equipment and other items of equipment approved by Lender. Up to 20% of the Loan may be used for software and tenant improvements.

SECTION 3. REPRESENTATIONS AND WARRANTIES OF BORROWER

The Borrower represents, warrants and agrees that:

3.1 it has good title in and to the Equipment, free of all liens, security interests, encumbrances and claims whatsoever, except for the interest of the Lender therein;

3.2 it has the full power and authority to, and does hereby grant and convey to the Lender, a valid first priority perfected security interest in the Collateral as security for the Secured Obligations, free of all liens, security interests, encumbrances and claims, and shall execute such

Uniform Commercial Code ("UCC") financing statements in connection herewith as the Lender may reasonably request. No other lien, security interest, adverse claim or encumbrance has been created by Borrower or is known by Borrower to exist with respect to any Collateral;

3.3 it is a corporation duly organized, legally existing and in good standing under the laws of the State of Delaware, and is duly qualified as a foreign corporation in all jurisdictions where the failure to so qualify would have a material adverse effect on the Collateral or the business of the Borrower taken as a whole;

3.4 the execution, delivery and performance of the Note, this

Agreement, the Warrant Agreement dated September 25, 1998 pursuant to which Borrower granted to Lender the right to purchase the number of shares of preferred stock as set forth therein ("Warrant Agreement"), and all financing statements, certificates and other documents required to be delivered or executed in connection herewith (collectively, the "Loan Documents") have been duly authorized by all necessary corporate action of Borrower, the individual or individuals executing the Loan Documents were duly authorized to do so, the Equipment is personal property and as used by the Borrower will not be or become fixtures under applicable law, and the Loan Documents constitute legal, valid and binding obligations of the Borrower, enforceable in accordance with their respective terms, subject to applicable bankruptcy, insolvency, reorganization or other similar laws generally affecting the enforcement of the rights of creditors;

3.5 the Loan Documents do not and will not violate any provisions of its Certificate of Incorporation, bylaws or any contract, agreement, law, regulation, order, injunction, judgment, decree or writ to which the Borrower is subject, or result in the creation or imposition of any lien, security interest or other encumbrance upon the Collateral, other than those created by this Agreement;

3.6 the execution, delivery and performance of the Loan Documents do not require the consent or approval of any other person or entity including, without limitation, any regulatory authority or governmental body of the United States or any state thereof or any political subdivision of the United States or any state thereof.

3.7 as of the date hereof no fact or condition exists that would (or could, with the passage of time, the giving of notice, or both) constitute an Event of Default under this Agreement or any of the Loan Documents and no event which has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing. For purposes of this Agreement, "Material Adverse Effect" means a material adverse effect upon (i) the business, operations, properties, assets or financial condition of Borrower; or (ii) the ability of Borrower to perform the Secured Obligations.

SECTION 4. INSURANCE AND RISK OF LOSS

4.1 Risk of loss of, damage to or destruction of the Equipment shall be borne by the Borrower and effective from the date of this Agreement and until the payment and performance in full of all Secured Obligations, Borrower shall at its own expense cause to be carried and maintained all risk casualty insurance (covering risk of fire, theft and other such risks as the Lender may require, including standard and extended coverage) with respect to each item of Equipment in an amount no less than the replacement costs applicable to such item of Equipment during the term of this Agreement. All policies evidencing such casualty insurance shall contain a

standard mortgagee's endorsement and shall provide for at least thirty days prior written notice by the underwriter or insurance company to the Lender in the event of cancellation or expiration. Borrower shall provide Lender with insurance certificates evidencing the foregoing at time of closing.

4.2 If any item of Equipment is lost or rendered unusable as a result of any physical damage to or destruction of such item of Equipment during the period from the date hereof to and including the maturity date under the Note or the date all Secured Obligations hereunder have been fully satisfied, whichever is later, Borrower shall give to Lender prompt notice thereof. Borrower shall determine, within fifteen (15) days after the date of occurrence of such loss, damage or destruction, whether such item of Equipment can be repaired and restored to the condition in which such item of Equipment was required to be maintained as of the date immediately preceding such damage. If Borrower determines that such item of Equipment can be repaired, Borrower, at its expense, shall cause such item of Equipment to be promptly repaired. If Borrower determines that such item of I Equipment is lost or cannot be repaired,

Borrower shall promptly notify the Lender and such item of Equipment shall be deemed to have suffered a "Casualty Loss" for purposes of this Section as of the date of the occurrence of such loss. Within fifteen (15) days following the occurrence of any such loss, damage or destruction, Borrower shall notify the Lender of the item(s) of Equipment which has suffered such Casualty Loss ("Loss Item"), and within thirty (30) days thereafter (the "Settlement Date"), Borrower shall either (a) replace such item(s) of Equipment with equipment of the same model, type and feature configuration, in an operating condition and repair no less than that required hereunder of the damaged or lost equipment immediately prior to the date of such damage or loss, and having a fair market value no less than the Casualty Value (as defined herein) applicable to such item of Equipment as of the date immediately prior to such damage, in which case such replacement equipment shall for all purposes hereunder become part of the Collateral and (without limiting the preceding provisions) Borrower shall grant to Lender a first lien and security interest in respect of such replacement equipment pursuant to the terms of this Agreement, and Borrower shall provide the Lender evidence satisfactory to the Lender of Borrower's good and marketable title to such replacement equipment (free of any liens, security interests or encumbrances other than those created by this Agreement and Borrower shall be entitled to receive the amount of any insurance or other recovery received by Lender up to cost of obtaining the replacement equipment; or (b) so long as no Event of Default or event which with the giving of notice or passage of time, or both, would constitute an Event of Default, has occurred and is continuing, Borrower may provide substitute equipment satisfactory to Lender to become part of the Collateral and Borrower shall grant to Lender a first lien and security interest in respect of such substitute equipment pursuant to the terms of this Agreement, and Borrower shall provide the Lender evidence satisfactory to Lender of Borrower's good and marketable title to such substitute equipment (free of any liens, security interests or encumbrances other than created by this Agreement and Lender shall provide any required endorsements in connection with any insurance proceeds received by Borrower pursuant to such insurance policies; or (c) Borrower shall pay Lender the insurance proceeds payable pursuant to such insurance policies ("Insurance Proceeds") with respect to such Loss Item(s) and the principal amount of the Note (and interest accrued on the principal amount so prepayable) shall become due and payable on the Settlement Date to the extent of the replacement cost for all such Loss Item(s). For purposes of this Section 4.2, Casualty Value shall mean an amount equal to the greater of the fair market value of the Equipment as of the date of the Casualty Loss or the outstanding principal and accrued interest on the Loan. Moneys so received shall be applied, on the date of such receipt, as follows: first, to pay any

accrued interest on the outstanding principal amount of the Note on such date; second, to prepay, the outstanding principal amount of the Note (to the extent of the fair market value attributable to such Loss Item(s)); third, to pay any other Indebtedness of amounts then due and owing to the Lender hereunder; and fourth, so long as there has occurred no Event of Default under Section 8 hereof and no event which with the giving of notice or passage of time or both would constitute an Event of Default, has occurred and is continuing, Borrower and Lender hereby agree that the balance of any such Insurance Proceeds shall be paid promptly to the Borrower.

4.3 Effective upon the date hereof under the Note and while there are any Secured Obligations outstanding, Borrower shall cause to be carried and maintained comprehensive general liability insurance with regard to the Collateral against risks customarily insured against in the Borrower's business. Such risks shall include, without limitation, the risks of death, bodily injury and property damage associated with the Collateral. All policies evidencing such insurance shall provide for at least thirty (30) days prior written notice by the underwriter or insurance company to the Lender in the event of cancellation or expiration.

4.4 Borrower shall and does hereby indemnify and hold Lender, its agents and shareholders harmless from and against any and all claims, costs, expenses, damages and liabilities (including without limitation such claims, costs, expenses, damages and liabilities based on liability in tort including

without limitation strict liability in tort) including reasonable attorneys' fees, arising out of Borrower's ownership, possession, operation, control, use, maintenance, delivery, or other disposition of the Collateral. Notwithstanding the foregoing, Borrower shall not be responsible under the terms of this Section 4.4 to a party indemnified hereunder for any claims, costs, expenses, damages and liabilities occasioned by the negligence or willful misconduct of such indemnified party.

SECTION 5. COVENANTS OF BORROWER

Borrower covenants and agrees as follows at all times while any of the Secured Obligations remain outstanding:

5.1 Borrower shall maintain the Equipment in good operating order, repair, condition and appearance and protect the Equipment from deterioration, other than normal wear and tear. Borrower shall not use the Equipment or permit its use for any purpose other than for which it was designed. Borrower's obligation regarding the maintenance of the Equipment shall include, without limitation, all maintenance, repair, refurbishment and replacement recommended or advised either by the manufacturer, or that commonly performed by prudent business and/or professional practice. Any exceptions or qualifications expressed in this Agreement relating to normal or ordinary wear and tear shall not be deemed to limit Borrower's obligations pursuant to the preceding sentence.

5.2 Borrower shall only relocate any item of the Collateral provided that: (a) it shall have caused to be filed and/or delivered to the Lender all UCC financing statements, certificates or other documents or instruments necessary to continue in effect the first prior perfected security interest of the Lender in the Collateral, and (b) it shall have given the Lender no less than fifteen (15) days prior written notice of such relocation.

5.3 Upon the request of Lender, Borrower shall, during business hours, make the Equipment available to Lender for inspection at the place where it is normally located and shall make Borrower's log and maintenance records pertaining to the Equipment available to the Equipment available to Lender for inspection. Borrower shall take all action necessary to maintain such logs and maintenance records in a correct and complete fashion.

5.4 Upon the request of Lender, Borrower shall cause the Equipment to be plainly, permanently and conspicuously marked, by stenciling or by metal tag or plate affixed thereto, indicating Lender's security interest in the Equipment. Borrower shall replace any such stenciling, tag or plate which may be removed or destroyed or become illegible. Borrower shall keep all Equipment free from any marking or labeling which might be interpreted as a claim of ownership adverse to Borrower's.

5.5 Borrower covenants and agrees to pay when due, all taxes, fees or other charges of any nature whatsoever (together with any related interest or penalties) now or hereafter imposed or assessed against Borrower, Lender or the Collateral or upon Borrower's ownership, possession, use, operation or disposition thereof or upon Borrower's rents, receipts or earnings arising therefrom. Borrower shall file on or before the due date therefor all personal property tax returns in respect of the Collateral.

5.6 Borrower shall furnish to Lender the financial statements listed hereinafter, prepared in accordance with generally accepted accounting principles consistently applied (the "Financial Statements"):

(a) as soon as practicable (and in any event within thirty (30) days) after the end of each month: an internally prepared income statement, balance sheet, and cash flow statement, (including the commencement of any material litigation by or against Borrower), each certified by Borrower's Chief Executive or Financial Officer to be true and correct;

(b) as soon as practicable (and in any event within ninety (90) days) after the end of each fiscal year, audited Financial Statements, setting forth in comparative form the corresponding figures for the preceding fiscal year, and accompanied by any audit report and opinion of the independent certified public accountants selected by Borrower; and

(c) promptly any additional information (including but not limited to tax returns, income statements, balance sheets, and names of principal creditors) as Lender reasonably believes necessary to evaluate Borrower's continuing ability to meet financial obligations.

5.7 Notwithstanding the foregoing, after the effective date of the initial registration statement covering a public offering of Borrower's securities, the term "Financial Statements" shall be deemed to refer to only those statements required by the Securities and Exchange Commission, to be provided no less frequently than quarterly. Borrower will from time to time execute, deliver and file, alone or with Lender, any financing statements, security agreements or other documents; and take all further action that may be necessary, or that Lender may reasonably request, to confirm, perfect, preserve and protect the security interests intended to be granted hereby, and in addition, and for such purposes only, Borrower hereby authorizes Lender to execute and deliver on behalf of Borrower and to file such financing statements, security

agreement and other documents without the signature of Borrower either in Lender's name or in the name of Borrower as agent and attorney-in-fact for Borrower.

5.8 Borrower shall protect and defend Borrower's title as well as the interest of the Lender against all persons claiming any interest adverse to Borrower or Lender and shall at all times keep the Collateral free and clear from any attachment or levy, liens or encumbrances whatsoever (except any placed thereon by Lender, or any liens arising by operation of law with respect to any obligations not yet overdue or any other liens consented to in writing by Lender) and shall give Lender immediate written notice thereof.

SECTION 6. CONDITIONS PRECEDENT TO LOAN

The obligation of Lender to fund the Loan on each Advance Date(s) shall be subject to satisfaction by Borrower or waiver by Lender, in Lender's sole discretion, of the following conditions:

6.1 (a) The Advance Date(s) for any installment shall occur on or before September 25, 1999.

6.2 DOCUMENT DELIVERY. Borrower, on or prior to the Closing Date, shall have delivered to Lender the following, in form and substance reasonably satisfactory to Lender:

(a) executed originals of the Agreement, Note(s), Warrant Agreement and any documents reasonably required by Lender to effectuate the liens of Lender, with respect to all Collateral;

(b) certified copy of resolutions of Borrower's board of directors evidencing approval of the borrowing and other transactions evidenced by the Loan Documents;

(c) certified copies of the Certificate of Incorporation and the Bylaws of Borrower, as amended through the Closing Date;

(d) certificate of good standing for Borrower from its state of incorporation and similar certificates from all other

jurisdictions in which it does business and where the failure to be qualified would have a Material Adverse Effect;

(e) such other documents as Lender may reasonably request.

6.3 ADVANCE REQUEST. Borrower, on or prior to each Advance Date(s), shall have delivered to Lender the following:

(a) a minimum of two (2) business days prior to the Advance Date(s), written notice in the form of an Advance Request, or as otherwise specified by Lender from time to time, specifying amount of such Advance and wire transfer instructions;

(b) such other documents as Lender may reasonably request.

6.4 PERFECTION OF SECURITY INTERESTS. Borrower shall have taken or caused to be taken such actions requested by Lender to grant Lender a first priority perfected security interest in the Collateral. Such actions shall include, without limitation, the delivery to Lender of all appropriate financing statements, executed by Borrower, as to the Collateral granted by Borrower for all jurisdictions as may be necessary or desirable to perfect the security interest of Lender in such Collateral

6.5 ABSENCE OF EVENTS OF DEFAULTS. As of the Closing Date or the Advance Date, no fact or condition exists that would (or would, with the passage of time, the giving of notice, or both) constitute an Event of Default under this Agreement or any of the Loan Documents.

6.6 MATERIAL ADVERSE EFFECT. As of the Closing Date or the Advance Date, no event which has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

SECTION 7. ASSIGNMENT BY LENDER

7.1 Borrower acknowledges and understands that Lender may sell and assign all or a part of its interest hereunder and under the Note and Loan Documents to any person or entity (an "Assignee"). After such assignment the term Lender shall mean such Assignee, and such Assignee shall be vested with all rights, powers and remedies of Lender hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, the Lender shall retain all rights, powers and remedies hereby given. No such assignment by Lender shall relieve Borrower of any of its obligations hereunder. Borrower shall acknowledge such assignment or assignments as shall be designated by written notice given by Lender to Borrower. The Lender agrees that in the event of any transfer by it of the Note, it will endorse thereon a notation as to the portion of the principal of the Note which shall have been paid at the time of such transfer and as to the date to which interest shall have been last paid thereon.

SECTION 8. DEFAULT

The occurrence of any one or more of the following events (herein called "Events of Default") shall constitute a default hereunder and under the Note:

8.1 The Borrower defaults in the payment of any principal or interest payable under this Agreement, the Note or any of the other Loan Documents and such default continues for more than five (5) days after the due date thereof;

8.2 The Borrower defaults in the payment or performance of any other covenant or obligation of the Borrower hereunder or under the Note or any other Loan Documents for more than ten (10) days after the Lender has given

notice of such default to the Borrower;

8.3 Any representation or warranty made herein by the Borrower shall prove to have been false or misleading in any material respect;

8.4 The making of an assignment by Borrower for the benefit of its creditors or the admission by Borrower in writing of its inability to pay its debts as they become due, or the insolvency of Borrower, or the filing by Borrower of a voluntary petition in bankruptcy, or the

adjudication of Borrower as a bankrupt, or the filing by Borrower of any petition or answer seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution, or similar relief under any present or future statute, law or regulation, or the filing of any answer by Borrower admitting, or the failure by Borrower to deny, the material allegations of a petition filed against it for any such relief, or the seeking or consenting by Borrower to, or acquiescence by Borrower in, the appointment of any trustee, receiver or liquidator of Borrower or of all or any substantial part of the properties of Borrower, or the inability of Borrower to pay its debts when due, or the commission by Borrower of any act of bankruptcy as defined in the Federal Bankruptcy Act, as amended;

8.5 The failure by Borrower, within sixty (60) days after the commencement of any proceeding against Borrower seeking any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, to obtain the dismissal of such proceeding or, within sixty (60) days after the appointment, without the written consent or acquiescence of Lender, of any trustee, receiver or liquidator of Borrower or of all or any substantial part of the properties of Borrower, to vacate such appointment; or

8.6 The default by Borrower under any other notes or other agreement for borrowed money, lease or other agreement between Borrower and Lender.

SECTION 9. REMEDIES

Upon the occurrence hereof of any one or more Events of Default, Lender, at its option, may declare the Note to be accelerated and immediately due and payable, (provided, that upon the occurrence of an Event of Default of the type described in 8.4 or 8.5, the Note and all other Secured Obligations shall automatically be accelerated and made due and payable without any further act) whereupon the unpaid principal of and accrued interest on such Note shall become immediately due and payable, and shall thereafter bear interest at the Default Rate and calculated in accordance with Section 1.2. Lender may exercise all rights and remedies with respect to the Collateral granted pursuant hereto for such Note, or otherwise available to it under applicable law, including the right to release, hold or otherwise dispose of all or any part of the Collateral and the right to utilize, process and commingle the Collateral.

Upon the happening and during the continuance of any Event of Default, Lender may then, or at any time thereafter and from time to time, apply, collect, sell in one or more sales, lease or otherwise dispose of, any or all of the Collateral, in its then condition or following any commercially reasonable preparation or processing, in such order as Lender may elect, and any such sale may be made either at public or private sale at its place of business or elsewhere. Borrower agrees that any such public or private sale may occur upon five (5) calendar day's notice to Borrower. Lender may require Borrower to assemble the Collateral and make it available to Lender at a place designated by Lender which is reasonably convenient to Lender and Borrower, The proceeds of any sale, disposition or other realization upon all or any part of the collateral shall be distributed by Lender in the following order of priorities:

First, to Lender in an amount sufficient to pay in full Lender's reasonable costs and professionals' and advisors' fees and expenses;

Second, to Lender in an amount equal to the then unpaid amount of the Secured Obligations in such order and priority as Lender may choose In its sole discretion; and

Finally, upon payment in full of all of the Secured Obligations, to Borrower or its representatives or as a court of competent jurisdiction may direct.

The Lender shall return to the Borrower any surplus Collateral remaining after payment of all Secured Obligations.

SECTION 10. MISCELLANEOUS

10.1 Borrower shall remain liable to Lender for any unpaid Secured Obligations, advances, costs, charges and expenses, together with interest thereon and shall pay the same immediately to Lender at Lender's offices.

10.2 The powers conferred upon Lender by this Agreement are solely to protect its interest in the Collateral and shall not impose any duty upon Lender to exercise any such powers.

10.3 This is a continuing Agreement and the grant of a security interest hereunder shall remain in full force and effect and all the rights, powers and remedies of Lender hereunder shall continue to exist until the Secured Obligations are paid in full as the same become due and payable. When Borrower has paid in full all Secured Obligations, Lender will execute a written termination statement, reassigning to Borrower, without recourse, the Collateral and all rights conveyed hereby and return possession (if Lender has possession) of the Collateral to Borrower. The rights, powers and remedies of Lender hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of any other rights, powers and remedies of Lender. Furthermore, regardless of whether or not the UCC is in effect in the jurisdiction where such rights, powers and remedies are asserted, Lender shall have the rights, powers and remedies of a secured party under the UCC.

10.4 Upon payment in full of all Secured Obligations, the Lender shall cancel the Note, this Agreement and all UCC financing statements, if any, and shall promptly deliver all such canceled documents to the Borrower.

10.5 GOVERNING LAW. This Agreement, the Note and the other Loan Documents have been negotiated and delivered to Lender in the State of Illinois and shall not become effective until accepted by Lender in the State of Illinois. Payment to Lender by Borrower of the Secured Obligations is due in the State of Illinois. This Agreement shall be governed by, and construed and enforced in accordance with the laws of the State of Illinois excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

10.6 CONSENT TO JURISDICTION AND VENUE. All judicial proceedings arising in or under or related to this Agreement, the Note or any of the other Loan Documents may be brought in any state or federal court of competent jurisdiction located in the State of Illinois. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to personal jurisdiction in Cook County, State of Illinois; (b) waives any objection as to jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement, the Note and the other Loan Documents. Service of

process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for

notice set forth in Section 10.8 below and shall be deemed effective and received as set forth in Section 10.8 below. Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

10.7 Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

10.8 Any notice required or given hereunder shall be deemed properly given upon the earlier of: (i) the first business day after transmission by facsimile or hand delivery or deposit with an overnight express service or overnight mail delivery service; or (ii) or three (3) days after mailed, postage prepaid, in each case, addressed to the designated recipient at its address set forth herein or such other address as such party may advise the other party by notice given in accordance with this provision.

10.9 Lender and Borrower acknowledge that there are no agreements or understandings, written or oral, between Lender and Borrower with respect to the Loan, other than as set forth herein, in the Note and the other Loan Documents and that this Agreement, the Note and the other Loan Documents contain the entire agreement between Lender and Borrower with respect thereto. None of the terms of this Agreement, the Note and the other Loan Documents may be amended except by an instrument executed by each of the parties hereto.

10.10 No omission, or delay, by Lender at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by Borrower at any time designated, shall be a waiver of any such right or remedy to which Lender is entitled, nor shall it in any way affect the right of Lender to enforce such provisions thereafter.

10.11 All agreements, representations and warranties contained in this Agreement or the Note, or in any Loan Documents delivered pursuant hereto or in connection herewith shall be for the benefit of Lender and any Assignee and shall survive the execution and delivery of this Agreement or the Note and the expiration or other termination of this Agreement or the Note.

10.12 This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

10.13 This Agreement shall be binding upon, and shall inure to the benefit of, Borrower and its permitted assigns (if any). Borrower shall not assign its obligations under this Agreement, the Note or any of the other Loan Documents without Lender's express written consent and any such attempted assignment shall be void and of no effect. Any assignment by Borrower in connection with a "Merger" (as defined below) shall be subject to Lender's prior consent. Any consent granted by Lender shall be conditioned upon such surviving entity or transferee assuming Borrower's Secured Obligations hereunder pursuant to assignment documents reasonably acceptable to Lender. If Lender reasonably withholds its consent to such assignment in

connection with a Merger, the outstanding principal and accrued and unpaid interest shall be prepaid in whole without a prepayment premium.

For purposes of this Agreement, a "Merger" shall mean any consolidation or merger of the Borrower with or into any other corporation or entity, any sale or conveyance of an or substantially all of the assets or stock of the Borrower by or to any other person or entity in which Borrower is not the surviving entity.

IN WITNESS WHEREOF, the Borrower and the Lender have duly executed and delivered this Agreement as of the day and year first above written.

BORROWER: CYTOKINETICS, INCORPORATED.

By: /s/ Jon C. Richards

Title: Chief Financial Officer
Date: 10-1-98

ACCEPTED IN ROSEMONT, ILLINOIS:

LENDER: COMDISCO, INC.

By: /s/ JAMES P. LABE

Title: PRESIDENT
COMDISCO VENTURES DIVISION

Date: SEP 30 1998

EXHIBIT 4.4

Amendment No. One to Loan and Security Agreement

This Amendment Agreement No. One ("Amendment") to the Loan and Security Agreement dated as of September 25, 1998 is entered into this 1st day of February, 1999 by and between Cytokinetics, inc., a Delaware corporation, with its chief executive offices and principal place of business at 280 East Grand Avenue Suite 2, South San Francisco, CA 94080 ("Borrower") and Comdisco, Inc., a Delaware corporation, with its chief executive offices and principal place of business at 6111 North River Road, Rosemont, IL 60018 ("Lender").

RECITALS

WHEREAS, pursuant to the terms and conditions set forth in the Loan and Security Agreement dated as of September 25, 1998 between Borrower and Lender (hereinafter, "Loan Agreement"), the parties have entered into that certain Secured Promissory Note dated February 3, 1999 herewith (the "Note(s)") whereby for value received, Borrower promises to pay certain payments to Lender in the principal amount of Six Hundred Sixty Two Thousand Six Hundred Ninety four and 81/100 Dollars ($662,694.81);

WHEREAS, in connection with the issuance of the Note, Lender and Borrower wish to amend the Loan Agreement to include the Exhibit B as required under the Loan Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and mutual agreements contained herein, Borrower and Lender hereby agree as follows:

1. Except as expressly set forth herein, all terms used herein shall have the meanings set forth in the Loan Agreement.

2. Borrower and Lender agree that the Exhibit B attached hereto shall be incorporated and made a part of the Loan Agreement and the equipment described thereon shall be "Equipment" as set forth in the Loan Agreement.

3. Except as specifically amended hereby, the terms and conditions of the Loan Agreement are hereby reaffirmed and remain in full force and effect, and from and after the date hereof the "Agreement" shall mean the "Agreement" as amended by this Amendment.

4. This Amendment may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Borrower and Lender have duly executed and delivered this Amendment as of the day and year first above written.

BORROWER — CYTOKINETICS, INC.

Signature: /s/ Jon C. Richards

Print Name: Jon C. Richards

Title: Chief Financial Officer

ACCEPTED IN ROSEMONT, ILLINOIS

LENDER — COMDISCO, INC.

Signature: /s/ Jill Hanses

Print Name: Jill Hanses

Title: SRVP

EXHIBIT B

Cytokinetics, Inc.

REF#	VENDOR	DATE REC/INV	PO#	INVOICE #	DESCRIPTION (brief)	SERIAL #	COST
Furniture							
8	Corp Int	8-Sep		1085-1	Desk-director 3x24 corner, 4x24 ret	N/A	1,165.00
8	Corp Int	8-Sep		1085-1	Desk-director locking pedestal	N/A	1,165.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-shared	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-adm	N/A	1,100.00
8	Corp Int	8-Sep		1085-1	desks-adm	N/A	1,100.00
253	Item	20-Oct	CS10198	87449 CA	Work Station	No S/N	778.11
254	Item	20-Oct	CS10198	87449 CA	Work Station	No S/N	778.11
							23,686.22
LAB EQ:							
1	VWR	28-Aug	CY185	13218620	Freezer, gen upright 20.9cft (-20)	U17H391576VH	895.00
2	VWR	5-Aug	CY108	277640	Generator PT DA 21 1 2/2EC	H2840271366211F	1,016.00
2	VWR	10-Aug	CY164	10480030	Nanopure infinity UV/UF 120V	899980816921	4,033.00
2	VWR	11-AUQ	CY110	58752390	Freezer uprt auto/DF 23.3cft (-80)	U10H39050UH	4,190.55
2	VWR	11-Aug	CY209	292020	Radiation SRVY w/Probet	9825-319	625.00
2	VWR	13-Aug	CY108	11293240	Polytron, PTMR2100 Homogenizer	324474	1,196.00
3	VWR	29-Jul	061798C	57664663	Dual slab gelkit 220MM	NO S/N	643.80
4	VWR	17-Jul	CY110	58832690	Oven, Hybridiser, techne HB-1D	826905-8	2,931.75
5	VWR	9-Jul	CY110	58752380	Incubator, CSA model 1 545	1103097	1,450.52
5	VWR	9-Jul	CY110	58752380	Incubator, WTR JKT model 3015	600298	2,397.95
5	VWR	8-Jul	CY108	192070	Generator PT-DA2107/2EC	H284027136613G	888.00
5	Beckman	9-Jul	CY110	58752400	Afgra 6R rfrg bnch cntrifuge	ALR98G01	6,556.00

5	VWR	9-Jul	CY110	58752400	GH-3.8 Horiz rotor w/4 ALM	98U 20801	2,133.50
5	VWR	9-Jul	CY110	58752400	Carrier assy, mtcroplus	Consumable	977.50
14	PE Bio	4-Jul	CY107	90172820	Analyzer, general 100/120V (system)	100000668	55,000.00
16	Tech Ins	22-Jul	CY138	102160	TMS mainbody W/B INO w/ lenses.eye	To be returned	3,127.59
20	Stratgen	21-Jul	CY153	670159	Stratalinker 2400, 120V	9823647	1,435.50
23	MJ Research	11-Aug	980615	50435	DNA engine chassis	EN007984	5,495.00
24	MJ Research	11-Aug	980615	50435	Dual Alpha PTC 200/225	ALO18393	2,495.00

REF#	VENDOR	TOTAL	CK#			% FUNDED	TOTAL FUNDED
Furniture							
8	Corp Int	1,165.00	2196/2077			80%	$ 932.00
8	Corp Int	1,165.00	2196/2077			80%	$ 932.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 830.00
8	Corp Int	1,100.00	2196/2077			80%	$ 88000
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880,00
8	Corp int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
8	Corp Int	1,100.00	2196/2077			80%	$ 880.00
253	Item	778.11	VISA	778.11	accrue	100%	$ 778.11
254	Item	778.11	VISA	778.11	accrue	100%	$ 778.11
		23,686.22			ok		$19,260.22
LAB EQ:							
1	VWR	895.00	2187	895.00		80%	$ 716,00
2	VWR	1,016.00	2186			80%	$ 812.80
2	VWR	4,033.00	2186			80%	$ 3,226.40
2	VWR	4,190.55	2186			80%	$ 3,352.44
2	VWR	625.00	2186			80%	$ 500.00
2	VWR	1,196.00	2186	11,060.55		80%	$ 956.80
3	VWR	643.80	2110	643.80		80%	$ 515.04
4	VWR	2,931.75	2072	2,931.75		80%	$ 2,345.40
5	VWR	1,450.52	2056			70%	$ 1,015.36
5	VWR	2,397.95	2056			70%	$ 1,678.57
5	VWR	888.00	2056			70%	$ 621.60
5	Beckman	6,556.00	2056			70%	$ 4,589.20
5	VWR	2,133.50	2056			70%	$ 1,493.45
5	VWR	977.50	2056	14,403.47		70%	$ 684.25
14	PE Bio	55,000.00	2087	55,000.00		70%	$38,500.00
16	Tech Ins	3,127.59	2098	3.127.59		80%	$ 2,502.07
20	Stratgen	1,435.50	2130	1,435.50		80%	$ 1,148.40
23	MJ Research	5,495.00	2174			80%	$ 4,396.00

24	MJ Research	2,495.00	2174	80%	$ 1,996.00

1/29/99

Cytokinetics, Inc.

REF #	VENDOR	DATE REC/INV	PO#	INVOICE #	DESCRIPTION	SERIAL #	COST
26	MJ Research	11-Aug	980615	50435	Minicycler 16W Hot Bonnet	MC008706	2,995.00
29	Savant	31-Jul	Cy125	155171	Gel pump w/charcoal filter	GEP140-9G310051-1	2,085.00
32	Cryosafe	2-Sep	Cy239	578	Liquid Nitrogen auto till liquid tank	562007PS9809	5,495.00
33	Cryosafe	2-Sep	Cy239	578	Complete invt sys	562007P89S09	1,100.00
37	Savant	11-Sep	CY260	156820	DNA speedvac & rotor	110-813470196-1G	4,072.50
39	Molecular Dev	15-Sep	Shumate	C. Shumate exp rept	Spectramax 340, softmax pro	MO1115 (LO2022)	12,800.00
200	BioRad	15-Sep	91498	1430358	Ultramark Microplate Reader	10006	19,995.00
201	BioRad	31-Jul	CY173	1402499	Econo Pump Model EP-1	700-BR08532	1,315.37
202	Beckman	6-Oct	CY313	352838FT01	Rotor Assy/w bottle cap, PP & AY	98U1947	4,482.28
203	Beckman	8-Oct	CY313	352838FT02	J2-HS Centrifuge 208V 60HZ	CJA98K01	11,631.90
204	Beckman	10-Sep	CY244	349358FT01	Multimek 96 Pipettor	304181APS	46,350.00
205	Beckman	10-Sep	CY244	349358FT01	Multimek Pro Software	304181APS	5,000.00
206	Beckman	10-Sep	CY244	349358FT01	Disposable Tip Wash System	304181APS	6,000.00
207	Beckman	2-Oct	CY266	348803FT00A	SW55TI Swinging Bucket Titanium Rotor	98U2605	8,160.00
208	Beckman	2-Oct	CY266	348803FT00A	DU 640 UV/VIS Scanning Spcetrophotometer	4323214	7,140.00
209	Beckman	2-Oct	CY266	348803FT00A	Transport	4323214	659.60
210	Beckman	2-Oct	CY266	348803FT00A	Micro Auto 6 Cell Holder unheated	4323214	673.20
211	Beckman	2-Oct	CY266	348803FT00A	External Storage Device	4323214	584.80
212	Beckman	2-Oct	CY266	348803FT00A	UV Silica Cuvette (set4)	4323214	530.40
213	Beckman	2-Oct	CY266	348803FT00A	Optima TLX Ultracentrifuge	CTX98G04	21,938.07
214	Beckman	2-Oct	CY266	348803FT00A	TLA 110 Fixed Angle Titanium Rotor Pkg	98U314	4,726.00
215	Beckman	2-Oct	CY266	348803FT00A	TLA 100 Fixed Angle Titanium Rotor Pkg	98U1338	3,066.80
216	Beckman	2-Oct	CY266	348803FT00A	Avanti J-25 Centrifuge for 50/60 HX	JHX98K02	14,756.00
217	Beckman	2-Oct	CY266	348803FT00A	JA 25.50 Fixed Angle Rotor Assy	JHX98K02	2,352.80
218	Beckman	2-Oct	CY266	348803FT00A	JLA-16 Rotor w/single locking lid	98U752	3,284.00
219	Beckman	2-Oct	CY266	348803FT00A	Optima LE 80 K preparative Untracentrifuge	COL9840	27,404.00
220	Beckman	2-Oct	CY266	348803FT00A	Type 19 Fixed angle Alum. Rotor Assy	98E3701	5,508.00
221	Beckrnan	2-Oct	CY266	348803FT00A	Type 45TI Fixed angle titanium Rotor Assy	98U3423	7,344.00
222	Beckman	2-Oct	CY266	348803FT00A	Type 70.1 Fixed angle Titan. Rotor Assy	98U3968	7,208.00
223	ComDisco	8-Oct		12910	New Brunswick Orbital Shaker G-25	190524971	3,360.00
224	ComDisco	8-Oct		12910	New Brunswick Orbital Shaker G-25	181188	3,360.00
225	CCS Packard	14-Sep	9149802	3090407	Jun-Air Compressor w/air hose	405282	1,550.00
226	Forma Scient	18-Sep	CY243	2735850	Lab Glassware Dryer	18937-514	7,428.00
227	Forma Scient	16-Sep	CY263	2738190	Bio Safe Cab TT 6Ft SLD	19497-69	5,090.00
230	MicroSource	22-Sep	CY294	94728	MicroSource Plates "Killer' Plate	N/A	1,100.00
231	VWR	22-Sep	CY261	13582370	55702-497 REF,Chr,VWR49C,FS,MST,115VT	12076807	2,996.94
232	VWR	18-Sep	CY252	13463890	Scotsman 325 Ice Flaker	051918-03N	2,675.00
233	VWR	17-Sep	CY185	13124400	Revco/Lindberg 24.4 CuFt Upright (-80)	80508h-381550-SH	8,398.00
234	VWR	29-Sep	CY314	432300	Bath.GP. Microcntl CSA 5.5L1 1 5VT	698060478	576.90
235	VWR	5-Oct	CY318	15794230	Storage Mat Applicator	No SIN	904.76
236	VWR	5-Oct	CY317	15769580	Elect Pip 8CH	N72553	786.05
7	VWR	25-Jun	061798C	57664630	Micro centrfg, epp 5417C 115V	3929	1,905.00
7	VWR	25-Jun	061798C	57664630	Micro centrfg, epp 5417C 115V	9165	1,905.00
7	VWR	25-Jun	061798C	57664630	Micro centrfg, epp 5417C 115V	8991	1,905.00

REF#	VENDOR	TOTAL	CK#	% FUNDED	TOTAL FUNDED

26	MJ Research	2,995.00	2174	10,985.00		80%	$	2,396.00
29	Savant	2,085.00	2180	2,085.00		80%	$	1,668.00
32	Cryosafe	5,495.00	2213		accrue	80%	$	4,396.00
33	Cryosafe	1,100.00	2213	6,595.00	accrue	80%	$	880.00
37	Savant	4,072.50	2238	4,072.50		100%	$	4,072.50
39	Molecular Dev	12,800.00	2252	12,800.00		100%	$	12,800.00
200	BioRad	19,995.00	2273			100%	$	19,995.00
201	BioRad	1,315.37	2273	21,310.37		80%	$	1,052.30
202	Beckman	4,482.28	2274			100%	$	4,482.28
203	Beckman	11,631.90	2274			100%	$	11,631.90
204	Beckman	46,350.00	2274			80%	$	37,080.00
205	Beckman	5,000.00	2274			80%	$	4,000,00
206	Beckman	6,000.00	2274	73,464.18		80%	$	4,800.00
207	Beckman	8,160.00	2275			100%	$	8,160.00
208	Beckman	7,140.00	2275			100%	$	7,140.00
209	Beckman	659.60	2275			100%	$	659.60
210	Beckman	673.20	2275			100%	$	673.20
211	Beckman	584.80	2275			100%	$	584.80
212	Beckman	530.40	2275			100%	$	530.40
213	Beckman	21,938.07	2275			100%	$	21,938.07
214	Beckman	4,726.00	2275			100%	$	4,726.00
215	Beckman	3,066.80	2275			100%	$	3,066.80
216	Beckman	14,756.00	2275			100%	$	14,756.00
217	Beckman	2,352.80	2275			100%	$	2,352.80
218	Beckman	3,284.00	2275			100%	$	3,284.00
219	Beckman	27,404.00	2275			100%	$	27,404.00
220	Beckman	5,508.00	2275			100%	$	5,508.00
221	Beckrnan	7,344.00	2275			100%	$	7,344.00
222	Beckman	7,203.00	2275	115,335.67		100%	$	7,208.00
223	ComDisco	3,360.00	2279			100%	$	3,360.00
224	ComDisco	3,360.00	2279	6,720.00		100%	$	3,360.00
225	CCS Packard	1,550.00	2282	1,550.00		100%	$	1,550.00
226	Forma Scient	7,428,00	2292			100%	$	7,428.00
227	Forma Scient	5,090.00	2292	12,518.00		100%	$	5,090.00
230	MicroSource	1,100.00	2300	1,100.00	accru	100%	$	1,100.00
231	VWR	2,996.94	2324			100%	$	2,996.94
232	VWR	2,675.00	2324			100%	$	2,675.00
233	VWR	8,398.00	2324			100%	$	8,398.00
234	VWR	576.90	2324			100%	$	576.90
235	VWR	904.76	2324			100%	$	904.76
236	VWR	786.05	2324	16,337.65		100%	$	786.05
7	VWR	1,905.00	2015			70%	$	1,333.50
7	VWR	1,905.00	2015			70%	$	1,333.50
7	VWR	1,905.00	2015			70%	$	1,333.50

Cytokinetics, Inc.

REF #	VENDOR	DATE REC/INV	PO#	INVOICE #	DESCRIPTION	SERIAL #
7	VWR	25-Jun	061798C	57664630	Micro centrfg, epp 5417C 115V	8992
7	VWR	25-Jun	061798C	57664630	Micrcent refrig, w/o rotor 115V	540703929
7	VWR	25-Jun	061798C	57664630	Platform, rocking VWR100	8906011
7	VWR	25-Jun	061798C	57664630	Platform, rocking VWR100	980601A

7	VWR	25-Jun	061798C		57664630	Platform, rocking VWR100	980601F
7	VWR	25-Jun	061798C		57664630	Vortex mixer, multi tube	1071
7	VWR	25-Jun	061798C		57664630	Balance, analyt premier	116040045
7	VWR	25-Jun	061798C		57664630	PH meter, 430 meter w/kit 120V	3889
7	VWR	1-Jul	061798C		57664640	Lauda circ, E 106T, 115V/60HZ	W09037
7	VWR	1-Jul	061798C		57664640	Lauda circ, E 106T, 115V/60HZ	W09035
7	VWR	26-Jun	061798C		57664660	Dual slab gelkit 220MM	No S/N
7	VWR	26-Jun	061798C		57664661	Transillum, dual, Bnch TP VWR115VT	060898-006
7	VWR	25-Jun	061798C		57664670	Balance, PRF, LVL, Delta, PR5002DRT	1117151544
7	VWR	8-Jul	061798C		57664632	Shakr orbit micp roc CNT 110V	960
7	VWR	8-Jul	061798C		57664632	Shakr orbit micp roc CNT 110V	958
7	VWR	8-Jul	061798C		57664632	Shakr orbit micp roc CNT 110V	963
7	VWR	8-Jul	061798C		57664633	Finnpette digitl 12ch	F501984510050
7	VWR	2-Jul	061798C		57664631	Finnpette dig.12ch 50-300UL	FS9064
7	VWR	9-Jul	061798C		57664651	Ultrason cell distr 1/2 IN/450	C080306G
83	BioRad	22-Jui	CY134		1396445	Uno Column	347BR2689
84	BioRad	22-Jul	CY134		1396445	Auto Steam Select Valve	347BR2689
85	BioRad	22-Jul	CY134		1396445	Auto Steam Select Valve	347BR2689
93	BioRad	22-Jul	CY134		1396445	Select Valve	347BR2689
94	BioRad	22-Jul	CY134		1396445	Select Valve	347BR2689
86	BioRad	23-Jul	CY134		1396830	Auto Biologic System	347BR2689
87	BioRad	23-Jul	CY134		1396830	Biologic Dynaloop kit	347BR2689
88	BioRad	31-Jul	CY173		1402499	Econo Pump, model EP-1, 110V	700BR08532
81	Life Tech	28-Jul	CY165		743380	EDAS 120 system	EKB74902512
80	BioRad	12-Aug	CY134		1409267	Dynaloop 90ML replacement loop	347BR2689
82	Microfluids	19-Aug	CY201		3793	M110S Large Pump Assy	98058
89	PEBio	14-Sep			90194114	TF, Kit BDT PR-100	No S/N
90	PEBio	14-Sep			90196900	10MMD/250MML Glass Column	No S/N
245	Beckman	29-Oct	CY313	352838FT03		JLA-16 Rotor w/single locking lid	98U752
246	CCS Packard	6-Oct	CY253		3100462	Platestak, scanner, deck	1347
247	CCS Packard	6-Oct	Cs100698		3100458	500ML Birdfeeder	N/A
249	MXR	8-Oct	CY266		369682	Konica SRX-101 Processor	105210881
	WXR	29-Oct			370525	SRX-101 Film Processor	105210881
250	Therm-X	26-Oct	CY347		54128	Watlow Mini Benchtop controller/couple	P/N Mini TR-00-000 (No S/N)
251	PE Bio	4-Jul	CY107		90172820	Genetic Analyzer 100/120V 310	100000668
252	Univ. Imaging	23-Oct	CY269		6623	Hamamtsu C4742-95 12 Bit Interline Camera with 2x2 or 4x4 binning	270465
252	Univ. Imaging	23-Oct	CY269		6623	Acquisition Option for Hamamatsu Camera	270465

REF#	VENDOR	COST	TOTAL	CK#		% FUNDED	TOTAL FUNDED
7	VWR	1,905.00	1,905.00	2015		70%	$ 1,333.50
7	VWR	5,033.00	5,033.00	2015		70%	$ 3,523.10
7	VWR	567.00	567.00	2015		70%	$ 396.90
7	VWR	567.00	567.00	2015		70%	$ 396.90
7	VWR	567.00	567.00	2015		70%	$ 396.90
7	VWR	1,081.00	1,081.00	2015		70%	$ 756.70
7	VWR	5,466.00	5,466.00	2015		70%	$ 3,826.20
7	VWR	567.88	567.88	2015		70%	$ 397.52
7	VWR	1,186.25	1,186.25	2015		70%	$ 830.38
7	VWR	1,186.25	1,186.25	2015		70%	$ 830.38
7	VWR	643.80	643.80	2015		70%	$ 450.66
7	VWR	1,108.51	1,108.51	2015		70%	$ 775.96
7	VWR	2,796.00	2,796.00	2015		70%	$ 1,957.20
7	VWR	982.55	982.55	2015		70%	$ 687.79
7	VWR	982.55	982.55	2015		70%	$ 687.79
7	VWR	982.55	982.55	2015		70%	$ 687.79
7	VWR	573.18	573.18	2015		70%	$ 401.23
7	VWR	573.18	573.18	2015		70%	$ 401.23
7	VWR	2,296.00	2,296.00	2015	34,779.70	70%	$ 1,607.20

83	BioRad	997.50	997.50	2139			80%	$	798.00
84	BioRad	855.00	855.00	2139			80%	$	684.00
85	BioRad	855.00	855.00	2139			80%	$	684.00
93	BioRad	506.25	506.25	2139			80%	$	405.00
94	BioRad	506.25	506.25	2139			80%	$	405.00
86	BioRad	22,311.00	22,311.00	2139			80%	$	17,848.80
87	BioRad	697.50	697.50	2139			80%	$	558.00
88	BioRad	1,350.00	1,350.00	2139/2273	28,078.50		80%	$	1,080.00
81	Life Tech	3,141.00	3,141.00	2140	3,141.00		80%	$	2,512.80
80	BioRad	645.00	645.00	2155	645.00		80%	$	516.00
82	Microfluids	23,800.00	23,800.00	2175	23,800.00		80%	$	19,040.00
89	PEBio	675.00	675.00	2201			100%	$	675.00
90	PEBio	575.00	575.00	2201	1,250.00		100%	$	575.00
245	Beckman	2,956.44	2,956.44	2353	2,956.44		100%	$	2,956.44
246	CCS Packard	23,225.00	23,225.00	2356	23,225.00		100%	$	23,225.00
247	CCS Packard	1,100.00	1,100.00	accrued	1,100.00		100%	$	1,100.00
249	MXR	3,812.00	3,812.00	2374	3,812.00		100%	$	3,812.00
	WXR	3,812.00	3,812.00	2301	3,812.00	no invo	100%	$	3,812.00
250	Therm-X	658.00	658.00	2389	658.00		100%	$	658.00
251	PE Bio	55,000.00	55,000.00	2087	55,000.00		70%	$	38,500.00
252	Univ. Imaging	14,900.00	14,900.00	2392			100%	$	14,900.00
252	Univ. Imaging	4,800.00	4,800.00	2392			100%	$	4,800.00

REF #	VENDOR	DATE REC/INV	PO#	INVOICE #	DESCRIPTION	SERIAL #	COST
252	Univ. Imaging	23-Oct	CY269	6623	Lamda Light Source with 175 W Ozone Free Bulb	N/A	3,985.00
252	Univ. Imaging	23-Oct	CY269	6623	Liquid Light Guide for Lambda-10C	N/A	1,400.00
252	Univ. Imaging	23-OCt	CY259	6623	Epi Replacement Adapter for Zeiss Inverted Scope	N/A	700.00
252	Univ. Imaging	23-Oct	CY269	6623	Sutter LS cold Mirror and Adapter	N/A	600.00
252	Univ. Imaging	23-Oct	CY269	6623	Lambda-10 Ten Position Filter Whieel with Shutter	N/A	5,650.00
252	Univ. Imaging	23-Oct	CY269	6623	Lambda-10 Excitation Adapter for Zeiss AxioVert	N/A	200.00
252	Univ. Imaging	23-Oct	CY269	6623	2 Axis (X,Y) Motor controler	9009	4,200.00
252	Univ. Imaging	23-Oct	CY269	6623	Prior Motorized Travel Stage for Inv. Scopes	3966	6,350.00
252	Univ. Imaging	23-Oct	CY269	6623	Prior Specimen Holder for H 107 Stage	N/A	350.00
252	Univ. Imaging	23-Oct	CY269	6623	Prior 9 pin. RS-232 cable	N/A	50.00
237	Zymark	16-Sep	CY245	105607	Twister-zymark, 110V/220V & kit ext. landscape finger	TW9838N0227	10,050.00
							609,863.67

COMPUTER HARDWARE:							
40	Sabry	8-Apr	catalog	153620042	Dell dimension system	DY3KP	3,345.00
41	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB	1S656284U23XCKX4	1,301.00
42	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB	1S656284U23XCRL7	1,301.00
43	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB	1S656284U23XCKC7	1,002.00
44	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB	1S656284U23XCPG8	1,002.00
45	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB	1S656284U23XCKN9	1,002.00
46	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB	1S656284U23XCPT4	1,002.00
47	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB	1S656284U23XCKV3	1,002.00
48	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB	1S656284U23XCPY4	1,002.00
49	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB	1S656284U23XCRF6	812.00
50	CDW	20-Aug	Malik		IBM Pc 300PL 5/166 2.5GB	1S656284U23XCRX9	812.00
51	Spectrum	27-Aug	Malik	32450	Decaview monit 15" w/cards	552067822	571.00
55	Informax	29-Jun	CY100	4038	Vector NTI5.0	BLLIUV-4038	2,195.00
56	Informax	29-Jun	CY100	4038	Vector NTI5.0	BLLIUV-4038	2,195.00

95	Informax	6-Jul	CY100	4038	Align X		BLLIUV-4038	795.00
96	Informax	6-Jul	CY100	4038	Align X		BLLIUV-4038	795.00
97	informax	6-Jul	CY100	4038	Align X		BLLIUV-4038	795.00
98	Informax	6-Jul	CY100	4038	Align X		BLLIUV-4038	795.00
57	MDL	5-Aug	8059801	141153	ISIS Draw software		ID214XE980234	495.00
58	MDL	5-Aug	8059801	141153	ISIS Base software		IB214XE980100	925.00
59	Computown	10-Sep	verbal	358223	IBM Pc 300PL 4.2 GB w/19in monitor		1S689216U23N2684	2,720.00
60	Computown	10-Sep	verbal	358223	IBM Pc 300PL 4.2 GB w/19in monitor		1S689216U23N2641	2,720.00
238	Computown	17-Sep		360244	Procurve Switch 4000M		SG83160178	2,300.00
239	Computown	22-Sep		361793	PC 300PL 4.2GB sys w/19in monitor		23N1467	2,720.00
240	Computown	22-Sep		361793	PC 300PL 4.2GB sys w/19in monitor		23N1033	2,720.00
241	Computown	6-Oct		366561	M Pro P2-4009.1GB		23F3332	3,250.00
242	Computown	6-Oct	10598	366588	128MB 100MHZ ECC Module		Memory - No S/N	437.50

REF #	VENDOR	TOTAL	CK #			% FUNDED	TOTAL FUNDED
252	Univ. Imaging	3,985.00	2392			100%	$ 3,985.00
252	Univ. Imaging	1,400.00	2392			100%	$ 1,400.00
252	Univ. Imaging	700.00	2392			100%	$ 700.00
252	Univ. Imaging	600.00	2392			100%	$ 600.00
252	Univ. Imaging	5,650.00	2392			100%	$ 5,650.00
252	Univ. Imaging	200.00	2392			100%	$ 200.00
252	Univ. Imaging	4,200.00	2392			100%	$ 4,200.00
252	Univ. Imaging	6,350.00	2392			100%	$ 6,350.00
252	Univ. Imaging	350.00	2392			100%	$ 350.00
252	Univ. Imaging	50.00	2392	43,185.00		100%	$ 50.00
237	Zymark	10,050.00	2327	10,050.00		100%	$ 10,050.00
		609,863.67		609,863.67	ok		$ 531,290.91

COMPUTER HARDWARE: -

40	Sabry	3,345.00	1045	3,345.00	accrue	65%	$ 2,174.25
41	CDW	1,301.00	2143		accrue	80%	$ 1,040.80
42	CDW	1,301.00	2143		accrue	80%	$ 1,040.80
43	CDW	1,002.00	2143		accrue	80%	$ 801.60
44	CDW	1,002.00	2143		accrue	80%	$ 801.60
45	CDW	1,002.00	2143		accrue	80%	$ 801.60
46	CDW	1,002.00	2143		accrue	30%	$ 801.60
47	CDW	1,002.00	2143		accrue	80%	$ 801.60
48	CDW	1,002.00	2143		accrue	80%	$ 801.60
49	CDW	812.00	2143		accrue	80%	$ 649.60
50	CDW	812.00	2143	10,238.00	accrue	80%	$ 649.60
51	Spectrum	571.00	2144	571.00		80%	$ 456.80
55	Informax	2,195.00	2166			70%	$ 1,536.50
56	Informax	2,195.00	2166			70%	$ 1,536.50
95	Informax	795.00	2166			70%	$ 556.50
96	Informax	795.00	2166			70%	$ 556.50
97	informax	795.00	2166			70%	$ 556.50
98	Informax	795.00	2166	7,570.00		70%	$ 556.50
57	MDL	495.00	2173			80%	$ 396.00
58	MDL	925.00	2173	1,420.00		80%	$ 740.00
59	Computown	2,720.00	2189			80%	$ 2,176.00
60	Computown	2,720.00	2189	5,440.00		80%	$ 2,176.00
238	Computown	2,300.00	2331			100%	$ 2,300.00
239	Computown	2,720.00	2331			100%	$ 2,720.00
240	Computown	2,720.00	2331			100%	$ 2,720.00
241	Computown	3,250.00	2331			100%	$ 3,250.00
242	Computown	437.50	2331			100%	$ 437.50

Cytokinetics, Inc.

REF #	VENDOR	DATE REC/INV	PO#	INVOICE #	DESCRIPTION	SERIAL #	COST	TOTAL
243	Computown	6-Oct	10598	366588	128MB 100MHZ ECC Module	Memory - No S/N	437.50	437.50
248	Computown	20-Oct	Verbal	370998	Thinkpad	72299	3,050.00	3,050.00
	Computown	20-Oct	Verbal	370998	Thinkpad	71299/1	3,050.00	3,050.00
100	Computown	31-Jul		345499	Server 330 P2-333 #864021	1S861021Y23AAD88	3,685.00	3,685.00
100	Computown	31-Jul		345499	50 GB Internal AIT tape drive sdx-300	3Y3KP	3,710.00	3,710.00
100	Computown	21-Jul		345499	Win NT server v4.0 #227.01152	BPC814C01665	1,460.00	1,460.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1014	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1047	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1467	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1032	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1049	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1503	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1033	2,143.00	2,143.00
100	Computown	21-Jul		342904	IBM PC 300 PL PII-350 #689216U	1S689216U23N1051	2,143.00	2,143.00
							72,548.00	72,548.00
OFFICE EQUIPMENT-OTHER:								
62	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311698	811.00	811.00
63	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311711	811.00	811.00
64	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311680	811.00	811.00
65	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311690	811.00	811.00
66	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311692	811.00	811.00
67	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311699	811.00	811.00
68	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311708	811.00	811.00
69	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311702	811.00	811.00
70	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311694	811.00	811.00
71	Computown	2-Jul	Sabry	336481-A	GNM0600 computer	0660H9954A2311681	811.00	811.00
	Computown	2-Jul	Sabry	336481-A	LaserJet 4000TN 17PPM 8MB 1200X1200DPI PCL6	1SUSNC128841	1,545.00	1,545.00
72	Computown	2-Jul	Sabry	340497	IBM Pc 300PL 4.2 GB HD	1S689216U23N1017	2,143.00	2,143.00
73	Computown	2-Jul	Sabry	340497	IBM Pc 300PL 4.2 GB HD	1S689216U23N2668	2,143.00	2,143.00
91	Sears	13-Sep	Vaughan	exp report	Freezer 17 in	BA83212874	579.99	579.99
92	Sears	13-Sep	Vaughan	exp report	Refrig 18 in	BA3609110	899.98	899.98
							15,420.97	15,420.97
TELEPHONE HARDWARE:								
74	ACD	14-Jul			Toshiba DK424 (Model DKSue424A)	G28977	11,277.00	11,277.00
					Voice Center	1239496		
ARCHITECT FEES:								
75	Dowler	28-May		9804001-2	Architect, blueprints, programming	NO S/N	3,600.98	3,600.98
76	Dowler	15-Jul		9804003	Architect, construction documents	NO S/N	1,530.00	1,530.00
255	Dowler	19-Oct		9804007	Architect, blueprints	NO S/N	50.00	50.00
256	Dowler	19-Oct		9804006	Architect, construction documents	NO S/N	1,567.50	1,567.50
	Dowler	8-Sep		9804005	Architect	NO S/N	2,190.00	2,190.00

REF #	VENDOR	CK #		% FUNDED	TOTAL FUNDED
243	Computown	2331	11,865.00	100%	$ 437.50
248	Computown	accrued	3,050.00	100%	$ 3,050.00
	Computown	accrued	3,050.00	100%	$ 3,050.00
100	Computown	2001		80%	$ 2,948.00
100	Computown	2001		80%	$ 2,968.00
100	Computown	2001		80%	$ 1,168.00
100	Computown	2001		80%	$ 1,714.40
100	Computown	2001		80%	$ 1,714.40
100	Computown	2001		80%	$ 1,714.40

100	Computown	2001			80%	$	1,714.40
100	Computown	2001			80%	$	1,714.40
100	Computown	2001			80%	$	1,714.40
100	Computown	2001			80%	$	1,714.40
100	Computown	2001	25,999.00		80%	$	1,714.40
			72,548.00	ok		$	60,372.65
OFFICE EQUIPMENT-OTHER:							
62	Computown	1033			70%	$	567.70
63	Computown	1033			70%	$	567.70
64	Computown	1033			70%	$	567.70
65	Computown	1033			70%	$	567.70
66	Computown	1033			70%	$	567.70
67	Computown	1033			70%	$	567.70
68	Computown	1033			70%	$	567.70
69	Computown	1033			70%	$	567.70
70	Computown	1033			70%	$	567.70
71	Computown	1033			70%	$	567.70
	Computown	1033	9,655.00		70%	$	1,081.50
72	Computown	2058			70%	$	1,500.10
73	Computown	2058	4,286.00		70%	$	1,500.10
91	Sears	2217			100%	$	579.99
92	Sears	2217	1,479.97		100%	$	899.98
			15,420.97	ok		$	11,238.67
TELEPHONE HARDWARE:							
74	ACD	2014/2146	11,277.00	ok	80%	$	9,021.60
ARCHITECT FEES:							
75	Dowler	1016	3,600.98		70%	$	2,520.69
76	Dowler	2099	1,530.00		80%	$	1,224.00
255	Dowler	accrued	50.00		100%	$	50.00
256	Dowler	accrued	1,567.50		100%	$	1,567.50
	Dowler	2286	2,190.00	need c	80%	$	1,752.00

Cytokinetics, Inc.

REF #	VENDOR	DATE REC/INV	PO#	INVOICE #	DESCRIPTION	SERIAL #	COST	TOTAL	CK #	
77	Dowler	15-Jul		9804004	Architect	NO S/N	38.34	38.34	2100	38.34
							8,976.82	8,976.82		8,976.82
CABLING COSTS:										
78	Valley Comm	26-Jun		38799A	Voice Cabling	NO S/N	11,363.67	11,363.67	2059	11,363.67
78	Valley Comm	26-Jun		38799A	Voice Cabling	NO S/N	9,671.04	9,671.04	accrued	9,671.04
							21,034.71	21,034.71		21,034.71
TENANT IMPROVEMENT COSTS-OTHER										
79	Cardkey	26-Aug		558778	Security Sys	0385-98G	12,052.00	12,052.00	1036/2158	12,052.00
							12,052.00	12,052.00		12,052.00
							91,694.20	91,694.20		91,694.20
								TOTAL INV.		774,859.39

REF #	VENDOR	% FUNDED	TOTAL FUNDED

77	Dowler		80%	$ 30.67
	ok			$ 7,144.86
CABLING COSTS:				
78	Valley Comm		70%	$ 7,954.57
78	Valley Comm	journal	70%	$ 6,769.73
	ok			$ 14,724.30
TENANT IMPROVEMENT COSTS-OTHER				
79	Cardkey		80%	$ 9,641.60
	-			$ 9,641.60
	TOTAL HARDWARE			$ 631,184.05
	TOTAL SOFT & TI			$ 31,510.76
	TOTAL FUNDED			$ 662,694.81

Exhibit 4.5

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AS AMENDED, OR ANY STATE SECURITIES LAWS. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL (WHICH MAY BE COMPANY COUNSEL) REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY APPLICABLE STATE SECURITIES LAWS.

WARRANT AGREEMENT

TO PURCHASE SHARES OF THE SERIES A PREFERRED STOCK OF

CYTOKINETICS, INC.

DATED AS OF SEPTEMBER 25, 1998 (THE "EFFECTIVE DATE")

WHEREAS, Cytokenetics, Inc., a Delaware corporation (the "Company") has entered into a Loan And Security Agreement dated as of September 25, 1998, and related Promissory Note(s) (collectively, the "Loans") with Comdisco, Inc., a Delaware corporation (the "Warrantholder"); and

WHEREAS, the Company desires to grant to Warrantholder, in consideration for such Loans, the right to purchase shares of its Series A Preferred Stock;

NOW, THEREFORE, in consideration of the Warrantholder executing and delivering such Loans and in consideration of mutual covenants and agreements contained herein, the Company and Warrantholder agree as follows:

1. GRANT OF THE RIGHT TO PURCHASE PREFERRED STOCK.

For the first $1,000,000 portion of the Loans, the Company hereby grants to the Warrantholder, and the Warrantholder is entitled, upon the terms and subject to the conditions hereinafter set forth, to subscribe to and purchase, from the Company, 45,000 fully paid and non-assessable shares of the Company's Series A Preferred Stock ("Preferred Stock") at a purchase price of $1.00 per share (the "Exercise Price") provided however, that from and after the effective date of the registration statement for the Company's initial public offering of its equity securities, the securities purchasable by the Warrantholder upon the exercise of this Warrant Agreement shall be shares of the Company's Common Stock ("Common Stock") which shares shall be purchasable by the Warrantholder in the same number that the Warrantholder would otherwise have been entitled to purchase had this Warrant Agreement remained exercisable for shares of the Company's Preferred Stock. From and after the effective date of the registration statement for the Company's initial public offering of its equity securities, the Warrantholder shall not have any further right pursuant to this Warrant Agreement to purchase shares of the Company's Preferred Stock. The shares of Preferred Stock or Common Stock that are issuable from time to time upon the exercise of this Warrant Agreement are sometimes referred to herein as the "Stock.

In the event that the Company requests and the Warrantholder funds any portion of the additional $250,000 Advances between the first $1,000,000 and up to $1,500,000 as provided under the Loans, the Company hereby grants to the Warrantholder, and the Warrantholder is entitled, upon the terms and subject to the conditions hereinafter set forth, to subscribe for and purchase, from the Company, for each Advance funded, 11,250 shares of Stock at the Exercise Price.

The number and purchase price of such shares are subject to adjustment as provided in Section 8 hereof.

2. TERM OF THE WARRANT AGREEMENT.

Except as otherwise provided for herein, the term of this Warrant

Agreement and the right to purchase Stock as granted herein shall commence on the Effective Date and shall be exercisable for a period of (i) seven (7) years or (ii) three (3) years from the effective date of the Company's initial public offering, whichever is shorter.

3. EXERCISE OF THE PURCHASE RIGHTS.

The purchase rights set forth in this Warrant Agreement are exercisable by the Warrantholder, in whole or in part, at any time, or from time to time, prior to the expiration of the term set forth in Section 2 above, by tendering to the Company at its principal office a notice of exercise in the form attached hereto as Exhibit I (the "Notice of Exercise"), duly completed and executed. Promptly upon receipt of the Notice of Exercise and the payment of the purchase price in accordance with the terms set forth below, and in no event later than twenty-one (21) days thereafter, the Company shall issue to the Warrantholder a certificate for the number of shares of Stock purchased and shall execute the acknowledgment of exercise in the form attached hereto as Exhibit II (the "Acknowledgment of Exercise") indicating the number of shares which remain subject to future purchases, if any.

The Exercise Price may be paid at the Warrantholder's election either (i) by cash or check, or (ii) by surrender of Warrants ("Net Issuance") as determined below. If the Warrantholder elects the Net Issuance method, the Company will issue Stock in accordance with the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where: X = the number of shares of Stock to be issued to the Warrantholder.

Y = the number of shares of Stock requested to be exercised under this Warrant Agreement.

A = the fair market value of one (1) share of Stock.

B = the Exercise Price.

For purposes of the above calculation, current fair market value of Stock shall mean with respect to each share of Stock:

(i) if the exercise is in connection with an initial public offering of the Company's Common Stock, and if the Company's Registration Statement relating to such public offering has been declared effective by the SEC, then the fair market value per share shall be the product of (x) the initial "Price to Public" specified in the final prospectus with respect to the offering and (y) the number of shares of Common Stock into which each share of Stock is convertible at the time of such exercise;

(ii) if this Warrant is exercised after, and not in connection with the Company's initial public offering, and:

(a) if traded on a securities exchange, the fair market value shall be deemed to be the product of (x) the average of the closing prices over a twenty-one (21) day period ending three days before the day the current fair market value of the securities is being determined and (y) the number of shares of Common Stock into which each share of Stock is convertible at the time of such exercise; or

(b) if actively traded over-the-counter, the fair market value shall be deemed to be the product of (x) the average of the closing bid and asked prices quoted on the

NASDAQ system (or similar system) over the twenty-one (21) day period ending three days before the day the current fair market value of the securities is being determined and (y) the number of shares of Common Stock into which each share of Stock is convertible at the time of such exercise;

(iii) if at any time the Common Stock is not listed on any securities exchange or quoted in the NASDAQ System or the over-the-counter market, the current fair market value of Stock shall be the product of (x) the highest price per share which the Company could obtain from a willing buyer (not a current employee or director) for shares of Common Stock sold by the Company, from authorized but unissued shares, as determined in good faith by its Board of Directors and (y) the number of shares of Common Stock into which each shares of Stock is convertible at the time of such exercise unless the Company shall become subject to a merger, acquisition or other consolidation pursuant to which the Company is not the surviving party, in which case the fair market value of Stock shall be deemed to be the value received by the holders of the Company's Stock on a common equivalent basis pursuant to such merger or acquisition.

Upon partial exercise by either cash or Net Issuance, the Company shall promptly issue an amended Warrant Agreement representing the remaining number of shares purchasable hereunder. All other terms and conditions of such amended Warrant Agreement shall be identical to those contained herein, including, but not limited to the Effective Date hereof.

4. RESERVATION OF SHARES.

(a) Authorization and Reservation of Shares. During the term of this Warrant Agreement, the Company will at all times have authorized and reserved a sufficient number of shares of its Stock to provide for the exercise of the rights to purchase Stock as provided for herein.

(b) Registration or Listing. If any shares of Stock required to be reserved hereunder require registration with or approval of any governmental authority under any Federal or State law (other than any registration under the Securities Act of 1933, as amended ("1933 Act"), as then in effect, or any similar Federal statute then enforced, or any state securities law, required by reason of any transfer involved in such conversion), or listing on any domestic securities exchange, before such shares may be issued upon conversion, the Company will, at its expense and as expeditiously as possible, use its best efforts to cause such shares to be duly registered, listed or approved for listing on such domestic securities exchange, as the case may be.

5. NO FRACTIONAL SHARES OR SCRIP.

No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the Warrant, but in lieu of such fractional shares the Company shall make a cash payment therefor upon the basis of the Exercise Price then in effect.

6. NO RIGHTS AS SHAREHOLDER.

This Warrant Agreement does not entitle the Warrantholder to any voting rights or other rights as a shareholder of the Company prior to the exercise of the Warrant.

7. WARRANTHOLDER REGISTRY.

The Company shall maintain a registry showing the name and address of the registered holder of this Warrant Agreement.

8. ADJUSTMENT RIGHTS.

The purchase price per share and the number of shares of Stock purchasable hereunder are subject to adjustment, as follows:

(a) Merger and Sale of Assets. If at any time there shall be a capital reorganization of the shares of the Company's stock (other than a combination, reclassification, exchange or subdivision of shares otherwise provided for herein), or a merger or consolidation of the Company with or into another corporation whether or not the Company is the surviving corporation, or the sale of all or substantially all of the Company's properties and assets to any other person (hereinafter referred to as a "Merger Event"), then, as a part of such Merger Event, lawful provision shall be made so that the Warrantholder shall thereafter be entitled to receive, upon exercise of the Warrant, the number of shares of preferred stock or other securities of the successor corporation resulting from such Merger Event, equivalent in value to that which would have been issuable if Warrantholder had exercised this Warrant immediately prior to the Merger Event. In any such case, appropriate adjustment (as determined in good faith by the Company's Board of Directors) shall be made in the application of the provisions of this Warrant Agreement with respect to the rights and interest of the Warrantholder after the Merger Event to the end that the provisions of this Warrant Agreement (including adjustments of the Exercise Price and number of shares of Preferred Stock purchasable) shall be applicable to the greatest extent possible.

(b) Reclassification of Shares. If the Company at any time shall, by combination, reclassification, exchange or subdivision of securities or otherwise, change any of the securities as to which purchase rights under this Warrant Agreement exist into the same or a different number of securities of any other class or classes, this Warrant Agreement shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights

under this Warrant Agreement immediately prior to such combination, reclassification, exchange, subdivision or other change.

(c) Subdivision or Combination of Shares. If the Company at any time shall combine or subdivide its Stock, the Exercise Price shall be proportionately decreased in the case of a subdivision, or proportionately increased in the case of a combination.

(d) Stock Dividends. If the Company at any time shall pay a dividend payable in, or make any other distribution (except any distribution specifically provided for in the foregoing subsections (a) or (b)) of the Company's stock, then the Exercise Price shall be adjusted, from and after the record date of such dividend or distribution, to that price determined by multiplying the Exercise Price in effect immediately prior to such record date by a fraction (i) the numerator of which shall be the total number of all shares of the Company's stock outstanding immediately prior to such dividend or distribution, and (ii) the denominator of which shall be the total number of all shares of the Company's stock outstanding immediately after such dividend or distribution. The Warrantholder shall thereafter be entitled to purchase, at the Exercise Price resulting from such adjustment, the number of shares of Stock (calculated to the nearest whole share) obtained by multiplying the Exercise Price in effect immediately prior to such adjustment by the number of shares of Stock issuable upon the exercise hereof immediately prior to such adjustment and dividing the product thereof by the Exercise Price resulting from such adjustment.

(e) Antidilution Rights. Additional antidilution rights applicable to the Preferred Stock purchasable hereunder are as set forth in the Company's Certificate of Incorporation, as amended through the Effective Date, a true and complete copy of which is attached hereto as Exhibit _ (the "Charter"). The Company shall promptly provide the Warrantholder with any restatement,

amendment, modification or waiver of the Charter. The Company shall provide Warrantholder with prior written notice of any issuance of its stock or other equity security to occur after the Effective Date of this Warrant, which notice shall include (a) the price at which such stock or security is to be sold, (b) the number of shares to be issued, and (c) such other information as necessary for Warrantholder to determine if a dilutive event has occurred.

(f) Notice of Adjustments. If: (i) the Company shall declare any dividend or distribution upon its stock, whether in cash, property, stock or other securities; (ii) the Company shall offer for subscription prorata to the holders of any class of its Preferred or other convertible stock any additional shares of stock of any class or other rights; (iii) there shall be any Merger Event; (iv) there shall be an initial public offering; or (v) there shall be any voluntary dissolution, liquidation or winding up of the Company; then, in connection with each such event, the Company shall send to the Warrantholder: (A) at least twenty (20) days' prior written notice of the date on which the books of the Company shall close or a record shall be taken for such dividend, distribution, subscription rights (specifying the date on which the holders of Stock shall be entitled thereto) or for determining rights to vote in respect of such Merger Event, dissolution, liquidation or winding up; (B) in the case of any such Merger Event, dissolution, liquidation or winding up, at least twenty (20) days' prior written notice of the date when the same shall take place (and specifying the date on which the holders of Stock shall be entitled to exchange their Stock for securities or other property deliverable upon such Merger Event, dissolution, liquidation or winding up); and (C) in the case of a public offering, the Company shall give the Warrantholder at least twenty (20) days written notice prior to the effective date thereof.

Each such written notice shall set forth, in reasonable detail, (i) the event requiring the adjustment, (ii) the amount of the adjustment, (iii) the method by which such adjustment was calculated, (iv) the Exercise Price, and (v) the number of shares subject to purchase hereunder after giving effect to such adjustment, and shall be given by first class mail, postage prepaid, addressed to the Warrantholder, at the address as shown on the books of the Company.

(g) Timely Notice. Failure to timely provide such notice required by subsection (f) above shall entitle Warrantholder to retain the benefit of the applicable notice period notwithstanding anything to the contrary contained in any insufficient notice received by Warrantholder. The notice period shall begin on the date Warrantholder actually receives a written notice containing all the information specified above.

9. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

(a) Reservation of Stock. The Stock issuable upon exercise of the Warrantholder's rights has been duly and validly reserved and, when issued in accordance with the provisions of this Warrant Agreement, will be validly issued, fully paid and non-assessable, and will be free of any taxes, liens, charges or encumbrances of any nature whatsoever; provided, however, that the Stock issuable pursuant to this Warrant Agreement may be subject

to restrictions on transfer under state and/or Federal securities laws. The Company has made available to the Warrantholder true, correct and complete copies of its Charter and Bylaws, as amended. The issuance of certificates for shares of Stock upon exercise of the Warrant Agreement shall be made without charge to the Warrantholder for any issuance tax in respect thereof, or other cost incurred by the Company in connection with such exercise and the related issuance of shares of Stock. The Company shall not be required to pay any tax which may be payable in respect of any transfer involved and the issuance and delivery of any certificate in a name other than that of the Warrantholder.

(b) Due Authority. The execution and delivery by the Company of this Warrant Agreement and the performance of all obligations of the Company hereunder, including the issuance to Warrantholder of the right to acquire the

shares of Stock, have been duly authorized by all necessary corporate action on the part of the Company, and the Loans and this Warrant Agreement are not inconsistent with the Company's Charter or Bylaws, do not contravene any law or governmental rule, regulation or order applicable to it, do not and will not contravene any provision of, or constitute a default under, any indenture, mortgage, contract or other instrument to which it is a party or by which it is bound, and the Loans and this Warrant Agreement constitute legal, valid and binding agreements of the Company, enforceable in accordance with their respective terms.

(c) Consents and Approvals. No consent or approval of, giving of notice to, registration with, or taking of any other action in respect of any state, Federal or other governmental authority or agency is required with respect to the execution, delivery and performance by the Company of its obligations under this Warrant Agreement, except for the filing of notices pursuant to Regulation D under the 1933 Act and any filing required by applicable state securities law, which filings will be effective by the time required thereby.

(d) Issued Securities. All issued and outstanding shares of Common Stock, Preferred Stock or any other securities of the Company have been duly authorized and validly issued and are fully paid and nonassessable. All outstanding shares of Common Stock, Preferred Stock and any other securities were issued in full compliance with all Federal and state securities laws. In addition:

(i) The authorized capital of the Company consists of (A) 10,000,000 shares of Common Stock, of which 1,126,110 shares are issued and outstanding, and (B) 5,550,000 shares of preferred stock, of which 5,300,000 shares are issued and outstanding and are convertible into 5,550,000 shares of Common Stock at $1.00 per share.

(ii) The Company has reserved (A) 2,000,000 shares of Common Stock for issuance under its under its 1997 Stock Option/Stock Issuance Plan under which 1,503,890 options have been granted. There are no other options, warrants, conversion privileges or other rights presently outstanding to purchase or otherwise acquire any authorized but unissued shares of the Company's capital stock or other securities of the Company.

(iii) In accordance with the Company's Articles of Incorporation, no shareholder of the Company has preemptive rights to purchase new issuances of the Company's capital stock.

(e) Insurance. The Company has in full force and effect insurance policies, with extended coverage, insuring the Company and its property and business against such losses and risks, and in such amounts, as are customary for corporations engaged in a similar business and similarly situated and as otherwise may be required pursuant to the terms of any other contract or agreement.

(f) Exempt Transaction. Subject to the accuracy of the Warrantholder's representations in Section 10 hereof, the issuance of the Stock upon exercise of this Warrant will constitute a transaction exempt from (i) the registration requirements of Section 5 of the 1933 Act, in reliance upon Section 4(2) thereof, and (ii) the qualification requirements of the applicable state securities laws.

(g) Compliance with Rule 144. At the written request of the Warrantholder, who proposes to sell Stock issuable upon the exercise of the Warrant in compliance with Rule 144 promulgated by the Securities and Exchange Commission, the Company shall furnish to the Warrantholder, within ten days after receipt of such request, a written statement confirming the Company's compliance with the filing requirements of the Securities and Exchange Commission as set forth in such Rule, as such Rule may be amended from time to time.

10. REPRESENTATIONS AND COVENANTS OF THE WARRANTHOLDER.

This Warrant Agreement has been entered into by the Company in reliance upon the following representations and covenants of the Warrantholder:

(a) Investment Purpose. The right to acquire Stock issuable upon exercise of the Warrantholder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Warrantholder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Private Issue. The Warrantholder understands (i) that the Stock issuable upon exercise of this Warrant is not registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuance contemplated by this Warrant Agreement will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations set forth in this Section 10.

(c) Disposition of Warrantholder's Rights. In no event will the Warrantholder make a disposition of any of its rights to acquire Stock issuable upon exercise of such rights unless and until (i) it shall have notified the Company of the proposed disposition, and (ii) if requested by the Company, it shall have furnished the Company with an opinion of counsel (which counsel may either be inside or outside counsel to the Warrantholder) satisfactory to the Company and its counsel to the effect that (A) appropriate action necessary for compliance with the 1933 Act has been taken, or (B) an exemption from the registration requirements of the 1933 Act is available. Notwithstanding the foregoing, the restrictions imposed upon the transferability of any of its rights to acquire Stock issuable on the exercise of such rights do not apply to transfers from the beneficial owner of any of the aforementioned securities to its nominee or from such nominee to its beneficial owner, and shall terminate as to any particular share of Stock when (1) such security shall have been effectively registered under the 1933 Act and sold by the holder thereof in accordance with such registration or (2) such security shall have been sold without registration in compliance with Rule 144 under the 1933 Act, or (3) a letter shall have been issued to the Warrantholder at its request by the staff of the Securities and Exchange Commission or a ruling shall have been issued to the Warrantholder at its request by such Commission stating that no action shall be recommended by such staff or taken by such Commission, as the case may be, if such security is transferred without registration under the 1933 Act in accordance with the conditions set forth in such letter or ruling and such letter or ruling specifies that no subsequent restrictions on transfer are required. Whenever the restrictions imposed hereunder shall terminate, as hereinabove provided, the Warrantholder or holder of a share of Stock then outstanding as to which such restrictions have terminated shall be entitled to receive from the Company, without expense to such holder, one or more new certificates for the Warrant or for such shares of Stock not bearing any restrictive legend.

(d) Financial Risk. The Warrantholder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment, and has the ability to bear the economic risks of its investment.

(e) Risk of No Registration. The Warrantholder understands that if the Company does not register with the Securities and Exchange Commission pursuant to Section 12 of the 1934 Act (the "1934 Act"), or file reports pursuant to Section 15(d), of the 1934 Act", or if a registration statement covering the securities under the 1933 Act is not in effect when it desires to sell (i) the rights to purchase Stock pursuant to this Warrant Agreement, or (ii) the Stock issuable upon exercise of the right to purchase, it may be required to hold such securities for an indefinite period. The Warrantholder also understands that any sale of its rights of the Warrantholder to purchase Stock which might be made by it in reliance upon Rule 144 under the 1933 Act

may be made only in accordance with the terms and conditions of that Rule.

(f) Accredited Investor. Warrantholder is an "accredited investor" within the meaning of the Securities and Exchange Rule 501 of Regulation D, as presently in effect.

11. TRANSFERS.

Subject to the terms and conditions contained in Section 10 hereof, this Warrant Agreement and all rights hereunder are transferable in whole or in part by the Warrantholder and any successor transferee, provided, however, in no event shall the number of transfers of the rights and interests in all of the Warrants exceed three (3) transfers. The transfer shall be recorded on the books of the Company upon receipt by the Company of a notice of

transfer in the form attached hereto as Exhibit III (the "Transfer Notice"), at its principal offices and the payment to the Company of all transfer taxes and other governmental charges imposed on such transfer.

12. MISCELLANEOUS.

(a) Effective Date. The provisions of this Warrant Agreement shall be construed and shall be given effect in all respects as if it had been executed and delivered by the Company on the date hereof. This Warrant Agreement shall be binding upon any successors or assigns of the Company.

(b) Attorney's Fees. In any litigation, arbitration or court proceeding between the Company and the Warrantholder relating hereto, the prevailing party shall be entitled to attorneys' fees and expenses and all costs of proceedings incurred in enforcing this Warrant Agreement.

(c) Governing Law. This Warrant Agreement shall be governed by and construed for all purposes under and in accordance with the laws of the State of Illinois.

(d) Counterparts. This Warrant Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(e) Notices. Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery, facsimile transmission (provided that the original is sent by personal delivery or mail as hereinafter set forth) or seven (7) days after deposit in the United States mail, by registered or certified mail, addressed (i) to the Warrantholder at 6111 North River Road, Rosemont, Illinois 60018, attention: Venture Lease Administration, cc: Legal Department, attn.: General Counsel, (and/or, if by facsimile, (847) 518-5465 and (847)518-5088 and (ii) to the Company at 280 East Grand Avenue, Suite 2, South San Francisco, CA 94080, attention: President (and/or if by facsimile, (650) 624-3010 or at such other address as any such party may subsequently designate by written notice to the other party.

(f) Remedies. In the event of any default hereunder, the non-defaulting party may proceed to protect and enforce its rights either by suit in equity and/or by action at law, including but not limited to an action for damages as a result of any such default, and/or an action for specific performance for any default where Warrantholder will not have an adequate remedy at law and where damages will not be readily ascertainable. The Company expressly agrees that it shall not oppose an application by the Warrantholder or any other person entitled to the benefit of this Agreement requiring specific performance of any or all provisions hereof or enjoining the Company from continuing to commit any such breach of this Agreement.

(g) No Impairment of Rights. The Company will not, by amendment of its Charter or through any other means, avoid or seek to avoid the observance or

performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate in order to protect the rights of the Warrantholder against impairment.

(h) Survival. The representations, warranties, covenants and conditions of the respective parties contained herein or made pursuant to this Warrant Agreement shall survive the execution and delivery of this Warrant Agreement.

(i) Severability. In the event any one or more of the provisions of this Warrant Agreement shall for any reason be held invalid, illegal or unenforceable, the remaining provisions of this Warrant Agreement shall be unimpaired, and the invalid, illegal or unenforceable provision shall be replaced by a mutually acceptable valid, legal and enforceable provision, which comes closest to the intention of the parties underlying the invalid, illegal or unenforceable provision.

(j) Amendments. Any provision of this Warrant Agreement may be amended by a written instrument signed by the Company and by the Warrantholder.

IN WITNESS WHEREOF, the parties hereto have caused this Warrant Agreement to be executed by its officers thereunto duly authorized as of the Effective Date.

COMPANY: CYTOKENETICS, INC.

By: /s/ JON C. RICHARDS

Title: Chief Financial Officer

WARRANTHOLDER: COMDISCO, INC.

By: /s/ JAMES P. LABE

Title: JAMES P. LABE
PRESIDENT COMDISCO VENTURES DIVISION

EXHIBIT I

NOTICE OF EXERCISE

TO: _____

(1) The undersigned Warrantholder hereby elects to purchase _____ shares of the Series A Preferred Stock of _____, pursuant to the terms of the Warrant Agreement dated the ____ day of _____ 19___ (the "Warrant Agreement") between _____ and the Warrantholder, and tenders herewith payment of the purchase price for such shares in full, together with all applicable transfer taxes, if any.

(2) In exercising its rights to purchase the Series A Preferred Stock of _____, the undersigned hereby confirms and acknowledges the investment representations and warranties made in Section 10 of the Warrant Agreement.

(3) Please issue a certificate or certificates representing said shares of Series A Preferred Stock in the name of the undersigned or in such other name as is specified below.

_____
(Name)

_____
(Address)

WARRANTHOLDER: COMDISCO, INC.

By: _____

Title: _____

Date: _____

EXHIBIT II

ACKNOWLEDGMENT OF EXERCISE

The undersigned _____ , hereby acknowledge receipt of the "Notice of Exercise" from Comdisco, Inc., to purchase _____ shares of the Series A Preferred Stock of_____ pursuant to the terms of the Warrant Agreement, and further acknowledges that _____ shares remain subject to purchase under the terms of the Warrant Agreement,

COMPANY:

By: _____

Title: _____

Date: _____

EXHIBIT III

TRANSFER NOTICE

(TO TRANSFER OR ASSIGN THE FOREGOING WARRANT AGREEMENT EXECUTE THIS FORM AND SUPPLY REQUIRED INFORMATION. DO NOT USE THIS FORM TO PURCHASE SHARES.)

FOR VALUE RECEIVED, the foregoing Warrant Agreement and all rights evidenced thereby are hereby transferred and assigned to

_____
(Please Print)

whose address is

_____

_____

Dated: _____

Holder's Signature: _____

Holder's Address: _____

_____

Signature Guaranteed: _____

NOTE: The signature to this Transfer Notice must correspond with the name as it appears on the face of the Warrant Agreement, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant Agreement.

Exhibit 4.6

LOAN AND SECURITY AGREEMENT

THIS AGREEMENT (the "Agreement"), dated as of December 16, 1999 (the "Closing Date") is entered into by and between Cytokinetics, Incorporated, a Delaware corporation having a principal place of business at 280 East Grand Avenue, South San Francisco, CA 94080 (the "Borrower") and Comdisco, Inc., a Delaware corporation having a principal place of business at 6111 North River Road, Rosemont, Illinois 60018 (the "Lender"). In consideration of the mutual agreements contained herein, the parties hereto agree as follows:

WHEREAS, Borrower has requested Lender to make available to Borrower a loan in the aggregate principal amount of up to FIVE MILLION and 00/100 DOLLARS ($5,000,000) (as the same may from time to time be amended, modified, supplemented or revised, the "Loan"), which shall be available in minimum installments of TWO HUNDRED FIFTY THOUSAND and 00/100 DOLLARS ($250,000) each (the "Advance") on various dates prior to December 16, 2000 ("Advance Date(s)"), which would be evidenced by Secured Promissory Note(s) executed by Borrower substantially in the form of EXHIBIT A-1 AND A-2 hereto (as the same may from time to time be amended, modified, supplemented or restated the "Note(s)");

NOW, THEREFORE, it is agreed:

SECTION 1. THE LOAN

1.1 Subject to the terms and conditions set forth herein, Lender shall lend to Borrower the aggregate original principal amount of FIVE MILLION AND 00/100 DOLLARS ($5,000,000) in two parts, the first part in the amount of Two Million Dollars ($2,000,000) ("Part I") and the second part in the amount of Three Million dollars ($3,000,000) ("Part II') together with interest at the rate of eight and one quarter percent (8.25%) per annum due and payable in monthly installments as set forth in the Note.

Proceeds of this Loan may finance computers, workstations, peripherals, instrumentation, electronic test equipment, office furniture, certain microscopy equipment and other equipment approved by Lender and evidenced by Secured Promissory Note(s) executed by Borrower substantially in the form of EXHIBIT A-1 . Up to 20% of the Loan may be used to finance software and tenant improvements evidenced by Secured Promissory Note(s) executed by Borrower substantially in the form of EXHIBIT A-2. Lender will not finance custom equipment, installation costs, delivery costs, rolling stock, special tooling, molds and hand held items.

1.2 Upon the occurrence of and during an Event of Default (as defined herein), interest shall thereafter be calculated at a rate of five percent (5%) in excess of the rate that would otherwise be applicable ("Default Rate"). All such interest shall be due and payable in arrears, on the first day of the following month.

1.3 Notwithstanding any provision in this Agreement, the Note, or any other "Loan Document" (as defined herein), it is not the parties' intent to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law which a court of competent jurisdiction shall deem applicable hereto (which under the laws of the State of Illinois shall be deemed to be the laws relating to permissible rates of interest on commercial loans) (the "Maximum Rate"). If the Borrower actually pays Lender an amount of interest, chargeable on the

total aggregate principal Secured Obligations of Borrower under this Agreement and the Note (as said rate is calculated over a period of time that is the longer of (i) the time from the date of this Agreement through the maturity time

as set forth on the Note, or (ii) the entire period of time that any principal is outstanding on the Note), which amount of interest exceeds interest calculated at the Maximum Rate on said principal chargeable over said period of time, then such excess interest actually paid by Borrower shall be applied first, to the payment of principal outstanding on the Note; second, after all principal is repaid, to the payment of Lender's out of pocket costs, expenses, and professional fees which are owed by Borrower to Lender under this Agreement or the Loan Documents; and third, after all principal, costs, expenses, and professional fees owed by Borrower to Lender are repaid, the excess (if any) shall be refunded to Borrower.

1.4 In the event any interest is not paid when due hereunder, delinquent interest shall be added to principal and shall bear interest on interest, compounded at the rate set forth in Section 1.1.

1.5 Upon and during the continuation of an Event of Default hereunder (as defined herein), all Secured Obligations, including principal, interest, compounded interest, and reasonable professional fees, shall bear interest at a rate per annum equal to the Default Rate.

1.6 Borrower shall have the option to prepay the Note, in whole or in part, at any time after the date hereof by paying the principal amount together with all accrued and unpaid interest with respect to such principal amount, as of the date of such prepayment and the Balloon Payment as described in the Note together with a prepayment premium equal to the difference, if any, between (x) the amount being prepaid and (y) the present value, discounted at the Treasury Rate, of each installment of principal and interest being prepaid discounted to the date of prepayment. If the amount in (x) is greater than the amount in (y), no prepayment premium shall be due. The "Treasury Rate" shall mean the then prevailing yield on US Treasury Constant Maturities for the most recent business day, as quoted in the Federal Reserve Statistical Release H15, as of the date of prepayment for an obligation of comparable maturity to the maturity date of the Note.

SECTION 2. SECURITY INTEREST

As security for the payment of all indebtedness ("Indebtedness") of the Borrower to the Lender hereunder and under the Note, as the same may be renewed, extended for any period or rearranged, and the performance by the Borrower of its other obligations hereunder (the Indebtedness and such other obligations being hereinafter sometimes collectively referred to as the "Secured Obligations"), the Borrower hereby assigns to the Lender, and grants to the Lender a first priority security interest in, all the Borrower's right, title, and interest in and to the following property ("Collateral"): (i) the equipment and other property (the "Equipment") described in Exhibit B attached hereto; and (ii) all proceeds, products, replacements, additions to, substitutions for and accessions to any and all Equipment including, without limitation, the proceeds applicable to the insurance referred to in Section 4 hereof.

Equipment shall consist of computers, workstations, peripherals, instrumentation, electronic test equipment, office furniture, certain types of microscopy equipment and other items of equipment approved by Lender. Up to 20% of the Loan may be used for software and tenant improvements.

SECTION 3. REPRESENTATIONS AND WARRANTIES OF BORROWER

The Borrower represents, warrants and agrees that:

3.1 it has good title in and to the Equipment, free of all liens, security interests, encumbrances and claims whatsoever, except for the interest of the Lender therein;

3.2 it has the full power and authority to, and does hereby grant and convey to the Lender, a valid first priority perfected security interest in

the Collateral as security for the Secured Obligations, free of all liens, security interests, encumbrances and claims, and shall execute such Uniform Commercial Code ("UCC") financing statements in connection herewith as the Lender may reasonably request. No other lien, security interest, adverse claim or encumbrance has been created by Borrower or is known by Borrower to exist with respect to any Collateral;

3.3 it is a corporation duly organized, legally existing and in good standing under the laws of the State of Delaware, and is duly qualified as a foreign corporation in all jurisdictions where the failure to so qualify would have a material adverse effect on the Collateral or the business of the Borrower taken as a whole;

3.4 the execution, delivery and performance of the Note, this Agreement, the Warrant Agreement dated December 16, 1999 pursuant to which Borrower granted to Lender the right to purchase the number of shares of preferred stock as set forth therein ("Warrant Agreement"), and all financing statements, certificates and other documents required to be delivered or executed in connection herewith (collectively, the "Loan Documents") have been duly authorized by all necessary corporate action of Borrower, the individual or individuals executing the Loan Documents were duly authorized to do so, the Equipment is personal property and as used by the Borrower will not be or become fixtures under applicable law, and the Loan Documents constitute legal, valid and binding obligations of the Borrower, enforceable in accordance with their respective terms, subject to applicable bankruptcy, insolvency, reorganization or other similar laws generally affecting the enforcement of the rights of creditors;

3.5 the Loan Documents do not and will not violate any provisions of its Certificate of Incorporation, bylaws or any contract, agreement, law, regulation, order, injunction, judgment, decree or writ to which the Borrower is subject, or result in the creation or imposition of any lien, security interest or other encumbrance upon the Collateral, other than those created by this Agreement;

3.6 the execution, delivery and performance of the Loan Documents do not require the consent or approval of any other person or entity including, without limitation, any regulatory authority or governmental body of the United States or any state thereof or any political subdivision of the United States or any state thereof.

3.7 as of the date hereof no fact or condition exists that would (or could, with the passage of time, the giving of notice, or both) constitute an Event of Default under this Agreement or any of the Loan Documents and no event which has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing. For purposes of this Agreement, "Material Adverse Effect" means a material adverse effect upon (i) the business, operations, properties, assets or financial condition of Borrower; or (ii) the ability of Borrower to perform the Secured Obligations.

SECTION 4. INSURANCE AND RISK OF LOSS

4.1 Risk of loss of, damage to or destruction of the Equipment shall be borne by the Borrower and effective from the date of this Agreement and until the payment and performance in full of all Secured Obligations, Borrower shall at its own expense cause to be carried and maintained all risk casualty insurance (covering risk of fire, theft and other such risks as the Lender may require, including standard and extended coverage) with respect to each item of Equipment in an amount no less than the replacement costs applicable to such item of Equipment during the term of this Agreement. All policies evidencing such casualty insurance shall contain a standard mortgagee's endorsement and shall provide for at least thirty days prior written notice by the underwriter or insurance company to the Lender in the event of cancellation or expiration. Borrower shall provide Lender with insurance certificates evidencing the

foregoing at time of closing.

4.2 If any item of Equipment is lost or rendered unusable as a result of any physical damage to or destruction of such item of Equipment during the period from the date hereof to and including the maturity date under the Note or the date all Secured Obligations hereunder have been fully satisfied, whichever is later, Borrower shall give to Lender prompt notice thereof. Borrower shall determine, within fifteen (15) days after the date of occurrence of such loss, damage or destruction, whether such item of Equipment can be repaired and restored to the condition in which such item of Equipment was required to be maintained as of the date immediately preceding such damage. If Borrower determines that such item of Equipment can be repaired, Borrower, at its expense, shall cause such item of Equipment to be promptly repaired. If Borrower determines that such item of I Equipment is lost or cannot be repaired, Borrower shall promptly notify the Lender and such item of Equipment shall be deemed to have suffered a "Casualty Loss" for purposes of this Section as of the date of the occurrence of such loss. Within fifteen (15) days following the occurrence of any such loss, damage or destruction, Borrower shall notify the Lender of the item(s) of Equipment which has suffered such Casualty Loss ("Loss Item"), and within thirty (30) days thereafter (the "Settlement Date"), Borrower shall either (a) replace such item(s) of Equipment with equipment of the same model, type and feature configuration, in an operating condition and repair no less than that required hereunder of the damaged or lost equipment immediately prior to the date of such damage or loss, and having a fair market value no less than the Casualty Value (as defined herein) applicable to such item of Equipment as of the date immediately prior to such damage, in which case such replacement equipment shall for all purposes hereunder become part of the Collateral and (without limiting the preceding provisions) Borrower shall grant to Lender a first lien and security interest in respect of such replacement equipment pursuant to the terms of this Agreement, and Borrower shall provide the Lender evidence satisfactory to the Lender of Borrower's good and marketable title to such replacement equipment (free of any liens, security interests or encumbrances other than those created by this Agreement and Borrower shall be entitled to receive the amount of any insurance or other recovery received by Lender up to cost of obtaining the replacement equipment; or (b) so long as no Event of Default or event which with the giving of notice or passage of time, or both, would constitute an Event of Default, has occurred and is continuing, Borrower may provide substitute equipment satisfactory to Lender to become part of the Collateral and Borrower shall grant to Lender a first lien and security interest in respect of such substitute equipment pursuant to the terms of this Agreement, and Borrower shall provide the Lender evidence satisfactory to Lender of Borrower's good and marketable title to such substitute equipment (free of any liens, security interests or

encumbrances other than created by this Agreement and Lender shall provide any required endorsements in connection with any insurance proceeds received by Borrower pursuant to such insurance policies; or (c) Borrower shall pay Lender the insurance proceeds payable pursuant to such insurance policies ("Insurance Proceeds")with respect to such Loss Item(s) and the principal amount of the Note (and interest accrued on the principal amount so prepayable) shall become due and payable on the Settlement Date to the extent of the replacement cost for all such Loss Item(s). For purposes of this Section 4.2, Casualty Value shall mean an amount equal to the greater of the fair market value of the Equipment as of the date of the Casualty Loss or the outstanding principal and accrued interest on the Loan. Moneys so received shall be applied, on the date of such receipt, as follows: first, to pay any accrued interest on the outstanding principal amount of the Note on such date; second, to prepay, the outstanding principal amount of the Note (to the extent of the fair market value attributable to such Loss Item(s)); third, to pay any other Indebtedness of amounts then due and owing to the Lender hereunder; and fourth, so long as there has occurred no Event of Default under Section 8 hereof and no event which with the giving of notice or passage of time or both would constitute an Event of Default, has occurred and is continuing, Borrower and Lender hereby agree that the balance of any such Insurance Proceeds shall be paid promptly to the Borrower.

4.3 Effective upon the date hereof under the Note and while there are any Secured Obligations outstanding, Borrower shall cause to be carried and maintained comprehensive general liability insurance with regard to the Collateral against risks customarily insured against in the Borrower's business. Such risks shall include, without limitation, the risks of death, bodily injury and property damage associated with the Collateral. All policies evidencing such insurance shall provide for at least thirty (30) days prior written notice by the underwriter or insurance company to the Lender in the event of cancellation or expiration.

4.4 Borrower shall and does hereby indemnify and hold Lender, its agents and shareholders harmless from and against any and all claims, costs, expenses, damages and liabilities (including without limitation such claims, costs, expenses, damages and liabilities based on liability in tort including without limitation strict liability in tort) including reasonable attorneys' fees, arising out of Borrower's ownership, possession, operation, control, use, maintenance, delivery, or other disposition of the Collateral. Notwithstanding the foregoing, Borrower shall not be responsible under the terms of this Section 4.4 to a party indemnified hereunder for any claims, costs, expenses, damages and liabilities occasioned by the negligence or willful misconduct of such indemnified party.

SECTION 5. COVENANTS OF BORROWER

Borrower covenants and agrees as follows at all times while any of the Secured Obligations remain outstanding:

5.1 Borrower shall maintain the Equipment in good operating order, repair, condition and appearance and protect the Equipment from deterioration, other than normal wear and tear. Borrower shall not use the Equipment or permit its use for any purpose other than for which it was designed. Borrower's obligation regarding the maintenance of the Equipment shall include, without limitation, all maintenance, repair, refurbishment and replacement recommended or advised either by the manufacturer, or that commonly performed by prudent business and/or professional practice. Any exceptions or qualifications expressed in this Agreement relating to normal or

ordinary wear and tear shall not be deemed to limit Borrower's obligations pursuant to the preceding sentence.

5.2 Borrower shall only relocate any item of the Collateral provided that: (a) it shall have caused to be filed and/or delivered to the Lender all UCC financing statements, certificates or other documents or instruments necessary to continue in effect the first prior perfected security interest of the Lender in the Collateral, and (b) it shall have given the Lender no less than fifteen (15) days prior written notice of such relocation.

5.3 Upon the request of Lender, Borrower shall, during business hours, make the Equipment available to Lender for inspection at the place where it is normally located and shall make Borrower's log and maintenance records pertaining to the Equipment available to the Equipment available to Lender for inspection. Borrower shall take all action necessary to maintain such logs and maintenance records in a correct and complete fashion.

5.4 Upon the request of Lender, Borrower shall cause the Equipment to be plainly, permanently and conspicuously marked, by stenciling or by metal tag or plate affixed thereto, indicating Lender's security interest in the Equipment. Borrower shall replace any such stenciling, tag or plate which may be removed or destroyed or become illegible. Borrower shall keep all Equipment free from any marking or labeling which might be interpreted as a claim of ownership adverse to Borrower's.

5.5 Borrower covenants and agrees to pay when due, all taxes, fees

or other charges of any nature whatsoever (together with any related interest or penalties) now or hereafter imposed or assessed against Borrower, Lender or the Collateral or upon Borrower's ownership, possession, use, operation or disposition thereof or upon Borrower's rents, receipts or earnings arising therefrom. Borrower shall file on or before the due date therefor all personal property tax returns in respect of the Collateral.

5.6 Borrower shall furnish to Lender the financial statements listed hereinafter, prepared in accordance with generally accepted accounting principles consistently applied (the "Financial Statements"):

(a) as soon as practicable (and in any event within thirty (30) days) after the end of each month: an internally prepared income statement, balance sheet, and cash flow statement, (including the commencement of any material litigation by or against Borrower), each certified by Borrower's Chief Executive or Financial Officer to be true and correct;

(b) as soon as practicable (and in any event within ninety (90) days) after the end of each fiscal year, audited Financial Statements, setting forth in comparative form the corresponding figures for the preceding fiscal year, and accompanied by any audit report and opinion of the independent certified public accountants selected by Borrower; and

(c) promptly any additional information (including but not limited to tax returns, income statements, balance sheets, and names of principal creditors) as Lender reasonably believes necessary to evaluate Borrower's continuing ability to meet financial obligations.

5.7 Notwithstanding the foregoing, after the effective date of the initial registration statement covering a public offering of Borrower's securities, the term "Financial Statements" shall be deemed to refer to only those statements required by the Securities and Exchange Commission, to be provided no less frequently than quarterly. Borrower will from time to time execute, deliver and file, alone or with Lender, any financing statements, security agreements or other documents; and take all further action that may be necessary, or that Lender may reasonably request, to confirm, perfect, preserve and protect the security interests intended to be granted hereby, and in addition, and for such purposes only, Borrower hereby authorizes Lender to execute and deliver on behalf of Borrower and to file such financing statements, security agreement and other documents without the signature of Borrower either in Lender's name or in the name of Borrower as agent and attorney-in-fact for Borrower.

5.8 Borrower shall protect and defend Borrower's title as well as the interest of the Lender against all persons claiming any interest adverse to Borrower or Lender and shall at all times keep the Collateral free and clear from any attachment or levy, liens or encumbrances whatsoever (except any placed thereon by Lender, or any liens arising by operation of law with respect to any obligations not yet overdue or any other liens consented to in writing by Lender) and shall give Lender immediate written notice thereof.

SECTION 6. CONDITIONS PRECEDENT TO LOAN

The obligation of Lender to fund the Loan on each Advance Date(s) shall be subject to satisfaction by Borrower or waiver by Lender, in Lender's sole discretion, of the following conditions:

6.1 (a) The Advance Date(s) for any installment shall occur on or before December 16, 2000.

6.2 DOCUMENT DELIVERY. Borrower, on or prior to the Closing Date,

shall have delivered to Lender the following, in form and substance reasonably satisfactory to Lender:

(a) executed originals of the Agreement, Note(s), Warrant Agreement and any documents reasonably required by Lender to effectuate the liens of Lender, with respect to all Collateral;

(b) certified copy of resolutions of Borrower's board of directors evidencing approval of the borrowing and other transactions evidenced by the Loan Documents;

(c) certified copies of the Certificate of Incorporation and the Bylaws of Borrower, as amended through the Closing Date;

(d) certificate of good standing for Borrower from its state of incorporation and similar certificates from all other jurisdictions in which it does business and where the failure to be qualified would have a Material Adverse Effect;

(e) such other documents as Lender may reasonably request.

6.3 ADVANCE REQUEST. Borrower, on or prior to each Advance Date(s), shall have delivered to Lender the following:

(a) a minimum of two (2) business days prior to the Advance Date(s), written notice in the form of an Advance Request, or as otherwise specified by Lender from time to time, specifying amount of such Advance and wire transfer instructions;

(b) such other documents as Lender may reasonably request.

6.4 PERFECTION OF SECURITY INTERESTS. Borrower shall have taken or caused to be taken such actions requested by Lender to grant Lender a first priority perfected security interest in the Collateral. Such actions shall include, without limitation, the delivery to Lender of all appropriate financing statements, executed by Borrower, as to the Collateral granted by Borrower for all jurisdictions as may be necessary or desirable to perfect the security interest of Lender in such Collateral

6.5 ABSENCE OF EVENTS OF DEFAULTS. As of the Closing Date or the Advance Date, no fact or condition exists that would (or would, with the passage of time, the giving of notice, or both) constitute an Event of Default under this Agreement or any of the Loan Documents.

6.6 MATERIAL ADVERSE EFFECT. As of the Closing Date or the Advance Date, no event which has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

SECTION 7. ASSIGNMENT BY LENDER

7.1 Borrower acknowledges and understands that Lender may sell and assign all or a part of its interest hereunder and under the Note and Loan Documents to any person or entity (an "Assignee"). After such assignment the term Lender shall mean such Assignee, and such Assignee shall be vested with all rights, powers and remedies of Lender hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, the Lender shall retain all rights, powers and remedies hereby given. No such assignment by Lender shall relieve Borrower of any of its obligations hereunder. Borrower shall acknowledge such assignment or assignments as shall be designated by written notice given by Lender to Borrower. The Lender agrees that in the event of any transfer by it of the Note, it will endorse thereon a notation as to the portion of the principal of the Note which shall have been paid at the time of

such transfer and as to the date to which interest shall have been last paid thereon.

SECTION 8. DEFAULT

The occurrence of any one or more of the following events (herein called "Events of Default") shall constitute a default hereunder and under the Note:

8.1 The Borrower defaults in the payment of any principal or interest payable under this Agreement, the Note or any of the other Loan Documents and such default continues for more than five (5) days after the due date thereof;

8.2 The Borrower defaults in the payment or performance of any other covenant or obligation of the Borrower hereunder or under the Note or any other Loan Documents for more than ten (10) days after the Lender has given notice of such default to the Borrower;

8.3 Any representation or warranty made herein by the Borrower shall prove to have been false or misleading in any material respect;

8.4 The making of an assignment by Borrower for the benefit of its creditors or the admission by Borrower in writing of its inability to pay its debts as they become due, or the insolvency of Borrower, or the filing by Borrower of a voluntary petition in bankruptcy, or the adjudication of Borrower as a bankrupt, or the filing by Borrower of any petition or answer seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution, or similar relief under any present or future statute, law or regulation, or the filing of any answer by Borrower admitting, or the failure by Borrower to deny, the material allegations of a petition filed against it for any such relief, or the seeking or consenting by Borrower to, or acquiescence by Borrower in, the appointment of any trustee, receiver or liquidator of Borrower or of all or any substantial part of the properties of Borrower, or the inability of Borrower to pay its debts when due, or the commission by Borrower of any act of bankruptcy as defined in the Federal Bankruptcy Act, as amended;

8.5 The failure by Borrower, within sixty (60) days after the commencement of any proceeding against Borrower seeking any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, to obtain the dismissal of such proceeding or, within sixty (60) days after the appointment, without the written consent or acquiescence of Lender, of any trustee, receiver or liquidator of Borrower or of all or any substantial part of the properties of Borrower, to vacate such appointment; or

8.6 The default by Borrower under any other notes or other agreement for borrowed money, lease or other agreement between Borrower and Lender.

SECTION 9. REMEDIES

Upon the occurrence hereof of any one or more Events of Default, Lender, at its option, may declare the Note to be accelerated and immediately due and payable, (provided, that upon the occurrence of an Event of Default of the type described in 8.4 or 8.5, the Note and all other Secured Obligations shall automatically be accelerated and made due and payable without any further act) whereupon the unpaid principal of and accrued interest on such Note shall become immediately due and payable, and shall thereafter bear interest at the Default Rate and calculated in accordance with Section 1.2. Lender may exercise all rights and remedies with respect to the Collateral granted pursuant hereto for such Note, or otherwise available to it under applicable law, including the right to release, hold or otherwise dispose of all or any part of the Collateral and the right to utilize, process and commingle the Collateral.

Upon the happening and during the continuance of any Event of Default, Lender may then, or at any time thereafter and from time to time, apply, collect, sell in one or more sales, lease or otherwise dispose of, any or all of the Collateral, in its then condition or following any commercially reasonable preparation or processing, in such order as Lender may elect, and any such sale may be made either at public or private sale at its place of business or elsewhere.

Borrower agrees that any such public or private sale may occur upon five (5) calendar day's notice to Borrower. Lender may require Borrower to assemble the Collateral and make it available to Lender at a place designated by Lender which is reasonably convenient to Lender and Borrower. The proceeds of any sale, disposition or other realization upon all or any part of the collateral shall be distributed by Lender in the following order of priorities:

First, to Lender in an amount sufficient to pay in full Lender's reasonable costs and professionals' and advisors' fees and expenses;

Second, to Lender in an amount equal to the then unpaid amount of the Secured Obligations in such order and priority as Lender may choose in its sole discretion; and

Finally, upon payment in full of all of the Secured Obligations, to Borrower or its representatives or as a court of competent jurisdiction may direct.

The Lender shall return to the Borrower any surplus Collateral remaining after payment of all Secured Obligations.

SECTION 10. MISCELLANEOUS

10.1 Borrower shall remain liable to Lender for any unpaid Secured Obligations, advances, costs, charges and expenses, together with interest thereon and shall pay the same immediately to Lender at Lender's offices.

10.2 The powers conferred upon Lender by this Agreement are solely to protect its interest in the Collateral and shall not impose any duty upon Lender to exercise any such powers.

10.3 This is a continuing Agreement and the grant of a security interest hereunder shall remain in full force and effect and all the rights, powers and remedies of Lender hereunder shall continue to exist until the Secured Obligations are paid in full as the same become due and payable. When Borrower has paid in full all Secured Obligations, Lender will execute a written termination statement, reassigning to Borrower, without recourse, the Collateral and all rights conveyed hereby and return possession (if Lender has possession) of the Collateral to Borrower. The rights, powers and remedies of Lender hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of any other rights, powers and remedies of Lender. Furthermore, regardless of whether or not the UCC is in effect in the jurisdiction where such rights, powers and remedies are asserted, Lender shall have the rights, powers and remedies of a secured party under the UCC.

10.4 Upon payment in full of all Secured Obligations, the Lender shall cancel the Note, this Agreement and all UCC financing statements, if any, and shall promptly deliver all such canceled documents to the Borrower.

10.5 GOVERNING LAW. This Agreement, the Note and the other Loan Documents have been negotiated and delivered to Lender in the State of Illinois and shall not become effective until accepted by Lender in the State of Illinois. Payment to Lender by Borrower of the Secured Obligations is due in the

State of Illinois. This Agreement shall be governed by, and

construed and enforced in accordance with the laws of the State of Illinois excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

10.6 CONSENT TO JURISDICTION AND VENUE. All judicial proceedings arising in or under or related to this Agreement, the Note or any of the other Loan Documents may be brought in any state or federal court of competent jurisdiction located in the State of Illinois. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to personal jurisdiction in Cook County, State of Illinois; (b) waives any objection as to jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement, the Note and the other Loan Documents. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in Section 10.8 below and shall be deemed effective and received as set forth in Section 10.8 below. Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

10.7 Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

10.8 Any notice required or given hereunder shall be deemed properly given upon the earlier of: (i) the first business day after transmission by facsimile or hand delivery or deposit with an overnight express service or overnight mail delivery service; or (ii) or three (3) days after mailed, postage prepaid, in each case, addressed to the designated recipient at its address set forth herein or such other address as such party may advise the other party by notice given in accordance with this provision.

10.9 Lender and Borrower acknowledge that there are no agreements or understandings, written or oral, between Lender and Borrower with respect to the Loan, other than as set forth herein, in the Note and the other Loan Documents and that this Agreement, the Note and the other Loan Documents contain the entire agreement between Lender and Borrower with respect thereto. None of the terms of this Agreement, the Note and the other Loan Documents may be amended except by an instrument executed by each of the parties hereto.

10.10 No omission, or delay, by Lender at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by Borrower at any time designated, shall be a waiver of any such right or remedy to which Lender is entitled, nor shall it in any way affect the right of Lender to enforce such provisions thereafter.

10.11 All agreements, representations and warranties contained in this Agreement or the Note, or in any Loan Documents delivered pursuant hereto or in connection herewith shall be for the benefit of Lender and any Assignee and shall survive the execution and delivery of this Agreement or the Note and the expiration or other termination of this Agreement or the Note.

10.12 This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

10.13 This Agreement shall be binding upon, and shall inure to the benefit of, Borrower and its permitted assigns (if any). Borrower shall not assign its obligations under this Agreement, the Note or any of the other Loan Documents without Lender's express written consent and any such attempted assignment shall be void and of no effect. Any assignment by Borrower in connection with a "Merger" (as defined below) shall be subject to Lender's prior consent. Any consent granted by Lender shall be conditioned upon such surviving entity or transferee assuming Borrower's Secured Obligations hereunder pursuant to assignment documents reasonably acceptable to Lender. If Lender reasonably withholds its consent to such assignment in connection with a Merger, the outstanding principal and accrued and unpaid interest shall be prepaid in whole without a prepayment premium.

For purposes of this Agreement, a "Merger" shall mean any consolidation or merger of the Borrower with or into any other corporation or entity, any sale or conveyance of an or substantially all of the assets or stock of the Borrower by or to any other person or entity in which Borrower is not the surviving entity.

IN WITNESS WHEREOF, the Borrower and the Lender have duly executed and delivered this Agreement as of the day and year first above written.

BORROWER: CYTOKINETICS, INCORPORATED.

By: /s/ JAMES SABRY

Title:

Date: _____

ACCEPTED IN ROSEMONT, ILLINOIS:

LENDER: COMDISCO, INC.

By: /s/ JILL C. HANSES

Title: JILL C. HANSES SENIOR VICE PRESIDENT

Date: DEC 23 1999

EXHIBIT A-1
SECURED PROMISSORY NOTE

Date: _____

$_____

Due: _____

FOR VALUE RECEIVED, Cytokinetics, Inc., Inc. a Delaware corporation (the "Borrower") hereby promises to pay to the order of Comdisco, Inc., a Delaware corporation (the "Lender") at P.O. Box 91744, Chicago, IL 60693 or such other place of payment as the holder of this Secured Promissory Note (this "Note") may specify from time to time in writing, in lawful money of the United States of America, the principal amount of _____and 00/100 Dollars ($_____) together with interest at eight and one quarter percent (8.25%) per annum from the date of this Note to maturity of each installment on the principal hereof remaining from time to time unpaid, such principal and interest to be paid 48 equal monthly installments of $_____each, commencing_____and on the same day of each month thereafter to and including_____ and an additional installment in the amount of $____(15%) ("Balloon Payment")* to be paid on_____, such installments to be applied first to accrued and unpaid interest and the balance to unpaid principal. Interest shall be computed on the basis of a year consisting of twelve months of thirty days each.

This Note is the Note referred to in, and is executed and delivered in connection with, that certain Loan and Security Agreement of even date herewith by and between Borrower and Lender (as the same may from time to time be amended, modified or supplemented in accordance with its terms, the "Loan Agreement"), and is entitled to the benefit and security of the Loan Agreement and the other Loan Documents (as defined in the Loan Agreement), to which reference is made for a statement of all of the terms and conditions thereof. All terms defined in the Loan Agreement shall have the same definitions when used herein, unless otherwise defined herein. Attached hereto as Exhibit B is a list of Collateral which is being financed with the proceeds of the Loan evidenced by this Note, which Collateral shall be deemed to be listed on Exhibit B to the Loan Agreement.

The Borrower waives presentment and demand for payment, notice of dishonor, protest and notice of protest and any other notice as permitted under the UCC or any applicable law.

This Note has been negotiated and delivered to Lender and is payable in the State of Illinois, and shall not become effective until accepted by Lender in the State of Illinois. This Note shall be governed by and construed and enforced in accordance with, the laws of the State of Illinois, excluding any conflicts of law rules or principles that would cause the application of the laws of any other jurisdiction.

BORROWER: CYTOKINETICS, INC.
280 East Grand Ave
South San Francisco, CA 94080

Signature: _____

Print Name: _____

Title: _____

* Borrower may request Lender to finance the Balloon Payment over 12 months at 8%. In that case a new promissory note will be prepared.

EXHIBIT A-2
SECURED PROMISSORY NOTE

Date: _____

$_____

Due: _____

FOR VALUE RECEIVED, Cytokinetics, Inc., Inc. a Delaware corporation (the "Borrower") hereby promises to pay to the order of Comdisco, Inc., a Delaware corporation (the "Lender") at P.O. Box 91744, Chicago, IL 60693 or such other place of payment as the holder of this Secured Promissory Note (this "Note") may specify from time to time in writing, in lawful money of the United States of America, the principal amount of _____and 00/100 Dollars ($ _____) together with interest at eight and one quarter percent (8.25%) per annum from the date of this Note to maturity of each installment on the principal hereof remaining from time to time unpaid, such principal and interest to be paid 36 equal monthly installments of $_____each, commencing_____and on the same day of each month thereafter to and including_____ and an additional installment in the amount of $____(15%) ("Balloon Payment")* to be paid on _____, such installments to be applied first to accrued and unpaid interest and the balance to unpaid principal. Interest shall be computed on the basis of a year consisting of twelve months of thirty days each.

This Note is the Note referred to in, and is executed and delivered in connection with, that certain Loan and Security Agreement of even date herewith by and between Borrower and Lender (as the same may from time to time be

amended, modified or supplemented in accordance with its terms, the "Loan Agreement"), and is entitled to the benefit and security of the Loan Agreement and the other Loan Documents (as defined in the Loan Agreement), to which reference is made for a statement of all of the terms and conditions thereof. All terms defined in the Loan Agreement shall have the same definitions when used herein, unless otherwise defined herein. Attached hereto as Exhibit B is a list of Collateral which is being financed with the proceeds of the Loan evidenced by this Note, which Collateral shall be deemed to be listed on Exhibit B to the Loan Agreement.

The Borrower waives presentment and demand for payment, notice of dishonor, protest and notice of protest and any other notice as permitted under the UCC or any applicable law.

This Note has been negotiated and delivered to Lender and is payable in the State of Illinois, and shall not become effective until accepted by Lender in the State of Illinois. This Note shall be governed by and construed and enforced in accordance with, the laws of the State of Illinois, excluding any conflicts of law rules or principles that would cause the application of the laws of any other jurisdiction.

BORROWER:

CYTOKINETICS, INC.
280 East Grand Ave
South San Francisco, CA 94080

Signature: _____

Print Name: _____

Title: _____

* Borrower may request Lender to finance the Balloon Payment over 12 months at 8%. In that case a new promissory note will be prepared.

EXHIBIT 4.7

Amendment No. 1 to Loan and Security Agreement

This Amendment Agreement No. 1 ("Amendment") to the Loan and Security Agreement dated as of December 16, 1999 is entered into this 29 Th day of June, 2000 by and between Cytokinetics, Inc., a California corporation, with its chief executive offices and principal place of business at 280 East Grand Avenue, Suite 2, South San Francisco, CA 94080 ("Borrower") and Comdisco, Inc., a Delaware corporation, with its chief executive offices and principal place of business at 6111 North River Road, Rosemont, IL 60018 ("Lender").

RECITALS

WHEREAS, PURSUANT to the terms and conditions set forth in the Loan and Security Agreement dated as of December 16, 1999 between Borrower and Lender (hereinafter, "Loan Agreement"), the parties have entered into that certain Secured Promissory Note dated June 29, herewith (the "Note(s)") whereby for value received, Borrower promises to pay certain payments to Lender in the original principal amount of Six Hundred Twenty Seven Thousand Five Hundred Thirteen and 27/100 Dollars ($627,513.27);

WHEREAS, IN connection with the issuance of the Note, Lender and Borrower wish to amend the Loan Agreement to include the Exhibit B as required under the Loan Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and mutual agreements contained herein, Borrower and Lender hereby agree as follows:

1. Except as expressly set forth herein, all terms used herein shall have the meanings set forth in the Loan Agreement.

2. Borrower and Lender agree that the Exhibit B attached hereto shall be incorporated and made a part of the Loan Agreement and the equipment described thereon shall be "Equipment" as set forth in the Loan Agreement.

3. Except as specifically amended hereby, the terms and conditions of the Loan Agreement are hereby reaffirmed and remain in full force and effect, and from and after the date hereof the "Agreement" shall mean the "Agreement" as amended by this Amendment.

4. This Amendment may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Borrower and Lender have duly executed and delivered this Amendment as of the day and year first above written.

BORROWER

CYTOKINETICS, INC

Signature: /s/ JAMES SABRY

Print Name: JAMES SABRY

Title: CEO

ACCEPTED IN ROSEMONT, ILLINOIS

LENDER COMDISCO, INC.

Signature: _____

Print Name: _____

Title: _____

EXHIBIT B

CYTOKINETICS
SCHEDULE OF FIXED ASSETS

INVOICE DATE	VENDOR	DESCRIPTION	INVOICE #	SERIAL NO.	QTY
COMPUTER HARDWARE					
09/03/99	Dell	Dell PIII 500K GX1/T	272857823	4UJ1W	5
09/03/99	Dell	Dell 6450 PIII/MT	27322227	4UJ20	2
09/08/99	The Computer Guys	HP Procurve Switch 4000M	11485	SG92602333,SY1899,SY1699,000AJ14D767	
09/21/99	The Computer Guys	HP NetServer E60	11558	US93300835	
09/24/99	Dell	G810 21" Monitor	280963745	QI93098826,QI93098830,QI93098834	3
09/28/99	The Computer Guys	Shiva Lanrover/E	11592	PE 13005984	1
10/05/99	Dell	Dell 6450 PIII/MT	284567401	6HVIQ	1
10/06/99	Dell	Dell PIII 500K GX1/T	284566569	6JMA6	2
10/08/99	Dell	G810 21" Monitor	284564598	QI91584578	1
10/14/99	Dell	Inspiron 3500 A366GT	280591603	V3TG3	1
10/19/00	Dell	Dell PIII 500K GX1/T	288359367	7BA1L,7BA1S,7BA1X,7BA20,7BA21	5
10/29/99	Dell	G810 21" Monitor	292634888	n/a	1
11/04/99	Dell	Dell PIII 500K GX1/T	296076011	815TD;815TJ;815TM;815TR;815TY	5
11/08/99	The Computer Guys	HP Laser Jet 4050N	11958	USQC054318	1
11/09/99	The Computer Guys	IOMEGA Zip 100MB External	11971	n/a	1
11/10/99	The Computer Guys	HP NetServer LH4r Xeon 500	11975	n/a	1
11/22/99	The Computer Guys	HP Laser Jet 5000N	12111	n/a	1
12/21/99	Dell	Dell PIII 500K	313855363	BU1R6; BU1R8; BU1R9; BU1RB;BU1D1	5
12/23/99	Dell	Dimension 500MHZ,PIII	314609751		1
12/23/99	Dell	Dell 500PIII/M	314665654	CODIJ;CODIQ;CODIW;CODIZ	4
01/06/00	The Computer Guys	HP 18.2 Ultra 2 SCSI	12396	n/a	5
01/07/00	Dell	Dell PIII GX1/T+Base W/4MB	319602017	CLHV3;CLHV5;CLFV7;CLHV8;CLHVA	5
01/17/00	Dell	Dell 500PIII/M	322740937	CZUPL;CZUPP;CZUPS;CZUPV	4

INVOICE DATE	VENDOR	DESCRIPTION	INVOICE #	SERIAL NO.	QTY
Computer Software					
09/27/99	The MathWorks	Neural Network - Windows	99030491	n/a	3
10/12/99	The Computer Guys	Microsoft Project98	11710	n/a	5
			11710	n/a	2
			11710	n/a	1
11/15/99	Rogue Wave	DBTools.h++Core Library for V	38386	n/a	1
			38386	n/a	1
			38386	n/a	1
			38386	n/a	1
			38386	n/a	1
			38386	n/a	1
			38386	n/a	1
			38386	n/a	1
11/29/99	MathSoft	S-PLUS 2000 Professional for	82855-327270	n/a	2
12/28/99	InforMax, Inc.	Adv.Supp. Renewal for 2 Licer	4038 ASR	n/a	1
01/03/00	IDBS	Activity Base - HTSProject	30200	n/a	1
01/04/00	The Computer Guys	Microsoft MOLP-A	12379	n/a	25
			12379	n/a	25
01/06/00	MDL Inform Systems, [ILLEGIBLE]	Sculpt for windows 95/98/NT4	01.06.00	OCN00049069	1
01/10/00	MDL Inform Systems, [ILLEGIBLE]	Sculpt for windows on CD	706917	OCN00554031	1
01/18/00	Applikon	Bioexpert Windows NT Softwa	00042/310550 n/a		1

INVOICE DATE	VENDOR	DESCRIPTION	INVOICE #	SERIAL NO.	QTY
EQUIPMENT					
08/18/99	Composite Rotor	Centrifuge Sorval 6000rmp	0007224-IN	#7224,#7226	
08/28/99	PE Biosystems	Geneamp 5700 SEQ DET Syst	90451346	22794E2NTRC8,100000283,S01443,22794E2NT RC8	

09/10/99	Beckman Coulter	Multimek 96,200UL	413325FT01			
09/16/99	Hudson Control Group	Platecrane 200100	6626	#11139-152		
09/21/99	BMG Labtechnologies	POLARstar Galaxy	1493	4030553		
10/07/99	CCS Packard	Standard Deck Plate	04-10-1485			
10/12/99	Microsource Discovery	Killer Plates	94841			
10/29/99	Hudson Control Group	Platecrane 200100	6641	#11139-163		
10/25/99	Linc-Quantum	HP-G1948A 1100 API	71170	US08410901		1
10/30/99	Li-Cor	Global IR2 DNA Sequencer	6202			
11/05/99	Comdisco Laboratory	New Brunswick G27 Shaker	15779			
11/12/99	Sanyo Sales & Supply [ILLEGIBLE]	Incubator C02	9813076-IN	90907519		1
11/17/99	MJ Research	PTC-2200	65847	EN010448,EN010460		
11/23/99	MJ Research	ALD-1244	66140			
12/13/99	CCS Packard	Platetrak PTS-120799-03.2	03-12-1713			
12/15/99	VWR Scientific	Rotoraps	2388195			
12/16/99	VWR Scientific	Pump,Syring Sage Mod M362	2405107			1
12/30/99	Universal Imaging Corp	Barcode Kit	7769	N781468, N895971		2
01/02/00	Sigma-Aldrich	Lopap-Pharm (SC011-1 Kit)	92520726			1
01/03/00	VWR Scientific	Pump 115V	2520170	KK081058		1
01/13/00	Universal Imaging Corp	HTS SU310	7816			
01/18/00	Bio-Rad	Ultramark Reader 110-240V	176691			
01/19/00	Marsh Biomedical	Plate Estate Storage System	245011	666/659/371		1
01/27/00	Varian	Prostar 210 SDM	1251025			

INVOICE DATE	VENDOR	DESCRIPTION	INVOICE #	SERIAL NO.	QTY
FURNITURE					
09/16/99	Corporate Interiors	Worksurface	1262	n/a	
09/23/99	Corporate Interiors	Regular Herman Shelf/H Herm	1317	A0520.1360, WR72	
10/01/99	Corporate Interiors	67"Hx48"W Powered Panel	1296 (Rev)	n/a	
10/01/99	Corporate Interiors	RA Stations	1348	n/a	
10/11/99	Corporate Interiors	BC Series Lab Stool w/Pneum [ILLEGIBLE]	1339	n/a	
10/20/99	Corporate Interiors	File Full Height Locking Pedes	1362	n/a	
10/20/99	Corporate Interiors	Ergonomic Clickit Arm w/Plata [ILLEGIBLE]	1350	n/a	
10/20/99	Corporate Interiors	60"Herman Miller Tack Board	1340	n/a	
10/21/99	Corporate Interiors	42"Four Drawer Locking	1331	n/a	
01/03/00	Corporate Interiors	4'x30" Workstation	1380	n/a	

INVOICE DATE	VENDOR	DESCRIPTION	INVOICE #	SERIAL NO.	QTY
TENANT IMPROVEMENT					
10/13/99	Sprig Electric	Install two 208V L(carat)NEMA circ [ILLEGIBLE]	36273	n/a	
10/13/99	Sprig Electric	Relocate power for equipment	36323	n/a	
10/13/99	Sprig Electric	Install furniture whips & pull 2- [ILLEGIBLE]	36374	n/a	
10/13/99	Sprig Electric	Repair flourescent lights	36384	n/a	
10/21/99	Sprig Electric	Replace high pressure fixtures	36429	n/a	
01/12/00	Peninsula Security Svc [ILLEGIBLE]	Radionics Readykey	13815	n/a	

Exhibit 4.8

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AS AMENDED, OR ANY STATE SECURITIES LAWS. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL (WHICH MAY BE COMPANY COUNSEL) REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY APPLICABLE STATE SECURITIES LAWS.

WARRANT AGREEMENT

TO PURCHASE SHARES OF THE SERIES B PREFERRED STOCK OF

CYTOKINETICS, INC.

DATED AS OF DECEMBER 16, 1999 (THE "EFFECTIVE DATE")

WHEREAS, Cytokenetics, Inc., a Delaware corporation (the "Company") has entered into a Loan And Security Agreement dated as of December 16,1999, and related Promissory Note(s) (collectively, the "Loans") with Comdisco, Inc., a Delaware corporation (the "Warrantholder"); and

WHEREAS, the Company desires to grant to Warrantholder, in consideration for such Loans, the right to purchase shares of its Series B Preferred Stock;

NOW, THEREFORE, in consideration of the Warrantholder executing and delivering such Loans and in consideration of mutual covenants and agreements contained herein, the Company and Warrantholder agree as follows:

1. GRANT OF THE RIGHT TO PURCHASE PREFERRED STOCK.

For the first $1,000,000 portion of the Loans, the Company hereby grants to the Warrantholder, and the Warrantholder is entitled, upon the terms and subject to the conditions hereinafter set forth, to subscribe to and purchase, from the Company, 14,483 fully paid and non-assessable shares of the Company's Series B Preferred Stock ("Preferred Stock") at a purchase price of $2.90 per share (the "Exercise Price") provided however, that from and after the effective date of the registration statement for the Company's initial public offering of its equity securities, the securities purchasable by the Warrantholder upon the exercise of this Warrant Agreement shall be shares of the Company's Common Stock ("Common Stock") which shares shall be purchasable by the Warrantholder in the same number that the Warrantholder would otherwise have been entitled to purchase had this Warrant Agreement remained exercisable for shares of the Company's Preferred Stock. From and after the effective date of the registration statement for the Company's initial public offering of its equity securities, the Warrantholder shall not have any further right pursuant to this Warrant Agreement to purchase shares of the Company's Preferred Stock. The shares of Preferred Stock or Common Stock that are issuable from time to time upon the exercise of this Warrant Agreement are sometimes referred to herein as the "Stock.

In the event that the Company requests and the Warrantholder funds any portion of the additional Advances between the first $1,000,000 and up to $2,000,000 as provided under the Loans, the Company hereby grants to the Warrantholder, and the Warrantholder is entitled, upon the terms and subject to the conditions hereinafter set forth, to subscribe for and purchase, from the Company, 14,483 shares of Stock at the Exercise Price.

In the event that the Company requests and the Warrantholder funds any portion of the additional Advances between the first $2,000,000 and up to $5,000,000 as provided under the Loans, the Company hereby grants to the Warrantholder, and the Warrantholder is entitled, upon the terms and subject to the conditions hereinafter set forth, to subscribe for and purchase, from the Company, 16,206 shares of Stock at the Exercise Price for each increment of

remaining $1,000,000 funded under the Loan.

For purposes of calculating the number of shares issuable hereunder, after the first dollar of each $1,000,000 installment is funded, the applicable number of shares referred to above shall be issuable. The number and purchase price of such shares are subject to adjustment as provided in Section 8 hereof.

2. TERM OF THE WARRANT AGREEMENT.

Except as otherwise provided for herein, the term of this Warrant Agreement and the right to purchase Stock as granted herein shall commence on the Effective Date and shall be exercisable for a period of (i) seven (7) years or (ii) three (3) years from the effective date of the Company's initial public offering, whichever is shorter.

3. EXERCISE OF THE PURCHASE RIGHTS.

The purchase rights set forth in this Warrant Agreement are exercisable by the Warrantholder, in whole or in part, at any time, or from time to time, prior to the expiration of the term set forth in Section 2 above, by tendering to the Company at its principal office a notice of exercise in the form attached hereto as Exhibit I (the "Notice of Exercise"), duly completed and executed. Promptly upon receipt of the Notice of Exercise and the payment of the purchase price in accordance with the terms set forth below, and in no event later than twenty-one (21) days thereafter, the Company shall issue to the Warrantholder a certificate for the number of shares of Stock purchased and shall execute the acknowledgment of exercise in the form attached hereto as Exhibit II (the "Acknowledgment of Exercise") indicating the number of shares which remain subject to future purchases, if any.

The Exercise Price may be paid at the Warrantholder's election either (i) by cash or check, or (ii) by surrender of Warrants ("Net Issuance") as determined below. If the Warrantholder elects the Net Issuance method, the Company will issue Stock in accordance with the following formula:

$$X = Y(A-B)/A$$

Where: X = the number of shares of Stock to be issued to the Warrantholder.

Y = the number of shares of Stock requested to be exercised under this Warrant Agreement.

A = the fair market value of one (1) share of Stock.

B = the Exercise Price.

For purposes of the above calculation, current fair market value of Stock shall mean with respect to each share of Stock:

(i) if the exercise is in connection with an initial public offering of the Company's Common Stock, and if the Company's Registration Statement relating to such public offering has been declared effective by the SEC, then the fair market value per share shall be the product of (x) the initial "Price to Public" specified in the final prospectus with respect to the offering and (y) the number of shares of Common Stock into which each share of Stock is convertible at the time of such exercise;

(ii) if this Warrant is exercised after, and not in connection with the Company's initial public offering, and:

(a) if traded on a securities exchange, the fair market value shall be deemed to be the product of (x) the average of the closing prices over a twenty-one (21) day

period ending three days before the day the current fair market value of the securities is being determined and (y) the number of shares of Common Stock into which each share of Stock is convertible at the time of such exercise; or

(b) if actively traded over-the-counter, the fair market value shall be deemed to be the product of (x) the average of the closing bid and asked prices quoted on the NASDAQ system (or similar system) over the twenty-one (21) day period ending three days before the day the current fair market value of the securities is being determined and (y) the number of shares of Common Stock into which each share of Stock is convertible at the time of such exercise;

(iii) if at any time the Common Stock is not listed on any securities exchange or quoted in the NASDAQ System or the over-the-counter market, the current fair market value of Stock shall be the product

of (x) the highest price per share which the Company could obtain from a willing buyer (not a current employee or director) for shares of Common Stock sold by the Company, from authorized but unissued shares, as determined in good faith by its Board of Directors and (y) the number of shares of Common Stock into which each shares of Stock is convertible at the time of such exercise unless the Company shall become subject to a merger, acquisition or other consolidation pursuant to which the Company is not the surviving party, in which case the fair market value of Stock shall be deemed to be the value received by the holders of the Company's Stock on a common equivalent basis pursuant to such merger or acquisition.

Upon partial exercise by either cash or Net Issuance, the Company shall promptly issue an amended Warrant Agreement representing the remaining number of shares purchasable hereunder. All other terms and conditions of such amended Warrant Agreement shall be identical to those contained herein, including, but not limited to the Effective Date hereof.

4. RESERVATION OF SHARES.

(a) Authorization and Reservation of Shares. During the term of this Warrant Agreement, the Company will at all times have authorized and reserved a sufficient number of shares of its Stock to provide for the exercise of the rights to purchase Stock as provided for herein.

(b) Registration or Listing. If any shares of Stock required to be reserved hereunder require registration with or approval of any governmental authority under any Federal or State law (other than any registration under the Securities Act of 1933, as amended ("1933 Act"), as then in effect, or any similar Federal statute then enforced, or any state securities law, required by reason of any transfer involved in such conversion), or listing on any domestic securities exchange, before such shares may be issued upon conversion, the Company will, at its expense and as expeditiously as possible, use its best efforts to cause such shares to be duly registered, listed or approved for listing on such domestic securities exchange, as the case may be.

5. NO FRACTIONAL SHARES OR SCRIP.

No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the Warrant, but in lieu of such fractional shares the Company shall make a cash payment therefor upon the basis of the Exercise Price then in effect.

6. NO RIGHTS AS SHAREHOLDER.

This Warrant Agreement does not entitle the Warrantholder to any voting

rights or other rights as a shareholder of the Company prior to the exercise of the Warrant.

7. WARRANTHOLDER REGISTRY.

The Company shall maintain a registry showing the name and address of the registered holder of this Warrant Agreement.

8. ADJUSTMENT RIGHTS.

The purchase price per share and the number of shares of Stock purchasable hereunder are subject to adjustment, as follows:

(a) Merger and Sale of Assets. If at any time there shall be a capital reorganization of the shares of the Company's stock (other than a combination, reclassification, exchange or subdivision of shares otherwise provided for herein), or a merger or consolidation of the Company with or into another corporation whether or not the Company is the surviving corporation, or the sale of all or substantially all of the Company's properties and assets to any other person (hereinafter referred to as a "Merger Event"), then, as a part of such Merger Event, lawful provision shall be made so that the Warrantholder shall thereafter be entitled to receive, upon exercise of the Warrant, the number of shares of preferred stock or other securities of the successor corporation resulting from such Merger Event, equivalent in value to that which would have been issuable if Warrantholder had exercised this Warrant immediately prior to the Merger Event. In any such case, appropriate adjustment (as determined in good faith by the Company's Board of Directors) shall be made in the application of the provisions of this Warrant Agreement with respect to the rights and interest of the Warrantholder after the Merger Event to the end that the provisions of this

Warrant Agreement (including adjustments of the Exercise Price and number of shares of Preferred Stock purchasable) shall be applicable to the greatest extent possible.

(b) Reclassification of Shares. If the Company at any time shall, by combination, reclassification, exchange or subdivision of securities or otherwise, change any of the securities as to which purchase rights under this Warrant Agreement exist into the same or a different number of securities of any other class or classes, this Warrant Agreement shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant Agreement immediately prior to such combination, reclassification, exchange, subdivision or other change.

(c) Subdivision or Combination of Shares. If the Company at any time shall combine or subdivide its Stock, the Exercise Price shall be proportionately decreased in the case of a subdivision, or proportionately increased in the case of a combination.

(d) Stock Dividends. If the Company at any time shall pay a dividend payable in, or make any other distribution (except any distribution specifically provided for in the foregoing subsections (a) or (b)) of the Company's stock, then the Exercise Price shall be adjusted, from and after the record date of such dividend or distribution, to that price determined by multiplying the Exercise Price in effect immediately prior to such record date by a fraction (i) the numerator of which shall be the total number of all shares of the Company's stock outstanding immediately prior to such dividend or distribution, and (ii) the denominator of which shall be the total number of all shares of the Company's stock outstanding immediately after such dividend or distribution. The Warrantholder shall thereafter be entitled to purchase, at the Exercise Price resulting from such adjustment, the number of shares of Stock (calculated to the nearest whole share) obtained by multiplying the Exercise Price in effect immediately prior to such adjustment by the number of shares of Stock issuable upon the exercise hereof immediately prior to such adjustment and

dividing the product thereof by the Exercise Price resulting from such adjustment.

(e) Antidilution Rights. Additional antidilution rights applicable to the Preferred Stock purchasable hereunder are as set forth in the Company's Certificate of Incorporation, as amended through the Effective Date, a true and complete copy of which is attached hereto as Exhibit _ (the "Charter"). The Company shall promptly provide the Warrantholder with any restatement, amendment, modification or waiver of the Charter. The Company shall provide Warrantholder with prior written notice of any issuance of its stock or other equity security to occur after the Effective Date of this Warrant, which notice shall include (a) the price at which such stock or security is to be sold, (b) the number of shares to be issued, and (c) such other information as necessary for Warrantholder to determine if a dilutive event has occurred.

(f) Notice of Adjustments. If: (i) the Company shall declare any dividend or distribution upon its stock, whether in cash, property, stock or other securities; (ii) the Company shall offer for subscription prorata to the holders of any class of its Preferred or other convertible stock any additional shares of stock of any class or other rights; (iii) there shall be any Merger Event; (iv) there shall be an initial public offering; or (v) there shall be any voluntary dissolution, liquidation or winding up of the Company; then, in connection with each such event, the Company shall send to the Warrantholder: (A) at least twenty (20) days' prior written notice of the date on which the books of the Company shall close or a record shall be taken for such dividend, distribution, subscription rights (specifying the date on which the holders of Stock shall be entitled thereto) or for determining rights to vote in respect of such Merger Event, dissolution, liquidation or winding up; (B) in the case of any such Merger Event, dissolution, liquidation or winding up, at least twenty (20) days' prior written notice of the date when the same shall take place (and specifying the date on which the holders of Stock shall be entitled to exchange their Stock for securities or other property deliverable upon such Merger Event, dissolution, liquidation or winding up); and (C) in the case of a public offering, the Company shall give the Warrantholder at least twenty (20) days written notice prior to the effective date thereof.

Each such written notice shall set forth, in reasonable detail, (i) the event requiring the adjustment, (ii) the amount of the adjustment, (iii) the method by which such adjustment was calculated, (iv) the Exercise Price, and (v) the number of shares subject to purchase hereunder after giving effect to such adjustment, and shall be given by first class mail, postage prepaid, addressed to the Warrantholder, at the address as shown on the books of the Company.

(g) Timely Notice. Failure to timely provide such notice required by subsection (f) above shall entitle Warrantholder to retain the benefit of the applicable notice period notwithstanding anything to the contrary contained

in any insufficient notice received by Warrantholder. The notice period shall begin on the date Warrantholder actually receives a written notice containing all the information specified above.

9. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

(a) Reservation of Stock. The Stock issuable upon exercise of the Warrantholder's rights has been duly and validly reserved and, when issued in accordance with the provisions of this Warrant Agreement, will be validly issued, fully paid and non-assessable, and will be free of any taxes, liens, charges or encumbrances of any nature whatsoever; provided, however, that the Stock issuable pursuant to this Warrant Agreement may be subject to restrictions on transfer under state and/or Federal securities laws. The Company has made available to the Warrantholder true, correct and complete copies of its Charter and Bylaws, as amended. The issuance of certificates for shares of Stock upon exercise of the Warrant Agreement shall be made without charge to the Warrantholder for any issuance tax in respect thereof, or other cost incurred by the Company in connection with such exercise and the related issuance of shares

of Stock. The Company shall not be required to pay any tax which may be payable in respect of any transfer involved and the issuance and delivery of any certificate in a name other than that of the Warrantholder.

(b) Due Authority. The execution and delivery by the Company of this Warrant Agreement and the performance of ail obligations of the Company hereunder, including the issuance to Warrantholder of the right to acquire the shares of Stock, have been duly authorized by all necessary corporate action on the part of the Company, and the Loans and this Warrant Agreement are not inconsistent with the Company's Charter or Bylaws, do not contravene any law or governmental rule, regulation or order applicable to it, do not and will not contravene any provision of, or constitute a default under, any indenture, mortgage, contract or other instrument to which it is a party or by which it is bound, and the Loans and this Warrant Agreement constitute legal, valid and binding agreements of the Company, enforceable in accordance with their respective terms.

(c) Consents and Approvals. No consent or approval of, giving of notice to, registration with, or taking of any other action in respect of any state, Federal or other governmental authority or agency is required with respect to the execution, delivery and performance by the Company of its obligations under this Warrant Agreement, except for the filing of notices pursuant to Regulation D under the 1933 Act and any filing required by applicable state securities law, which filings will be effective by the time required thereby.

(d) Issued Securities. All issued and outstanding shares of Common Stock, Preferred Stock or any other securities of the Company have been duly authorized and validly issued and are fully paid and nonassessable. All outstanding shares of Common Stock, Preferred Stock and any other securities were issued in full compliance with all Federal and state securities laws. In addition:

(i) The authorized capital of the Company consists of (A) 10,000,000 shares of Common Stock, of which 1,126,110 shares are issued and outstanding, and (B) 5,550,000 shares of preferred stock, of which 5,300,000 shares are issued and outstanding and are convertible into 5,550,000 shares of Common Stock at $1.00 per share.

(ii) The Company has reserved (A) 2,000,000 shares of Common Stock for issuance under its under its 1997 Stock Option/Stock Issuance Plan under which 1,503,890 options have been granted. There are no other options, warrants, conversion privileges or other rights presently outstanding to purchase or otherwise acquire any authorized but unissued shares of the Company's capital stock or other securities of the Company.

(iii) In accordance with the Company's Articles of Incorporation, no shareholder of the Company has preemptive rights to purchase new issuances of the Company's capital stock.

(e) Insurance. The Company has in full force and effect insurance policies, with extended coverage, insuring the Company and its property and business against such losses and risks, and in such amounts, as are customary for corporations engaged in a similar business and similarly situated and as otherwise may be required pursuant to the terms of any other contract or agreement.

(f) Exempt Transaction. Subject to the accuracy of the Warrantholder's representations in Section 10 hereof, the issuance of the Stock upon exercise of this Warrant will constitute a transaction exempt from (i) the

registration requirements of Section 5 of the 1933 Act, in reliance upon Section 4(2) thereof, and (ii) the qualification requirements of the applicable state securities laws.

(g) Compliance with Rule 144. At the written request of the Warrantholder, who proposes to sell Stock issuable upon the exercise of the Warrant in compliance with Rule 144 promulgated by the Securities and Exchange Commission, the Company shall furnish to the Warrantholder, within ten days after receipt of such request, a written statement confirming the Company's compliance with the filing requirements of the Securities and Exchange Commission as set forth in such Rule, as such Rule may be amended from time to time.

10. REPRESENTATIONS AND COVENANTS OF THE WARRANTHOLDER.

This Warrant Agreement has been entered into by the Company in reliance upon the following representations and covenants of the Warrantholder:

(a) Investment Purpose. The right to acquire Stock issuable upon exercise of the Warrantholder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Warrantholder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Private Issue. The Warrantholder understands (i) that the Stock issuable upon exercise of this Warrant is not registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuance contemplated by this Warrant Agreement will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations set forth in this Section 10.

(c) Disposition of Warrantholder's Rights. In no event will the Warrantholder make a disposition of any of its rights to acquire Stock issuable upon exercise of such rights unless and until (i) it shall have notified the Company of the proposed disposition, and (ii) if requested by the Company, it shall have furnished the Company with an opinion of counsel (which counsel may either be inside or outside counsel to the Warrantholder) satisfactory to the Company and its counsel to the effect that (A) appropriate action necessary for compliance with the 1933 Act has been taken, or (B) an exemption from the registration requirements of the 1933 Act is available. Notwithstanding the foregoing, the restrictions imposed upon the transferability of any of its rights to acquire Stock issuable on the exercise of such rights do not apply to transfers from the beneficial owner of any of the aforementioned securities to its nominee or from such nominee to its beneficial owner, and shall terminate as to any particular share of Stock when (1) such security shall have been effectively registered under the 1933 Act and sold by the holder thereof in accordance with such registration or (2) such security shall have been sold without registration in compliance with Rule 144 under the 1933 Act, or (3) a letter shall have been issued to the Warrantholder at its request by the staff of the Securities and Exchange Commission or a ruling shall have been issued to the Warrantholder at its request by such Commission stating that no action shall be recommended by such staff or taken by such Commission, as the case may be, if such security is transferred without registration under the 1933 Act in accordance with the conditions set forth in such letter or ruling and such letter or ruling specifies that no subsequent restrictions on transfer are required. Whenever the restrictions imposed hereunder shall terminate, as hereinabove provided, the Warrantholder or holder of a share of Stock then outstanding as to which such restrictions have terminated shall be entitled to receive from the Company, without expense to such holder, one or more new certificates for the Warrant or for such shares of Stock not bearing any restrictive legend.

(d) Financial Risk. The Warrantholder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment, and has the ability to bear the economic risks of its investment.

(e) Risk of No Registration. The Warrantholder understands that if the Company does not register with the Securities and Exchange Commission pursuant to Section 12 of the 1934 Act (the "1934 Act"), or file reports

pursuant to Section 15(d), of the 1934 Act", or if a registration statement covering the securities under the 1933 Act is not in effect when it desires to sell (i) the rights to purchase Stock pursuant to this Warrant Agreement, or (ii) the Stock issuable upon exercise of the right to purchase, it may be required to hold such securities for an indefinite period. The Warrantholder also understands that any sale of its rights of the Warrantholder to purchase Stock which might be made by it in reliance upon Rule 144 under the 1933 Act may be made only in accordance with the terms and conditions of that Rule.

(f) Accredited Investor. Warrantholder is an "accredited investor" within the meaning of the Securities and Exchange Rule 501 of Regulation D, as presently in effect.

11. TRANSFERS.

Subject to the terms and conditions contained in Section 10 hereof, this Warrant Agreement and all rights hereunder are transferable in whole or in part by the Warrantholder and any successor transferee, provided, however, in no event shall the number of transfers of the rights and interests in all of the Warrants exceed three (3) transfers. The transfer shall be recorded on the books of the Company upon receipt by the Company of a notice of transfer in the form attached hereto as Exhibit III (the "Transfer Notice"), at its principal offices and the payment to the Company of all transfer taxes and other governmental charges imposed on such transfer.

12. MISCELLANEOUS.

(a) Effective Date. The provisions of this Warrant Agreement shall be construed and shall be given effect in all respects as if it had been executed and delivered by the Company on the date hereof. This Warrant Agreement shall be binding upon any successors or assigns of the Company.

(b) Attorney's Fees. In any litigation, arbitration or court proceeding between the Company and the Warrantholder relating hereto, the prevailing party shall be entitled to attorneys' fees and expenses and all costs of proceedings incurred in enforcing this Warrant Agreement.

(c) Governing Law. This Warrant Agreement shall be governed by and construed for all purposes under and in accordance with the laws of the State of Illinois.

(d) Counterparts. This Warrant Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(e) Notices. Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery, facsimile transmission (provided that the original is sent by personal delivery or mail as hereinafter set forth) or seven (7) days after deposit in the United States mail, by registered or certified mail, addressed (i) to the Warrantholder at 6111 North River Road, Rosemont, Illinois 60018, attention: Venture Lease Administration, cc: Legal Department, attn.: General Counsel, (and/or, if by facsimile, (847) 518-5465 and (847)518-5088 and (ii) to the Company at 280 East Grand Avenue, Suite 2, South San Francisco, CA 94080, attention: President (and/or if by facsimile, (650) 624-3010 or at such other address as any such party may subsequently designate by written notice to the other party.

(f) Remedies. In the event of any default hereunder, the non-defaulting party may proceed to protect and enforce its rights either by suit in equity and/or by action at law, including but not limited to an action for damages as a result of any such default, and/or an action for specific performance for any default where Warrantholder will not have an adequate remedy at law and where damages will not be readily ascertainable. The Company expressly agrees that it shall not oppose an application by the Warrantholder or any other person entitled to the benefit of this Agreement requiring specific

performance of any or all provisions hereof or enjoining the Company from continuing to commit any such breach of this Agreement.

(g) No Impairment of Rights. The Company will not, by amendment of its Charter or through any other means, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate in order to protect the rights of the Warrantholder against impairment.

(h) Survival. The representations, warranties, covenants and conditions of the respective parties contained herein or made pursuant to this Warrant Agreement shall survive the execution and delivery of this Warrant Agreement.

(i) Severability. In the event any one or more of the provisions of this Warrant Agreement shall for any reason be held invalid, illegal or unenforceable, the remaining provisions of this Warrant Agreement shall be unimpaired, and the invalid, illegal or unenforceable provision shall be replaced by a mutually acceptable valid, legal and enforceable provision, which comes closest to the intention of the parties underlying the invalid, illegal or unenforceable provision.

(j) Amendments. Any provision of this Warrant Agreement may be amended by a written instrument signed by the Company and by the Warrantholder.

IN WITNESS WHEREOF, the parties hereto have caused this Warrant Agreement to be executed by its officers thereunto duly authorized as of the Effective Date.

COMPANY: CYTOKENETICS, INC.

By: /s/ JAMES SABRY

Title:_____

WARRANTHOLDER: COMDISCO, INC,

By: /s/ JILL C. HANSES

Title: SENIOR VICE PRESIDENT

EXHIBIT I

NOTICE OF EXERCISE

TO: _____

(1) The undersigned Warrantholder hereby elects to purchase. _____shares of the Series A Preferred Stock of _____, pursuant to the terms of the Warrant Agreement dated the _____ day of _____, 19__ (the "Warrant Agreement") between _____ and the Warrantholder, and tenders herewith payment of the purchase price for such shares in full, together with all applicable transfer taxes, if any.

(2) In exercising its rights to purchase the Series A Preferred Stock of ____, the undersigned hereby confirms and acknowledges the investment representations and warranties made in Section 10 of the Warrant Agreement.

(3) Please issue a certificate or certificates representing said shares of Series A Preferred Stock in the name of the undersigned or in such other name as is specified below.

_____
(Name)

_____
(Address)

WARRANTHOLDER: COMDISCO, INC.

By: _____

Title: _____

Date: _____

EXHIBIT II

ACKNOWLEDGMENT OF EXERCISE

The undersigned _____, hereby acknowledge receipt of the "Notice of Exercise" from Comdisco, Inc., to purchase _____ shares of the Series A Preferred Stock of _____ pursuant to the terms of the Warrant Agreement, and further acknowledges that _____ shares remain subject to purchase under the terms of the Warrant Agreement.

COMPANY:

By: _____

Title: _____

Date: _____

EXHIBIT III

TRANSFER NOTICE

(TO TRANSFER OR ASSIGN THE FOREGOING WARRANT AGREEMENT EXECUTE THIS FORM AND SUPPLY REQUIRED INFORMATION. DO NOT USE THIS FORM TO PURCHASE SHARES.)

FOR VALUE RECEIVED, the foregoing Warrant Agreement and all rights evidenced thereby are hereby transferred and assigned to

_____
(Please Print)

whose address is_____

_____

Dated: _____

Holder's Signature: _____

Holder's Address: _____

_____

Signature Guaranteed: _____

NOTE: The signature to this Transfer Notice must correspond with the name as it appears on the face of the Warrant Agreement, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant Agreement.

Exhibit 4.9

MASTER SECURITY AGREEMENT
dated as of FEBRUARY 2, 2001 ("AGREEMENT")

THIS AGREEMENT is between GENERAL ELECTRIC CAPITAL CORPORATION (together with its successors and assigns, if any, "SECURED PARTY") and CYTOKINETICS, INCORPORATED ("DEBTOR"). Secured Party has an office at 401 Merritt 7 2nd Floor, Norwalk, CT 06856. Debtor is a corporation organized and existing under the laws of the state of Delaware. Debtor's mailing address and chief place of business is 280 East Grand Avenue, Suite 2, South San Francisco, CA 9408O.

1. CREATION OF SECURITY INTEREST.

Debtor grants to Secured Party, its successors and assigns, a security interest in and against all property listed on any collateral schedule now or in the future annexed to or made a part of this Agreement ("COLLATERAL SCHEDULE"), and in and against all additions, attachments, accessories and accessions to such property, all substitutions, replacements or exchanges therefor, and all insurance and/or other proceeds thereof (all such property is individually and collectively called the "COLLATERAL"). This security interest is given to secure the payment and performance of all debts, obligations and liabilities of any kind whatsoever of Debtor to Secured Party, now existing or arising in the future, including but not limited to the payment and performance of certain Promissory Notes from time to time identified on any Collateral Schedule (collectively "NOTES" and each a "NOTE"), and any renewals, extensions and modifications of such debts, obligations and liabilities (such Notes, debts, obligations and liabilities are called the "INDEBTEDNESS"). Notwithstanding anything to the contrary contained in this Agreement, to the extent that Secured Party asserts a purchase money security interest in any items of Collateral ("PMSI COLLATERAL"): (i) the PMSI COLLATERAL shall secure only that portion of the Indebtedness which has been advanced by Secured Party to enable Debtor to purchase, or acquire rights in or the use of such PMSI Collateral (the "PMSI INDEBTEDNESS"), and (ii) no other Collateral shall secure the PMSI Indebtedness.

2. REPRESENTATIONS, WARRANTIES AND COVENANTS OF DEBTOR.

Debtor represents, warrants and covenants as of the date of this Agreement and as of the date of each Collateral Schedule that:

(a) Debtor is, and will remain, duly organized, existing and in good standing under the laws of the State set forth in the preamble of this Agreement, has its chief executive offices at the location specified in the preamble, and is, and will remain, duly qualified and licensed in every jurisdiction wherever necessary to carry on its business and operations;

(b) Debtor has adequate power and capacity to enter into, and to perform its obligations under this Agreement, each Note and any other documents evidencing, or given in connection with, any of the Indebtedness (all of the foregoing are called the "DEBT DOCUMENTS");

(c) This Agreement and the other Debt Documents have been duly authorized, executed and delivered by Debtor and constitute legal, valid and binding agreements enforceable in accordance with their terms, except to the extent that the enforcement of remedies may be limited under applicable bankruptcy and insolvency laws;

(d) No approval, consent or withholding of objections is required from any governmental authority or instrumentality with respect to the entry into, or performance by Debtor of any of the Debt Documents, except any already obtained;

(e) The entry into, and performance by, Debtor of the Debt Documents will not (i) violate any of the organizational documents of Debtor or any judgment, order, law or regulation applicable to Debtor, or (ii) result in any breach of or constitute a default under any contract to which Debtor is a party,

or result in the creation of any lien, claim or encumbrance on any of Debtor's property (except for liens in favor of Secured Party) pursuant to any indenture, mortgage, deed of trust, bank loan, credit agreement, or other agreement or instrument to which Debtor is a party;

(f) There are no suits or proceedings pending in court or before any commission, board or other administrative agency against or affecting Debtor which could, in the aggregate, have a material adverse effect on Debtor, its business or operations, or its ability to perform its obligations under the Debt Documents, nor does Debtor have reason to believe that any such suits or proceedings are threatened;

(g) All financial statements delivered to Secured Party in connection with the Indebtedness have been prepared in accordance with generally accepted accounting principles, and since the date of the most recent financial statement, there has been no material adverse change in Debtors financial condition;

(h) The Collateral is not, and will not be, used by Debtor for personal, family or household purposes;

(i) The Collateral is, and will remain, in good condition and repair and Debtor will not be negligent in its care and use;

(j) Debtor is, and will remain, the sole and lawful owner, and in possession of the Collateral, and has the sole right and lawful authority to grant the security interest described in this Agreement; and

(k) The Collateral is, and will remain, free and clear of all liens, claims and encumbrances of any kind whatsoever, except for (i) liens in favor of Secured Party, (ii) liens for taxes not yet due or for taxes being contested in good faith and which do not involve, in the judgment of Secured Party, any risk of the sale, forfeiture or loss of any of the Collateral, and (iii) inchoate materialmen's, mechanic's, repairmen's and similar liens arising by operation of law in the normal course of business for amounts which are not delinquent (all of such liens are called "PERMITTED LIENS").

3. COLLATERAL.

(a) Until the declaration of any default, Debtor shall remain in possession of the Collateral; except that Secured Party shall have the right to possess (i) any chattel paper or instrument that constitutes a part of the Collateral, and (ii) any other Collateral in which Secured Party's security interest may be perfected only by possession. Secured Party may inspect any of the Collateral during normal business hours after giving Debtor reasonable prior notice. If Secured Party asks, Debtor will promptly notify Secured Party in writing of the location of any Collateral.

(b) Debtor shall (i) use the Collateral only in its trade or business, (ii) maintain all of the Collateral in good operating order and repair, normal wear and tear excepted, (iii) use and maintain the Collateral only in compliance with manufacturers recommendations and all applicable laws, and (iv) keep all of the Collateral free and clear of all liens, claims and encumbrances (except for Permitted Liens).

(c) Debtor shall not, without the prior written consent of Secured Party, (i) part with possession of any of the Collateral (except to Secured Party or for maintenance and repair), (ii) remove any of the Collateral from the continental United States, or (iii) sell, rent, lease, mortgage, grant a security interest in or otherwise transfer or encumber (except for Permitted Liens) any of the Collateral.

(d) Debtor shall pay promptly when due all taxes, license fees, assessments and public and private charges levied or assessed on any of the Collateral, on its use, or on this Agreement or any of the other Debt Documents. At its option, Secured Party may discharge taxes, liens, security interests or

other encumbrances at any time levied or placed on the Collateral and may pay for the maintenance, insurance and preservation of the Collateral and effect compliance with the terms of this Agreement or any of the other Debt Documents. Debtor agrees to reimburse Secured Party, on demand, all costs and expenses incurred by Secured Party in connection with such payment or performance and agrees that such reimbursement obligation shall constitute Indebtedness.

(e) Debtor shall, at all times, keep accurate and complete records of the Collateral, and Secured Party shall have the right to inspect and make copies of all of Debtor's books and records relating to the Collateral during normal business hours, after giving Debtor reasonable prior notice.

(f) Debtor agrees and acknowledges that any third person who may at any time possess all or any portion of the Collateral shall be deemed to hold, and shall hold, the Collateral as the agent of, and as pledge holder for, Secured Parry. Secured Party may at any time give notice to any third person described in the preceding sentence that such third person is holding the Collateral as the agent of, and as pledge holder for, the Secured Party.

4. INSURANCE.

(a) Debtor shall at all times bear the entire risk of any loss, theft, damage to, or destruction of, any of the Collateral from any cause whatsoever.

(b) Debtor agrees to keep the Collateral insured against loss or damage by fire and extended coverage perils, theft, burglary, and for any or all Collateral which are vehicles, for risk of loss by collision, and if requested by Secured Party, against such other risks as Secured Party may reasonably require. The insurance coverage shall be in an amount no less than the full replacement value of the Collateral, and deductible amounts, insurers and policies shall be acceptable to Secured Party. Debtor shall deliver to Secured Party policies or certificates of insurance evidencing such coverage. Each policy shall name Secured Party as a loss payee, shall provide for coverage to Secured Party regardless of the breach by Debtor of any warranty or representation made therein, shall not be subject to co-insurance, and shall provide that coverage may not be canceled or altered by the insurer except upon thirty (30) days prior written notice to Secured Party. Debtor appoints Secured Party as its attorney-in-fact to make proof of loss, claim for insurance and adjustments with insurers, and to receive payment of and execute or endorse all documents, checks or drafts in connection with insurance payments. Secured Party shall not act as Debtors attorney-in-fact unless Debtor is in default. Proceeds of insurance shall be applied, at the option of Secured Party, to repair or replace the Collateral or to reduce any of the Indebtedness.

5. REPORTS.

(a) Debtor shall promptly notify Secured Party of (i) any change in the name of Debtor, (ii) any relocation of its chief executive offices, (iii) any relocation of any of the Collateral, (iv) any of the Collateral being lost, stolen, missing, destroyed, materially damaged or worn out, or (v) any lien, claim or encumbrance other than Permitted Liens attaching to or being made against any of the Collateral.

(b) Debtor will deliver to Secured Party Debtors complete financial statements, certified by a recognized firm of certified public accountants, within ninety (90) days of the close of each fiscal year of Debtor. If Secured Party requests, Debtor will deliver to Secured Party copies of Debtors quarterly financial reports certified by Debtors chief financial officer, within ninety (90) days after the close of each of Debtors fiscal quarter. Debtor will deliver to Secured Party copies of all Forms 10-K and 10-Q, if any, within 30 days after the dates on which they are filed with the Securities and Exchange Commission.

6. FURTHER ASSURANCES.

(a) Debtor shall, upon request of Secured Party, furnish to Secured Party such further information, execute and deliver to Secured Party such documents and instruments (including, without limitation, Uniform Commercial Code financing statements) and shall do such other acts and things as Secured

Party may at any time reasonably request relating to the perfection or protection of the security interest created by this Agreement or for the purpose of carrying out the intent of this Agreement. Without limiting the foregoing, Debtor shall cooperate and do all acts deemed necessary or advisable by Secured Party to continue in Secured Party a perfected first security interest in the Collateral, and shall obtain and furnish to Secured Party any subordinations, releases, landlord, lessor, or mortgagee waivers, and similar documents as may be from time to time requested by, and in form and substance satisfactory to, Secured Party.

(b) Debtor irrevocably grants to Secured Party the power to sign Debtor's name and generally to act on behalf of Debtor to execute and file applications for title, transfers of title, financing statements, notices of lien and other documents pertaining to any or all of the Collateral; this power is coupled with Secured Party's interest in the Collateral. Debtor shall, if any certificate of title be required or permitted by law for any of the Collateral, obtain and promptly deliver to Secured Party such certificate showing the lien of this Agreement with respect to the Collateral.

(c) Debtor shall indemnify and defend the Secured Party, its successors and assigns, and their respective directors, officers and employees, from and against all claims, actions and suits (including, without limitation, related attorneys' fees) of any kind whatsoever arising, directly or indirectly, in connection with any of the Collateral.

7. DEFAULT AND REMEDIES.

(a) Debtor shall be in default under this Agreement and each of the other Debt Documents if:

(i) Debtor breaches its obligation to pay when due any installment or other amount due or coming due under any of the Debt Documents

(ii) Debtor, without the prior written consent of Secured Party, attempts to or does sell, rent, lease, mortgage, grant a security interest in, or

otherwise transfer or encumber (except for Permitted Liens) any of the Collateral;

(iii) Debtor breaches any of its insurance obligations under Section 4;

(iv) Debtor breaches any of its other obligations under any of the Debt Documents and fails to cure that breach within thirty (30) days after written notice from Secured Party;

(v) Any warranty, representation or statement made by Debtor in any of the Debt Documents or otherwise in connection with any of the Indebtedness shall be false or misleading in any material respect;

(vi) Any of the Collateral is subjected to attachment, execution, levy, seizure or confiscation in any legal proceeding or otherwise, or if any legal or administrative proceeding is commenced against Debtor or any of the Collateral, which in the good faith judgment of Secured Party subjects any of the Collateral to a material risk of attachment, execution, levy, seizure or confiscation and no bond is posted or protective order obtained to negate such risk;

(vii) Debtor breaches or is in default under any other agreement between Debtor and Secured Party;

(viii) Debtor or any guarantor or other obligor for any of the Indebtedness (collectively "GUARANTOR") dissolves, terminates its existence, becomes insolvent or ceases to do business as a going concern;

(ix) If Debtor or any Guarantor is a natural person, Debtor or

any such Guarantor dies or becomes incompetent;

(x) A receiver is appointed for all or of any part of the property of Debtor or any Guarantor, or Debtor or any Guarantor makes any assignment for the benefit of creditors; or

(xi) Debtor or any Guarantor files a petition under any bankruptcy, insolvency or similar law, or any such petition is filed against Debtor or any Guarantor and is not dismissed within forty-five (45) days

(b) If Debtor is in default, the Secured Party, at its option, may declare any or all of the Indebtedness to be immediately due and payable, without demand or notice to Debtor or any Guarantor. The accelerated obligations and liabilities shall bear interest (both before and after any judgment) until paid in full at the lower of eighteen percent (18%) per annum or the maximum rate not prohibited by applicable law.

(c) After default, Secured Party shall have all of the rights and remedies of a Secured Party under the Uniform Commercial Code, and under any other applicable law. Without limiting the foregoing, Secured Party shall have the right to (i) notify any account debtor of Debtor or any obligor on any instrument which constitutes part of the Collateral to make payment to the Secured Party, (ii) with or without legal process, enter any premises where the Collateral may be and take possession of and remove the Collateral from the premises or store it on the premises, (iii) sell the Collateral at public or private sale, in whole or in part, and have the right to bid and purchase at said sale, or (iv) lease or otherwise dispose of all or part of the Collateral, applying proceeds from such disposition to the obligations then in default. If requested by Secured Party, Debtor shall promptly assemble the Collateral and make it available to Secured Party at a place to be designated by Secured Party which is reasonably convenient to both parties. Secured Party may also render any or all of the Collateral unusable at the Debtor's premises and may dispose of such Collateral on such premises without liability for rent or costs. Any notice that Secured Party is required to give to Debtor under the Uniform Commercial Code of the time and place of any public sale or the time after which any private sale or other intended disposition of the Collateral is to be made shall be deemed to constitute reasonable notice if such notice is given to the last known address of Debtor at least five (5) days prior to such action,

(d) Proceeds from any sale or lease or other disposition shall be applied: first, to all costs of repossession, storage, and disposition including without limitation attorneys', appraisers', and auctioneers' fees; second, to discharge the obligations then in default; third, to discharge any other Indebtedness of Debtor to Secured Party, whether as obligor, endorser, guarantor, surety or indemnitor; fourth, to expenses incurred in paying or settling liens and claims against the Collateral; and lastly, to Debtor, if there exists any surplus. Debtor shall remain fully liable for any deficiency.

(e) Debtor agrees to pay all reasonable attorneys' fees and other costs incurred by Secured Part)' in connection with the enforcement, assertion, defense or preservation of Secured Party's rights and remedies under this Agreement, or if prohibited by law, such lesser sum as may be permitted. Debtor further agrees that such fees and costs shall constitute Indebtedness.

(f) Secured Party's rights and remedies under this Agreement or otherwise arising are cumulative and may be exercised singularly or concurrently. Neither the failure nor any delay on the part of the Secured Party to exercise any right, power or privilege under this Agreement shall operate as a waiver, nor shall any single or partial exercise of any right, power or privilege preclude any other or further exercise of that or any other right, power or privilege. SECURED PARTY SHALL NOT BE DEEMED TO HAVE WAIVED ANY OF ITS RIGHTS UNDER THIS AGREEMENT OR UNDER ANY OTHER AGREEMENT, INSTRUMENT OR PAPER SIGNED BY DEBTOR UNLESS SUCH WAIVER IS EXPRESSED IN WRITING AND SIGNED BY SECURED PARTY. A waiver on any one occasion shall not be construed as a bar to or waiver of any right or remedy on any future occasion.

(g) DEBTOR AND SECURED PARTY UNCONDITIONALLY WAIVE THEIR RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS

AGREEMENT, ANY OF THE OTHER DEBT DOCUMENTS, ANY OF THE INDEBTEDNESS SECURED HEREBY, ANY DEALINGS BETWEEN DEBTOR AND SECURED PARTY RELATING TO THE SUBJECT MATTER OF THIS TRANSACTION OR ANY RELATED TRANSACTIONS, AND/OR THE RELATIONSHIP THAT IS BEING ESTABLISHED BETWEEN DEBTOR AND SECURED PARTY. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT. THIS WAIVER IS IRREVOCABLE. THIS WAIVER MAY NOT BE MODIFIED EITHER ORALLY OR IN WRITING. THE WAIVER ALSO SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS AGREEMENT, ANY OTHER DEBT DOCUMENTS, OR TO ANY OTHER DOCUMENTS OR AGREEMENTS RELATING TO THIS TRANSACTION OR ANY RELATED TRANSACTION. THIS AGREEMENT MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.

8. MISCELLANEOUS.

(a) This Agreement, any Note and/or any of the other Debt Documents may be assigned, in whole or in part, by Secured Party without notice to Debtor, and Debtor agrees not to assert against any such assignee, or assignee's assigns, any defense, set-off, recoupment claim or counterclaim which Debtor has or may at any time have against Secured Party for any reason whatsoever. Debtor agrees that if Debtor receives written notice of an assignment from Secured Party, Debtor will pay all amounts payable under any assigned Debt Documents to such assignee or as instructed by Secured Party. Debtor also agrees to

confirm in writing receipt of the notice of assignment as may be reasonably requested by assignee.

(b) All notices to be given in connection with this Agreement shall be in writing, shall be addressed to the parties at their respective addresses set forth in this Agreement (unless and until a different address may be specified in a written notice to the other party), and shall be deemed given (i) on the date of receipt if delivered in hand or by facsimile transmission, (ii) on the next business day after being sent by express mail, and (iii) on the fourth business day after being sent by regular, registered or certified mail. As used herein, the term "business day" shall mean and include any day other than Saturdays, Sundays, or other days on which commercial banks in New York, New York are required or authorized to be closed.

(c) Secured Party may correct patent errors and fill in all blanks in this Agreement or in any Collateral Schedule consistent with the agreement of the parties.

(d) Time is of the essence of this Agreement. This Agreement shall be binding, jointly and severally, upon all parties described as the "Debtor" and their respective heirs, executors, representatives, successors and assigns, and shall inure to the benefit of Secured Party, its successors and assigns.

(e) This Agreement and its Collateral Schedules constitute the entire agreement between the parties with respect to the subject matter of this Agreement and supersede all prior understandings (whether written, verbal or implied) with respect to such subject matter. THIS AGREEMENT AND ITS COLLATERAL SCHEDULES SHALL NOT BE CHANGED OR TERMINATED ORALLY OR BY COURSE OF CONDUCT, BUT ONLY BY A WRITING SIGNED BY BOTH PARTIES. Section headings contained in this Agreement have been included for convenience only, and shall not affect the construction or interpretation of this Agreement.

(f) This Agreement shall continue in full force and effect until all of the Indebtedness has been indefeasibly paid in full to Secured Party. The surrender, upon payment or otherwise, of any Note or any of the other documents evidencing any of the Indebtedness shall not affect the right of Secured Party to retain the Collateral for such other Indebtedness as may then exist or as it may be reasonably contemplated will exist in the future. This Agreement shall automatically be reinstated if Secured Party is ever required to return or restore the payment of all or any portion of the Indebtedness (all as though such payment had never been made).

(g) THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES

HEREUNDER SHALL IN ALL RESPECTS BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF CONNECTICUT (WITHOUT REGARD TO THE CONFLICT OF LAWS PRINCIPLES OF SUCH STATE), INCLUDING ALL MATTERS OF CONSTRUCTION, VALIDITY AND PERFORMANCE, REGARDLESS OF THE LOCATION OF THE EQUIPMENT.

IN WITNESS WHEREOF, Debtor and Secured Party, intending to be legally bound hereby, have duly executed this Agreement in one or more counterparts, each of which shall be deemed to be an original, as of the day and year first aforesaid.

SECURED PARTY:

GENERAL ELECTRIC CAPITAL CORPORATION

By: _____

Name: THOMAS ANNINO

Title: _____

DEBTOR:

CYTOKINETICS, INCORPORATED

By: /s/ James Sabry

Name:

Title: _____

GECC:

By: /s/ John Edel

Name: John Edel

Title: SVP

EXHIBIT 4.10

CROSS-COLLATERAL AND CROSS-DEFAULT AGREEMENT

General Electric Capital Corporation
401 Merritt 72nd Floor
Norwalk, CT 06856

Gentlemen:

You (and/or your successors or assigns, "you") have entered into or purchased one or more conditional sale contracts, lease agreements, chattel mortgages, security agreements, notes and other choses in action (herein designated "Accounts") arising from the bona fide sale or lease to us, by various vendors or lessors, of equipment and inventory (herein designated "Collateral") and/or you have made direct loans to or otherwise extended credit to us evidenced by Accounts creating security interests in Collateral.

In order to induce you to extend our time of payment on one or more Accounts and/or to make additional loans to us and/or to purchase additional Accounts and/or to lease us additional equipment, and in consideration of you so doing, and for other good and valuable consideration, the receipt of which we hereby acknowledge, we agree as follows:

All presently existing and hereafter acquired Collateral in which you have or shall have a security interest shall secure the payment and performance of all of our liabilities and obligations to you of every kind and character, whether joint or several, direct or indirect, absolute or contingent, due or to become due, and whether under presently existing or hereafter created Accounts or agreements, or otherwise.

We further agree that your security interest in the property covered by any Account now held or hereafter acquired by you shall not be terminated in whole or in part until and unless all indebtedness of every kind, due or to become due, owed by us to you is fully paid and satisfied and the terms of every Account have been fully performed by us. It is further agreed that you are to retain your security interest in all property covered by all Accounts held or acquired by you, as security for payment and performance under each such Account, notwithstanding the fact that one or more of such Accounts may become fully paid.

This instrument is intended to create cross-default and cross-security between and among all the within described Accounts now owned or hereafter acquired by you.

A default under any Account or agreement shall be deemed to be a default under all other Accounts and agreements. A default shall result if we fail to pay any sum when due on any Account or agreement, or if we breach any of the other terms and conditions thereof, or if we become insolvent, cease to do business as a going concern, make an assignment for the benefit of creditors, or if a petition for a receiver or in bankruptcy is filed by or against us, or if any of our property is seized, attached or levied upon. Upon our default any or all Accounts and agreements shall, at your option, become immediately due and payable without notice or demand to us or any other party obligated thereon, and you shall have and may exercise any and all rights and remedies of a secured party under the Uniform Commercial Code as enacted in the applicable jurisdiction and as otherwise granted to you under any Account or other agreement. We hereby waive, to the maximum extent permitted by law, notices of default, notices of repossession and sale or other disposition of collateral, and all other notices, and in the event any such notice cannot be waived, we agree that if such notice is mailed to us postage prepaid at the address shown below at least five (5) days prior to the exercise by you of any of your rights or remedies, such notice shall be deemed to be reasonable and shall fully satisfy any requirement for giving notice.

All rights granted to you hereunder shall be cumulative and not alternative, shall be in addition to and shall in no manner impair or affect your rights and remedies under any existing Account, agreement, statute or rule of law, and remedies under any existing Account, agreement, statute or rule of law.

This agreement may not be varied or altered nor its provisions waived except by your duly executed written agreement. This agreement shall inure to the benefit of your successors and assigns and shall be binding upon our heirs. administrators, executors, legal representatives, successors and assigns.

IN WITNESS WHEREOF, this agreement is executed this___ day of___, ___.

CYTOKINETICS, INCORPORATED
(Name of Proprietorship, Partnership or Corporation, as applicable)

By: /s/ James Sabry

(Signature)

Title:_____
(Owner, Partner or Officer, as applicable)

Address: 280 East Grand Avenue Suite 2,
South San Francisco, CA 94080

Exhibit 4.11

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT IS AVAILABLE FOR SUCH OFFER, SALE. OR TRANSFER, PLEDGE OR HYPOTHECATION IN THE OPINION OF LEGAL COUNSEL REASONABLY SATISFACTORY TO THE COMPANY.

WARRANT

To Purchase Shares of Common Stock of
CYTOKINETICS, INC.

THIS CERTIFIES that, for value received Bristow Investments, L.P., a California limited partnership (the "Holder"), is entitled, upon the terms and subject to the conditions hereinafter set forth, at any time after the date hereof and prior to the Commencement Date (as defined below), to subscribe for and purchase from Cytokinetics, Inc., a Delaware corporation (the "Company"), 16,000 shares of the Company's Common Stock at an exercise price ("Exercise Price") of $0.29 per share, subject to adjustment as set forth below.

1. Title of Warrant. Prior to the expiration hereof and subject to compliance with applicable laws, this Warrant and all rights hereunder are transferable, in whole or in part, at the office or agency of the Company, referred to in Section 2 hereof, by the holder hereof in person or by duly authorized attorney, upon surrender of this Warrant together with the Assignment Form annexed hereto properly endorsed.

2. Exercise of Warrant. The purchase rights represented by this Warrant are exercisable by the registered holder hereof, in whole or in part, at any time after the effective date of the assignment and assumption to and by the Company of that certain Lease, dated April 13, 1998 (as amended) by and between MetaXen, LLC and Britannia Pointe Grand Limited Partnership ("BPGLP") and prior to the date that is five (5) years after the closing date of an underwritten initial public offering ("IPO") of the Company's Common Stock pursuant to a registration statement filed with the Securities and Exchange Commission (the "SEC") under the Act, subject to adjustment as hereinafter provided, by the surrender of this Warrant and the Notice of Exercise Form annexed hereto duly executed at the office of the Company, in South San Francisco. California (or such other office or agency of the Company as it may designate by notice in writing to the registered holder hereof at the address of such holder appearing on the books of the Company), and upon payment of the Exercise Price for the shares thereby purchased (i) by cash or check or bank draft payable to the order of the Company, (ii) by cancellation of indebtedness of the Company payable to the holder hereof at the time of exercise, or (iii) by delivery of an election in writing to receive a number of shares of Common Stock equal to the aggregate number of shares of Common Stock subject to this Warrant (or the portion thereof being cancelled upon such exercise), less that number of shares of Common Stock having a fair market value as of such date equal to the aggregate Exercise Price of the Warrant (or such

portion thereof); whereupon the holder of this Warrant shall be entitled to receive a certificate for the number of shares so purchased. The Company agrees that if at the time of the surrender of this Warrant and purchase the holder hereof shall be entitled to exercise this Warrant, the shares so purchased shall be and be deemed to be issued to such holder as the record owner of such shares as of the close of business on the date on which this Warrant shall have been exercised as aforesaid. For purposes of clause (iii) of the preceding sentence, the fair market value of one share of the Company's Common Stock shall be determined as follows: (1) if the Company's Common Stock is listed on a national stock exchange, on the NASDAQ National Market System or on any other over-the-counter market, then such fair market value shall be the closing price per share reported for such class on such national stock exchange or on the

NASDAQ National Market System, or the average of the final "bid" and "asked" prices reported on such over-the-counter market, as applicable, at the close of business on the date of calculation as reported in the Wall Street Journal; and (2) if the Company's Common Stock is not listed on any national stock exchange, on the NASDAQ National Market System or on any other over-the-counter market, then the Board of Directors of the Company shall determine such fair market value as of the date of calculation in its reasonable good faith judgment, and shall (upon written request by the holder hereof) advise the holder hereof of such determination prior to any decision by such holder to exercise its purchase rights under this Warrant.

Certificates for shares purchased hereunder shall be delivered to the holder hereof within a reasonable time, but not later than ten (10) days, after the date on which this Warrant shall have been exercised as aforesaid.

If this Warrant is exercised with respect to less than all of the shares covered hereby, the holder hereof shall be entitled to receive a new Warrant, in this form, covering the number of shares with respect to which this Warrant shall not have been exercised.

The Company covenants that all shares of stock which may be issued upon the exercise of rights represented by this Warrant will, upon exercise of the rights represented by this Warrant, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

3. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant.

4. Charges, Taxes and Expenses. Issuance of certificates for shares of Common Stock upon the exercise of this Warrant shall be made without charge to the holder hereof for any issue or transfer tax or other incidental expense in respect of the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the holder of this Warrant or in such name or names as may be directed by the holder of this Warrant; provided, however, that in the event certificates for shares of Common Stock are to be issued in a name other than the name of the holder of this Warrant, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the holder hereof; and provided further, that upon any transfer involved in the issuance or delivery of any

certificates for shares of Common Stock, the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

5. No Rights as Shareholders. This Warrant does not entitle the holder hereof to any voting rights or other rights as a shareholder of the Company prior to the exercise hereof. Notwithstanding the foregoing, the Company shall, upon written request by the holder hereof to the chief financial officer of the Company from time to time (but not more often than twice in any 12-month period) provide to such holder copies of the following documents within a reasonable time after such request (but in all events only to the extent that, and no sooner than the time that, such documents have been made available to the Company's shareholders): (i) the Company's most recent audited annual financial statements or, if audited statements are not available, then the Company's unaudited annual financial statements as of the end of the Company's most recently ended fiscal year and (ii) unaudited quarterly financial statements for each quarter of the Company's fiscal year since the date of the annual financial statements delivered pursuant to clause (i) above. Notwithstanding the preceding sentence, during any period in which the Company has outstanding a class of publicly-traded securities or is for any other reason reporting company under the Securities Exchange Act of 1934, it shall be sufficient compliance with any

information request from the holder hereof pursuant to such sentence for the Company to provide copies of its most recent Form 10-K and annual report, any Form 10-Qs and/or Form 8-Ks filed by the Company with the SEC since the date of such Form 10- K, and any proxy statements.

6. Exchange and Registry of Warrant. This Warrant is exchangeable, upon the surrender hereof by the registered holder at the above-mentioned office or agency of the Company, for a new Warrant of like tenor and dated as of such exchange.

The Company shall maintain at the above-mentioned office or agency a registry showing the name and address of the registered holder of this Warrant. This Warrant may be surrendered for exchange, transfer or exercise, in accordance with its terms, at such office or agency of the Company, and the Company shall be entitled to rely in all respects, prior to written notice to the contrary, upon such registry.

7. Loss, Theft, Destruction or Mutilation of Warrant. Upon receipt by the Company of evidence reasonably satisfactory to it (such as an affidavit of the holder hereof) of the loss, theft, destruction or mutilation of this Warrant, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it, and upon reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of this Warrant, if mutilated, the Company will make and deliver a new Warrant of like tenor and dated as of such cancellation, in lieu of this Warrant.

8. Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday, then such action may be taken or such right may be exercised on the next succeeding day not a legal holiday.

9. Adjustment. The number of shares for which this Warrant is exercisable and the time period for exercise are subject to adjustment from time to time as follows:

(a) Reclassification, etc. If the Company at any time shall, by subdivision, combination or reclassification of securities or otherwise, change any of the securities to which purchase rights under this Warrant exist into the same or a different number of securities of any class or classes, this Warrant shall thereafter be to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant immediately prior to such subdivision, combination, reclassification or other change and the Exercise Price shall be proportionately adjusted.

(b) Cash Distributions. No adjustment on account of cash dividends or interest on the Company's Common Stock or other securities purchasable hereunder will be made to the Exercise Price.

(c) This warrant shall be deemed rescinded in the event that the Company's assumption of that certain Lease, dated April 13, 1998 (as amended) by and between BPGLP and MetaXen, LLC shall not have occurred by September 30, 2000.

10. Miscellaneous.

(a) Termination Upon Merger, Sale of Assets, etc. If at any time after the date hereof the Company proposes to merge with or into any other corporation, effect a consolidation or reorganization with or into any other entity, or sell or convey all or substantially all of its assets to any other entity (collectively, a "Merger"), the Company shall give the Holder written notice ("Merger Notice") of such impending transaction not later than thirty (30) days prior to the closing of such transaction. The Merger Notice shall describe the material terms and conditions of the impending transaction,

including the aggregate value of consideration to be received by the Holder for the shares underlying this Warrant on an as exercised basis, and the Company shall thereafter give the Holder prompt notice of any material changes to such terms and conditions.

(i) If, pursuant to such Merger, the shareholders of the Company receive solely cash and/or publicly traded securities in exchange for their shares of stock in the Company, as stated in the Merger Notice, and this Warrant has not been exercised prior to the closing of such transaction, this Warrant shall terminate.

(ii) Notwithstanding anything to the contrary, if, pursuant to such Merger, the shareholders of the Company receive non-publicly traded securities in exchange for their shares of stock in the Company, or if the aggregate value of the consideration consisting of cash and/or publicly traded securities to be received by the Holder for the securities underlying this Warrant, as stated in the Merger Notice, does not equal or exceed the aggregate Exercise Price of such underlying securities, then this Warrant shall not terminate pursuant to the provisions of Section 10(a)(i) above, and the Company shall, as a condition precedent to such transaction, cause effective provisions to be made so that the holder hereof shall have the right thereafter, by exercising this Warrant (in lieu of the shares of the common stock of the Company immediately theretofore

purchasable and receivable upon exercise of this Warrant) to purchase the kind and amount of shares of stock and other securities and property (including cash) receivable upon such transaction. Any such provision shall include provisions for adjustments in respect of such shares of stock and other securities and property that shall be as nearly equivalent as may be practicable to the adjustments provided for in this Warrant. The foregoing provisions of this Section 10(a)(ii) shall similarly apply to successive transactions, unless this Warrant is first terminated pusuant to the provisions of Section 10(a)(i) above.

(b) Issue Date. The provisions of this Warrant shall be construed and shall be given effect in all respect as if it had been issued and delivered by the Company on the date hereof. This Warrant shall be binding upon any successors or assigns of the Company. This Warrant shall constitute a contract under the laws of the State of California and for all purposes shall be construed in accordance with and governed by the laws of said state.

(c) Restrictions. The holder hereof acknowledges that the Common Stock acquired upon the exercise of this Warrant shall have restrictions upon its resale imposed by state and federal securities laws.

(d) Authorized Shares. The Company covenants that during the period the Warrant is exercisable, it will reserve from its authorized and Unicode Common Stock a sufficient number of shares to provide for the issuance of Common Stock upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of the Company's Common Stock upon the exercise of the purchase rights under this Warrant.

(e) No Impairment. The Company will not, by amendment of its Articles of Incorporation or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holder hereof against impairment.

(f) Notices of Record Date. In case:

(i) the Company shall take a record of the holders of its Common Stock for the purposes of entitling them to receive any

dividend (other than a cash dividend) or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares or stock of any class or any other securities or property, or to receive any other right; or

(ii) of any capital reorganization of the Company, any reclassification of the capital stock of the Company, any consolidation or merger of the Company with or into another corporation, or any conveyance of all or substantially all of the assets of the Company to another corporation; or

(iii) of the voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then, and in each such case, the Company will mail or cause to be mailed to the holder of this Warrant a notice specifying, as the case may be, (i) the date on which a record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, or (ii) the date on which such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up is to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up. Such notice shall be mailed at least thirty (30) days prior to the date therein specified.

(g) Attorneys' Fees. In any litigation, arbitration or other legal proceeding between the Company and the holder hereto relating to or arising out of this Warrant, the prevailing party shall be entitled to recover all its fees, costs and expenses incurred in connection with such proceeding, including (but not limited to) reasonable fees and expenses of attorneys and accountants and including (but not limited to) all such fees, costs and expenses incurred in connection with any appeals and/or in connection with the enforcement of any judgment or award rendered in such proceeding.

IN WITNESS WHEREOF, Cytokinetics, Inc. has caused this Warrant to be executed by its officers thereunto duly authorized.

Dated: July 20, 1999

CYTOKINETICS, INC.

By: /s/ James Sabry

Title: CEO & President

NOTICE OF EXERCISE

To: CYTOKINETICS, INC.

(1) _____, the undersigned, hereby elects to purchase _____shares of Common Stock (the "Shares") at an exercise price of $0.29 per share of Cytokinetics, Inc. pursuant to the terms of the attached Warrant, and tenders herewith payment of the aggregate purchase price of $_____in full (if exercising pursuant to net exercise provisions, enter $-0-), together with all applicable transfer taxes, if any:

(choose one)

[ ] By cash, check or sale draft payable to Cytokinetics, Inc.; or

[ ] By cancellation of indebtedness of Cytokinetics, Inc., payable to the undersigned as of the date hereof; or

[ ] By net exercise pursuant to the provisions of Section 2(iii) of the attached warrant (no tender of payment for the Shares needed).

(2) Please issue a certificate or certificates representing the Shares (or the number of shares of Common Stock remaining after application of the net exercise provisions of Section 2 (iii) of the attached warrant) in the name of the undersigned or in such other name as is specified below:

_____
(Name)

_____

_____
(Address)

(3) The undersigned represents that the aforesaid shares of Common Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares.

_____
(Date) (Signature)

ASSIGNMENT FORM

(To assign the foregoing warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

_____
(Please Print)

whose address is _____

_____
(Please Print)

Dated: _____,_____.

Holder's Signature: _____

Holder's Address: _____

_____

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatever, and must be guaranteed by a bank or trust company. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

Exhibit 4.12

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") AND MAY NOT BE OFFERED. SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT IS AVAILABLE FOR SUCH OFFER, SALE, OR TRANSFER, PLEDGE OR HYPOTHECATION IN THE OPINION OF LEGAL COUNSEL REASONABLY SATISFACTORY TO THE COMPANY.

WARRANT

To Purchase Shares of Common Stock of
CYTOKINETICS, INC.

THIS CERTIFIES that, for value received Laurence S. Shuhsan and Magdalena Shushan, Trustees of the Laurence and Magdalena Shushan Family Trust, under agreement dated October 8, 1997 (the "Holder"), is entitled, upon the terms and subject to the conditions hereinafter set forth, at any time after the date hereof and prior to the Commencement Date (as defined below), to subscribe for and purchase from Cytokinetics, Inc., a Delaware corporation (the "Company"), 4,000 shares of the Company's Common Stock at an exercise price ("Exercise Price") of $0.29 per share, subject to adjustment as set forth below.

1. Title of Warrant. Prior to the expiration hereof and subject to compliance with applicable laws, this Warrant and all rights hereunder are transferable, in whole or in part, at the office or agency of the Company, referred to in Section 2 hereof, by the holder hereof in person or by duly authorized attorney, upon surrender of this Warrant together with the Assignment Form annexed hereto properly endorsed.

2. Exercise of Warrant. The purchase rights represented by this Warrant are exercisable by the registered holder hereof, in whole or in part, at any time after the effective date of the assignment and assumption to and by the Company of that certain Lease, dated April 13, 1998 (as amended) by and between MetaXen, LLC and Britannia Pointe Grand Limited Partnership ("BPGLP") and prior to the date that is five (5) years after the closing date of-an underwritten initial public offering ("IPO") of the Company's Common Stock pursuant to a registration statement filed with the Securities and Exchange Commission (the "SEC") under the Act, subject to adjustment as hereinafter provided, by the surrender of this Warrant and the Notice of Exercise Form annexed hereto duly executed at the office of the Company, in South San Francisco, California (or such other office or agency of the Company as it may designate by notice in writing to the registered holder hereof at the address of such holder appearing on the books of the Company), and upon payment of the Exercise Price for the shares thereby purchased (i) by cash or check or bank draft payable to the order of the Company, (ii) by cancellation of indebtedness of the Company payable to the holder hereof at the time of exercise, or (iii) by delivery of an election in writing to receive a number of shares of Common Stock equal to the aggregate number of shares of Common Stock subject to this Warrant (or the portion thereof being cancelled upon such exercise), less that number of shares of Common Stock having a

fair market value as of such date equal to the aggregate Exercise Price of the Warrant (or such portion thereof); whereupon the holder of this Warrant shall be entitled to receive a certificate for the number of shares so purchased. The Company agrees that if at the time of the surrender of this Warrant and purchase the holder hereof shall be entitled to exercise this Warrant, the shares so purchased shall be and be deemed to be issued to such holder as the record owner of such shares as of the close of business on the date on which this Warrant shall have been exercised as aforesaid. For purposes of clause (iii) of the preceding sentence, the fair market value of one share of the Company's Common Stock shall be determined as follows: (1) if the Company's Common Stock is listed on a national stock exchange, on the NASDAQ National Market System or on any other over-the-counter market, then such fair market value shall be the

closing price per share reported for such class on such national stock exchange or on the NASDAQ National Market System, or the average of the final "bid" and "asked" prices reported on such over-the-counter market, as applicable, at the close of business on the date of calculation, as reported in the Wall Street Journal; and (2) if the Company's Common Stock is not listed on any national stock exchange, on the NASDAQ National Market System or on any other over-the-counter market, then the Board of Directors of the Company shall determine such fair market value as of the date of calculation in its reasonable good faith judgment, and shall (upon written request by the holder hereof) advise the holder hereof of such determination prior to any decision by such holder to exercise its purchase rights under this Warrant.

Certificates for shares purchased hereunder shall be delivered to the holder hereof within a reasonable time, but not later than ten (10) days, after the date on which this Warrant shall have been exercised as aforesaid.

If this Warrant is exercised with respect to less than all of the shares covered hereby, the holder hereof shall be entitled to receive a new Warrant, in this form, covering the number of shares with respect to which this Warrant shall not have been exercised.

The Company covenants that all shares of stock which may be issued upon the exercise of rights represented by this Warrant will, upon exercise of the rights represented by this Warrant, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

3. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant.

4. Charges, Taxes and Expenses. Issuance of certificates for shares of Common Stock upon the exercise of this Warrant shall be made without charge to the holder hereof for any issue or transfer tax or other incidental expense in respect of the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the holder of this Warrant or in such name or names as may be directed by the holder of this Warrant; provided, however, that in the event certificates for shares of Common Stock are to be issued in a name other than the name of the holder of this Warrant, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the holder hereof; and provided further, that upon any transfer involved in the issuance or delivery of any

certificates for shares of Common Stock, the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

5. No Rights as Shareholders. This Warrant does not entitle the holder hereof to any voting rights or other rights as a shareholder of the Company prior to the exercise hereof. Notwithstanding the foregoing, the Company shall, upon written request by the holder hereof to the chief financial officer of the Company from time to time (but not more often than twice in any 12-month period) provide to such holder copies of the following documents within a reasonable time after such request (but in all events only to the extent that, and no sooner than the time that, such documents have been made available to the Company's shareholders): (i) the Company's most recent audited annual financial statements or, if audited statements are not available, then the Company's unaudited annual financial statements as of the end of the Company's most recently ended fiscal year and (ii) unaudited quarterly financial statements for each quarter of the Company's fiscal year since the date of the annual financial statements delivered pursuant to clause (i) above. Notwithstanding the preceding sentence, during any period in which the Company has outstanding a class of publicly-traded securities or is for any other reason reporting company under

the Securities Exchange Act of 1934, it shall be sufficient compliance with any information request from the holder hereof pursuant to such sentence for the Company to provide copies of its most recent Form 10-K and annual report, any Form 10-Qs and/or Form 8-Ks filed by the Company with the SEC since the date of such Form 10-K, and any proxy statements.

6. Exchange and Registry of Warrant. This Warrant is exchangeable, upon the surrender hereof by the registered holder at the above-mentioned office or agency of the Company, for a new Warrant of like tenor and dated as of such exchange.

The Company shall maintain at the above-mentioned office or agency a registry showing the name and address of the registered holder of this Warrant. This Warrant may be surrendered for exchange, transfer or exercise, in accordance with its terms, at such office or agency of the Company, and the Company shall be entitled to rely in all respects, prior to written notice to the contrary, upon such registry.

7. Loss, Theft, Destruction or Mutilation of Warrant. Upon receipt by the Company of evidence reasonably satisfactory to it (such as an affidavit of the holder hereof) of the loss, theft, destruction or mutilation of this Warrant, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it, and upon reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of this Warrant, if mutilated, the Company will make and deliver a new Warrant of like tenor and dated as of such cancellation, in lieu of this Warrant.

8. Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday, then such action may be taken or such right may be exercised on the next succeeding day not a legal holiday.

9. Adjustment. The number of shares for which this Warrant is exercisable and the time period for exercise are subject to adjustment from time to time as follows:

(a) Rectification, etc. If the Company at any time shall, by subdivision, combination or reclassification of securities or otherwise, change any of the securities to which purchase rights under this Warrant exist into the same or a different number of securities of any class or classes, this Warrant shall thereafter be to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant immediately prior to such subdivision, combination, reclassification or other change and the Exercise Price shall be proportionately adjusted.

(b) Cash Distributions. No adjustment on account of cash dividends or interest on the Company's Common Stock or other securities purchasable hereunder will be made to the Exercise Price.

(c) This warrant shall be deemed rescinded in the event that the Company's assumption of that certain Lease, dated April 13, 1998 (as amended) by and between BPGLP and MetaXen, LLC shall not have occurred by September 30, 2000.

10. Miscellaneous.

(a) Termination Upon Merger, Sale of Assets, etc. If at any time after the date hereof the Company proposes to merge with or into any other corporation, effect a consolidation or reorganization with or into any other entity, or sell or convey all or substantially all of its assets to any other entity (collectively, a "Merger"), the Company shall give the Holder written notice ("Merger Notice") of such impending transaction not later than thirty

(30) days prior to the closing of such transaction. The Merger Notice shall describe the material terms and conditions of the impending transaction, including the aggregate value of consideration to be received by the Holder for the shares underlying this Warrant on an as exercised basis, and the Company shall thereafter give the Holder prompt notice of any material changes to such terms and conditions.

(i) If, pursuant to such Merger, the shareholders of the Company receive solely cash and/or publicly traded securities in exchange for their shares of stock in the Company, as stated in the Merger Notice, and this Warrant has not been exercised prior to the closing of such transaction, this Warrant shall terminate.

(ii) Notwithstanding anything to the contrary, if, pursuant to such Merger, the shareholders of the Company receive non-publicly traded securities in exchange for their shares of stock in the Company, or if the aggregate value of the consideration consisting of cash and/or publicly traded securities to be received by the Holder for the securities underlying this Warrant, as stated in the Merger Notice, does not equal or exceed the aggregate Exercise Price of such underlying securities, then this Warrant shall not terminate pursuant to the provisions of Section 10(a)(i) above, and the Company shall, as a condition precedent to such transaction, cause effective provisions to be made so that the holder hereof shall have the right thereafter, by exercising this Warrant (in lieu of the shares of the common stock of the Company immediately theretofore

purchasable and receivable upon exercise of this Warrant) to purchase the kind and amount of shares of stock and other securities and property (including cash) receivable upon such transaction. Any such provision shall include provisions for adjustments in respect of such shares of stock and other securities and property that shall be as nearly equivalent as may be practicable to the adjustments provided for in this Warrant. The foregoing provisions of this Section 10(a)(ii) shall similarly apply to successive transactions, unless this Warrant is first terminated pusuant to the provisions of Section 10(a)(i) above.

(b) Issue Date. The provisions of this Warrant shall be construed and shall be given effect in all respect as if it had been issued and delivered by the Company on the date hereof. This Warrant shall be binding upon any successors or assigns of the Company. This Warrant shall constitute a contract under the laws of the State of California and for all purposes shall be construed in accordance with and governed by the laws of said state.

(c) Restrictions. The holder hereof acknowledges that the Common Stock acquired upon the exercise of this Warrant shall have restrictions upon its resale imposed by state and federal securities laws.

(d) Authorized Shares. The Company covenants that during the period the Warrant is exercisable, it will reserve from its authorized and Unicode Common Stock a sufficient number of shares to provide for the issuance of Common Stock upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of the Company's Common Stock upon the exercise of the purchase rights under this Warrant.

(e) No Impairment. The Company will not, by amendment of its Articles of Incorporation or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holder hereof against impairment.

(f) Notices of Record Date. In case:

(i) the Company shall take a record of the holders of its Common Stock for the purposes of entitling them to receive any dividend (other than a cash dividend) or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares or stock of any class or any other securities or property, or to receive any other right; or

(ii) of any capital reorganization of the Company, any reclassification of the capital stock of the Company, any consolidation or merger of the Company with or into another corporation, or any conveyance of all or substantially all of the assets of the Company to another corporation; or

(iii) of the voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then, and in each such case, the Company will mail or cause to be mailed to the holder of this Warrant a notice specifying, as the case may be, (i) the date on which a record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, or (ii) the date on which such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up is to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up. Such notice shall be mailed at least thirty (30) days prior to the date therein specified.

(g) Attorneys' Fees. In any litigation, arbitration or other legal proceeding between the Company and the holder hereto relating to or arising out of this Warrant, the prevailing party shall be entitled to recover all its fees, costs and expenses incurred in connection with such proceeding, including (but not limited to) reasonable fees and expenses of attorneys and accountants and including (but not limited to) all such fees, costs and expenses incurred in connection with any appeals and/or in connection with the enforcement of any judgment or award rendered in such proceeding.

IN WITNESS WHEREOF, Cytokinetics, Inc. has caused this Warrant to be executed by its officers thereunto duly authorized.

Dated: July 20, 1999

CYTOKINETICS, INC.

By: /s/ James Sabry

Title: CEO & President

NOTICE OF EXERCISE

To: CYTOKINETICS, INC.

(1) _____, the undersigned, hereby elects to purchase _____ shares of Common Stock (the "Shares") at an exercise price of $0.29 per share of

Cytokinetics, Inc. pursuant to the terms of the attached Warrant, and tenders herewith payment of the aggregate purchase price of $_____ in full (if exercising pursuant to net exercise provisions, enter $-0-), together with all applicable transfer taxes, if any:

(choose one)

[ ] By cash, check or sale draft payable to Cytokinetics, Inc.; or

[ ] By cancellation of indebtedness of Cytokinetics, Inc., payable to the undersigned as of the date hereof; or

[ ] By net exercise pursuant to the provisions of Section 2(iii) of the attached warrant (no tender of payment for the Shares needed).

(2) Please issue a certificate or certificates representing the Shares (or the number of shares of Common Stock remaining after application of the net exercise provisions of Section 2 (iii) of the attached warrant) in the name of the undersigned or in such other name as is specified below:

_____
(Name)

_____

_____
(Address)

(3) The undersigned represents that the aforesaid shares of Common Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares.

_____
(Date) (Signature)

ASSIGNMENT FORM

(To assign the foregoing warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

_____
(Please Print)

whose address is _____

_____
(Please Print)

Dated: _____, _____.

Holder's Signature: _____

Holder's Address: _____

_____

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatever, and must be guaranteed by a bank or trust company. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

Exhibit 4.13

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT IS AVAILABLE FOR SUCH OFFER, SALE, OR TRANSFER, PLEDGE OR HYPOTHECATION IN THE OPINION OF LEGAL COUNSEL REASONABLY SATISFACTORY TO THE COMPANY.

WARRANT

To Purchase Shares of Common Stock of
CYTOKINETICS, INC.

THIS CERTIFIES that, for value received Slough Estates USA Inc., a Delaware corporation (the "Holder"), is entitled, upon the terms and subject to the conditions hereinafter set forth, at any time after the date hereof and prior to the Commencement Date (as defined below), to subscribe for and purchase from Cytokinetics, Inc., a Delaware corporation (the "Company"), 180,000 shares of the Company's Common Stock at an exercise price ("Exercise Price") of $0.29 per share, subject to adjustment as set forth below.

1. Title of Warrant. Prior to the expiration hereof and subject to compliance with applicable laws, this Warrant and all rights hereunder are transferable, in whole or in part, at the office or agency of the Company, referred to in Section 2 hereof, by the holder hereof in person or by duly authorized attorney, upon surrender of this Warrant together with the Assignment Form annexed hereto properly endorsed.

2. Exercise of Warrant. The purchase rights represented by this Warrant are exercisable by the registered holder hereof, in whole or in part, at any time after the effective date of the assignment and assumption to and by the Company of that certain Lease, dated April 13, 1998 (as amended) by and between MetaXen, LLC and Britannia Pointe Grand Limited Partnership ("BPGLP") and prior to the date that is five (5) years after the closing date of an underwritten initial public offering ("IPO") of the Company's Common Stock pursuant to a registration statement filed with the Securities and Exchange Commission (the "SEC") under the Act, subject to adjustment as hereinafter provided, by the surrender of this Warrant and the Notice of Exercise Form annexed hereto duly executed at the office of the Company, in South San Francisco, California (or such other office or agency of the Company as it may designate by notice in writing to the registered holder hereof at the address of such holder appearing on the books of the Company), and upon payment of the Exercise Price for the shares thereby purchased (i) by cash or check or bank draft payable to the order of the Company, (ii) by cancellation of indebtedness of the Company payable to the holder hereof at the time of exercise, or (iii) by delivery of an election in writing to receive a number of shares of Common Stock equal to the aggregate number of shares of Common Stock subject to this Warrant (or the portion thereof being cancelled upon such exercise), less that number of shares of Common Stock having a fair market value as of such date equal to the aggregate Exercise Price of the Warrant (or such

portion thereof); whereupon the holder of this Warrant shall be entitled to receive a certificate for the number of shares so purchased. The Company agrees that if at the time of the surrender of this Warrant and purchase the holder hereof shall be entitled to exercise this Warrant, the shares so purchased shall be and be deemed to be issued to such holder as the record owner of such shares as of the close of business on the date on which this Warrant shall have been exercised as aforesaid. For purposes of clause (iii) of the preceding sentence, the fair market value of one share of the Company's Common Stock shall be determined as follows: (1) if the Company's Common Stock is listed on a national stock exchange, on the NASDAQ National Market System or on any other over-the-counter market, then such fair market value shall be the closing price per share reported for such class on such national stock exchange or on the

NASDAQ National Market System, or the average of the final "bid" and "asked" prices reported on such over-the-counter market, as applicable, at the close of business on the date of calculation, as reported in the Wall Street Journal; and (2) if the Company's Common Stock is not listed on any national stock exchange, on the NASDAQ National Market System or on any other over-the-counter market, then the Board of Directors of the Company shall determine such fair market value as of the date of calculation in its reasonable good faith judgment, and shall (upon written request by the holder hereof) advise the holder hereof of such determination prior to any decision by such holder to exercise its purchase rights under this Warrant.

Certificates for shares purchased hereunder shall be delivered to the holder hereof within a reasonable time, but not later than ten (10) days, after the date on which this Warrant shall have been exercised as aforesaid.

If this Warrant is exercised with respect to less than all of the shares covered hereby, the holder hereof shall be entitled to receive a new Warrant, in this form, covering the number of shares with respect to which this Warrant shall not have been exercised.

The Company covenants that all shares of stock which may be issued upon the exercise of rights represented by this Warrant will, upon exercise of the rights represented by this Warrant, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

3. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant.

4. Charges, Taxes and Expenses. Issuance of certificates for shares of Common Stock upon the exercise of this Warrant shall be made without charge to the holder hereof for any issue or transfer tax or other incidental expense in respect of the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the holder of this Warrant or in such name or names as may be directed by the holder of this Warrant; provided, however, that in the event certificates for shares of Common Stock are to be issued in a name other than the name of the holder of this Warrant, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the holder hereof; and provided further, that upon any transfer involved in the issuance or delivery of any

certificates for shares of Common Stock, the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

5. No Rights as Shareholders. This Warrant does not entitle the holder hereof to any voting rights or other rights as a shareholder of the Company prior to the exercise hereof. Notwithstanding the foregoing, the Company shall, upon written request by the holder hereof to the chief financial officer of the Company from time to time (but not more often than twice in any 12-month period) provide to such holder copies of the following documents within a reasonable time after such request (but in all events only to the extent that, and no sooner than the time that, such documents have been made available to the Company's shareholders): (i) the Company's most recent audited annual financial statements or, if audited statements are not available, then the Company's unaudited annual financial statements as of the end of the Company's most recently ended fiscal year and (ii) unaudited quarterly financial statements for each quarter of the Company's fiscal year since the date of the annual financial statements delivered pursuant to clause (i) above. Notwithstanding the preceding sentence, during any period in which the Company has outstanding a class of publicly-traded securities or is for any other reason reporting company under the Securities Exchange Act of 1934, it shall be sufficient compliance with any

information request from the holder hereof pursuant to such sentence for the Company to provide copies of its most recent Form 10-K and annual report, any Form 10-Qs and/or Form 8-Ks filed by the Company with the SEC since the date of such Form 10-K, and any proxy statements.

6. Exchange and Registry of Warrant. This Warrant is exchangeable, upon the surrender hereof by the registered holder at the above-mentioned office or agency of the Company, for a new Warrant of like tenor and dated as of such exchange.

The Company shall maintain at the above-mentioned office or agency a registry showing the name and address of the registered holder of this Warrant. This Warrant may be surrendered for exchange, transfer or exercise, in accordance with its terms, at such office or agency of the Company, and the Company shall be entitled to rely in all respects, prior to written notice to the contrary, upon such registry.

7. Loss, Theft, Destruction or Mutilation of Warrant. Upon receipt by the Company of evidence reasonably satisfactory to it (such as an affidavit of the holder hereof) of the loss, theft, destruction or mutilation of this Warrant, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it, and upon reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of this Warrant, if mutilated, the Company will make and deliver a new Warrant of like tenor and dated as of such cancellation, in lieu of this Warrant.

8. Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday, then such action may be taken or such right may be exercised on the next succeeding day not a legal holiday.

9. Adjustment. The number of shares for which this Warrant is exercisable and the time period for exercise are subject to adjustment from time to time as follows:

(a) Reclassification, etc. If the Company at any time shall, by subdivision, combination or reclassification of securities or otherwise, change any of the securities to which purchase rights under this Warrant exist into the same or a different number of securities of any class or classes, this Warrant shall thereafter be to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant immediately prior to such subdivision, combination, reclassification or other change and the Exercise Price shall be proportionately adjusted.

(b) Cash Distributions. No adjustment on account of cash dividends or interest on the Company's Common Stock or other securities purchasable hereunder will be made to the Exercise Price.

(c) This warrant shall be deemed rescinded in the event that the Company's assumption of that certain Lease, dated April 13, 1998 (as amended) by and between BPGLP and MetaXen, LLC shall not have occurred by September 30, 2000.

10. Miscellaneous.

(a) Termination Upon Merger, Sale of Assets, etc. If at any time after the date hereof the Company proposes to merge with or into any other corporation, effect a consolidation or reorganization with or into any other entity, or sell or convey all or substantially all of its assets to any other entity (collectively, a "Merger"), the Company shall give the Holder written notice ("Merger Notice") of such impending transaction not later than thirty (30) days prior to the closing of such transaction. The Merger Notice shall describe the material terms and conditions of the impending transaction,

including the aggregate value of consideration to be received by the Holder for the shares underlying this Warrant on an as exercised basis, and the Company shall thereafter give the Holder prompt notice of any material changes to such terms and conditions.

(i) If, pursuant to such Merger, the shareholders of the Company receive solely cash and/or publicly traded securities in exchange for their shares of stock in the Company, as stated in the Merger Notice, and this Warrant has not been exercised prior to the closing of such transaction, this Warrant shall terminate.

(ii) Notwithstanding anything to the contrary, if, pursuant to such Merger, the shareholders of the Company receive non-publicly traded securities in exchange for their shares of stock in the Company, or if the aggregate value of the consideration consisting of cash and/or publicly traded securities to be received by the Holder for the securities underlying this Warrant, as stated in the Merger Notice, does not equal or exceed the aggregate Exercise Price of such underlying securities, then this Warrant shall not terminate pursuant to the provisions of Section 10(a)(i) above, and the Company shall, as a condition precedent to such transaction, cause effective provisions to be made so that the holder hereof shall have the right thereafter, by exercising this Warrant (in lieu of the shares of the common stock of the Company immediately theretofore

purchasable and receivable upon exercise of this Warrant) to purchase the kind and amount of shares of stock and other securities and property (including cash) receivable upon such transaction. Any such provision shall include provisions for adjustments in respect of such shares of stock and other securities and property that shall be as nearly equivalent as may be practicable to the adjustments provided for in this Warrant. The foregoing provisions of this Section 10(a)(ii) shall similarly apply to successive transactions, unless this Warrant is first terminated pusuant to the provisions of Section 10(a)(i) above.

(b) Issue Date. The provisions of this Warrant shall be construed and shall be given effect in all respect as if it had been issued and delivered by the Company on the date hereof. This Warrant shall be binding upon any successors or assigns of the Company. This Warrant shall constitute a contract under the laws of the State of California and for all purposes shall be construed in accordance with and governed by the laws of said state.

(c) Restrictions. The holder hereof acknowledges that the Common Stock acquired upon the exercise of this Warrant shall have restrictions upon its resale imposed by state and federal securities laws.

(d) Authorized Shares. The Company covenants that during the period the Warrant is exercisable, it will reserve from its authorized and Unicode Common Stock a sufficient number of shares to provide for the issuance of Common Stock upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of the Company's Common Stock upon the exercise of the purchase rights under this Warrant.

(e) No Impairment. The Company will not, by amendment of its Articles of Incorporation or any other voluntary action, avoid or seek to avoid the observance or performance ot any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holder hereof against impairment.

(f) Notices of Record Date. In case:

(i) the Company shall take a record of the holders of its Common Stock for the purposes of entitling them to receive any dividend

(other than a cash dividend) or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares or stock of any class or any other securities or property, or to receive any other right; or

(ii) of any capital reorganization of the Company, any reclassification of the capital stock of the Company, any consolidation or merger of the Company with or into another corporation, or any conveyance of all or substantially all of the assets of the Company to another corporation; or

(iii) of the voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then, and in each such case, the Company will mail or cause to be mailed to the holder of this Warrant a notice specifying, as the case may be, (i) the date on which a record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, or (ii) the date on which such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up is to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up. Such notice shall be mailed at least thirty (30) days prior to the date therein specified.

(g) Attorneys' Fees. In any litigation, arbitration or other legal proceeding between the Company and the holder hereto relating to or arising out of this Warrant, the prevailing party shall be entitled to recover all its fees, costs and expenses incurred in connection with such proceeding, including (but not limited to) reasonable fees and expenses of attorneys and accountants and including (but not limited to) all such fees, costs and expenses incurred in connection with any appeals and/or in connection with the enforcement of any judgment or award rendered in such proceeding.

IN WITNESS WHEREOF, Cytokinetics, Inc. has caused this Warrant to be executed by its officers thereunto duly authorized.

Dated: July 20, 1999

CYTOKINETICS, INC.

By: /s/ James Sabry

Title: CEO & President

NOTICE OF EXERCISE

To: CYTOKINETICS, INC.

(1) _____, the undersigned, hereby elects to purchase_____shares of Common Stock (the "Shares") at an exercise price of $0.29 per share of Cytokinetics, Inc. pursuant to the terms of the attached Warrant, and tenders herewith payment of the aggregate purchase price of $_____in full (if exercising pursuant to net exercise provisions, enter $-0-), together with all applicable transfer taxes, if any:

(choose one)

[ ] By cash, check or sale draft payable to Cytokinetics,

Inc.; or

[ ] By cancellation of indebtedness of Cytokinetics, Inc., payable to the undersigned as of the date hereof; or

[ ] By net exercise pursuant to the provisions of Secton 2(iii) of the attached warrant (no tender of payment for the Shares needed).

(2) Please issue a certificate or certificates representing the Shares (or the number of shares of Common Stock remaining after application of the net exercise provisions of Section 2 (iii) of the attached warrant) in the name of the undersigned or in such other name as is specified below:

_____
(Name)

_____

_____
(Address)

(3) The undersigned represents that the aforesaid shares of Common Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares.

_____
(Date) (Signature)

ASSIGNMENT FORM

(To assign the foregoing warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

_____
(Please Print)

whose address is _____

_____
(Please Print)

Dated:_____,_____.

Holder's Signature:_____

Holder's Address: _____

_____

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatever, and must be guaranteed by a bank or trust company. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

Exhibit 4.14

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). THESE SECURITIES MAY BE OFFERED, SOLD OR OTHERWISE TRANSFERRED ONLY (A) TO THE CORPORATION, (B) OUTSIDE THE UNITED STATES IN ACCORDANCE WITH RULE 901 OR REGULATIONS UNDER THE SECURITIES ACT IF APPLICABLE, OR (C) INSIDE THE UNITED STATES (i) PURSUANT TO THE EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 THEREUNDER, IF APPLICABLE, AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS OR (ii) IN COMPLIANCE WITH ANOTHER APPLICABLE EXEMPTION UNDER THE SECURITIES ACT AND ANY APPLICABLE STATE SECURITIES LAWS, SUCH COMPLIANCE, AT THE OPTION OF THE CORPORATION, TO BE EVIDENCED BY AN OPINION OF COUNSEL, IN FORM ACCEPTABLE TO THE CORPORATION, THAT NO VIOLATION OF SUCH REGISTRATION PROVISIONS WOULD RESULT FROM ANY PROPOSED TRANSFER OR ASSIGNMENT.

No. W-_____ SERIES B PREFERRED STOCK PURCHASE WARRANT As of August 30, 1999

CYTOKINETICS, INCORPORATED

THIS CERTIFIES that, for value received, The Magnum Trust (the "Holder") or its assigns, is entitled to subscribe for and purchase, from Cytokinetics, Incorporated, a Delaware corporation (the "Company"), shares of the Company's Series B Preferred Stock, upon the terms and subject to the conditions set forth herein, at any time on or after the date of this Warrant, and on or before, but in no case after August 30, 2006.

1. Exercise Price; Number of Warrant Shares. The purchase price of one share of Series B Preferred Stock under this Warrant shall be $2.90 per share, subject to adjustment pursuant to Sections 7 and 8 (such price as it shall be adjusted, the "Exercise Price"). The number of shares of Series B Preferred Stock purchasable upon exercise of this Warrant is 100,000, which shares upon such purchase shall be fully paid and non-assessable (the "Warrant Shares").

2. Exercise, of Warrant.

(a) Exercise Procedure. The purchase rights represented by this Warrant are exercisable by the Holder or its assignee, in whole or in part, at any time before August 30, 2006, by the surrender of this Warrant and a Notice of Exercise in the form attached as Exhibit A duly executed at, the office of the Company in South San Francisco, California (or such other office or agency of the Company as it may designate by notice in writing to the Holder at the address of such holder appearing on the books of the Company), and upon payment of the Exercise Price of the shares thereby purchased (by cash or by check or bank draft payable to the order of the Company or by cancellation of indebtedness of the Company to the holder, if any, at the time of exercise in an amount equal to the Exercise Price of the shares thereby purchased or pursuant to the net exercise proceeding set forth in Section 2(b), below); whereupon the Holder shall be entitled to receive a certificate for the number of shares of Series B Preferred Stock so purchased. If this Warrant is exercised as to only a portion of the shares for which it is exercisable, the Company shall, upon such exercise, deliver to the Holder a new Warrant representing the remaining shares for which the Warrant shall then be exercisable. This Warrant shall be deemed to have been exercised

immediately prior to the close of business on the date of delivery of such Notice of Exercise and payment as provided above, and the person entitled to receive the shares issuable upon such exercise shall be treated for all purposes as the holder of such shares of record as of the close of business on such date. As promptly as practicable on or after such date, the Company shall issue and deliver to such person a certificate for the number of shares issuable upon such exercise.

(b) Net Exercise.

(1) In lieu of the cash payment set forth in Section 2(a) above, the Holder shall have the right ("Conversion Right") to convert this Warrant or any portion thereof (without payment of any kind) into that number of shares of Series B Preferred Stock equal to (i) the product of (A) the number of shares of Series B Preferred then issuable upon such whole or partial exercise of this Warrant and (B) the excess, if any, of (X) the Market Price Per Share (as determined pursuant to Section 2(b)(3) below) with respect to the date of conversion over (Y) the Exercise Price in effect on the business day next preceding the date of conversion, divided by (ii) the Market Price Per Share with respect to the date of conversion.

(2) Manner of Conversion. The conversion rights provided for in this Section 2(b) may be exercised in whole or in pan and at any time and from time to time while any portion of this Warrant remains outstanding. In order to exercise its conversion rights under this Section, the Holder shall surrender to the Company, at its offices, this Warrant certificate accompanied by a duly completed Notice of Conversion in the form annexed hereto as Exhibit B. The Warrant (or so much thereof as shall have been surrendered for conversion) shall be deemed to have been converted immediately prior to the close of business on the day of surrender of such Warrant certificate for conversion in accordance with the foregoing provisions. As promptly as practicable on or after the conversion date, the Company shall issue and shall deliver to the Warramholder (i) a certificate or certificates representing the number of shares of Series B Preferred to which the Warrantholder shall be entitled as a result of the conversion, and (ii) if the Warrant certificate is being converted in part only, a new certificate of like tenor and date for the balance of the unconverted portion of the Warrant certificate.

(3) Market Price Per Share. As used herein, the "Market Price Per Share" on any date shall mean the fair market value of each share of Series B Preferred Stock as determined in good faith by the Board of Directors of the Company, provided that, after the Company's registration and sale of shares of its Common Stock pursuant to a public offering, the term "Market Price Per Share" shall mean the closing price per share of the Company's Common Stock for the trading day immediately preceding the date of exercise. The closing price for each such day shall be the last sale price or, in case no such sale takes place on such day, the average of the closing bid and asked prices, in either case on the principal securities exchange on which the shares of such Common Stock of the Company are listed or admitted to trading or, if applicable, the last sale price, or, in case no sale takes place on such day, the average of the closing bid and asked prices of such Common Stock on NASDAQ or any comparable system, or if such Common Stock is not reported on NASDAQ, or a comparable system, the average of the closing bid and asked prices as furnished by two members of the National Association of Securities Dealers, Inc. selected from time to time by the Company for that purpose. If such bid and asked prices are not available, then "Market Price Per

Share" shall be equal to the fair market value of such Common Stock as determined in good faith by the Board of Directors of the Company.

3. Restrictions on Transfer.

(a) Investment Representation. The Holder agrees that the Holder will not offer, sell or otherwise dispose of this Warrant or any securities issued on exercise of this Warrant except under circumstances which will not result in a violation of the Securities Act. Upon exercise of this Warrant, the Holder shall confirm in writing, by executing the form attached as Exhibit C hereto, that the securities purchased thereby are being acquired for investment solely for the Holder's own account and not as a nominee for any other Person, and not with a view toward distribution or resale.

(b) Certificate Legends. This warrant and all securities issued upon exercise of this Warrant (unless registered under the Securities

Act) shall be stamped or imprinted with a legend in substantially the following form (in addition to any legends required by applicable state securities laws):

> THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF, NO SUCH SALE OR DISPOSITION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933.
>
> THE SHARES REPRESENTED BY THIS CERTIFICATE MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

(c) Disposition of Warrant or Shares. With respect to any offer, sale or other disposition of this Warrant or any securities issued upon exercise of this Warrant before an initial public offering, the Holder agrees to give written notice to the Company prior thereto, describing briefly the manner thereof, together with a written opinion of the Holder's counsel, if reasonably requested by the Company, to the effect that such offer, sale or other disposition may be effected without registration under the Securities Act or qualification under any applicable state securities laws of this Warrant or such shares, as the case may be, and indicating whether or not under the Securities Act certificates for this Warrant or such shares, as the case may be, to be sold or otherwise disposed of require any restrictive legend as to applicable restrictions on transferability in order to insure compliance with the Securities Act. Each certificate representing this Warrant or the securities thus transferred (except a transfer pursuant to Rule 144) shall bear a legend as to the applicable restrictions on transferability in order to insure compliance with the Securities Act, unless in the aforesaid reasonably satisfactory opinion of counsel for the Holder or the security holder, as the case may be, such legend is not necessary in order to insure compliance with the Securities Act. The Company may issue stop transfer instructions to its transfer agent in connection with such restriction.

4. No Rights as Shareholder. This Warrant does not entitle the Holder to any voting rights or other rights as a shareholder of the Company prior to exercise; provided, however, that the Holder shall have "piggy-back" registration rights equivalent to those given to holders of Series B Preferred Stock pursuant to that certain First Amended and Restated Investors' Rights Agreement dated August 30,1999 by and among such holders and the Company, as the same may be amended from time to time (the "Rights Agreement"), and, provided further, that the Holder shall be bound by the transfer restrictions set forth in the Rights Agreement, including, without limitation, the Market Stand-Off provisions contained therein.

5. Loss. Theft, Destruction or Mutilation of Warrant. Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant, and in case of loss, theft or destruction, of indemnity reasonably satisfactory to it, and upon reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of this Warrant, if mutilated, the Company shall make and deliver a new Warrant of like tenor in lieu of this Warrant.

6. Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday, then such action may be taken or such right may be exercised on the next succeeding day not a legal holiday.

7. Change of Control, Qualified IPO and Anti-Dilution.

(a) Merger, Sale of Assets, etc. If at any time

after the date hereof the Company proposes to merge with or into any other corporation, effect a consolidation or acquisition with or into any other entity, which merger, consolidation or acquisition is of 100% of the voting securities of the Company (a "Termination Transaction"), the Company shall give the Holder written notice ("Merger Notice") of such impending transaction not later than thirty (30) days prior to the closing of such transaction. The Merger Notice shall describe the material terms and conditions of the impending transaction, including the price and aggregate value of securities and other consideration to be received by holders of Series B Preferred stock, by holders of Common Stock and by the Holder for the shares underlying this Warrant on an as exercised basis, and the Company shall thereafter give the Holder prompt notice of any material changes to such terms and conditions. If this Warrant has not been exercised or converted prior to the closing of a Termination Transaction that is the subject of such a Merger Notice, this Warrant shall terminate. Notwithstanding anything to the contrary in this Section 7(a), if, after the closing of a Termination Transaction, the shareholders of the Company prior to the closing will hold securities representing more than 50% of the voting control of the surviving entity, this warrant shall not terminate. In the event of such a non-terminating transaction, and in the event of a transaction of the sale or conveyance of all or substantially all of the assets of the Company, the Company shall, as a condition precedent to such transaction, cause effective provisions to be made so that the holder hereof shall have the right thereafter, by exercising this Warrant (in lieu of the shares of the common stock of the Company immediately theretofore purchasable and receivable upon exercise of this Warrant) to purchase the kind and amount of shares of stock and other securities and property (including cash) receivable upon such transaction by any holders of Series B Preferred Stock or holders of Common Stock, as applicable. Any such provision shall include provisions for adjustments in respect of such shares of

stock and other securities and property that shall be as nearly equivalent as may be practicable to the adjustments provided for in this Warrant. The foregoing provisions of this Section 7(a) shall similarly apply to successive transactions, unless this Warrant is first terminated pursuant this Section 7(a).

(b) Splits and Combinations. If the Company at any time subdivides any of its outstanding shares of Series B Preferred Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision shall be proportionately reduced, and conversely, if the outstanding shares of Series B Preferred Stock are combined into a smaller number of shares, the Exercise Price in effect immediately prior to such combination shall be proportionately increased. Upon any adjustment of the Exercise Price under this Section 7(b), the number of shares of Series B Preferred Stock issuable upon exercise of this Warrant shall equal the number of shares determined by dividing (i) the aggregate Exercise Price payable for the purchase of all shares issuable upon exercise of this Warrant immediately prior to such adjustment by (ii) the Exercise Price per share in effect immediately after such adjustment.

(c) Reclassifications. If the Company changes any of the securities as to which purchase rights under this Warrant exist into the same or a different number of securities of any other class or classes, this Warrant shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities that were subject to the purchase rights under this Warrant immediately prior to such reclassification or other change and the Exercise Price therefor shall be appropriately and proportionately adjusted.

(d) Dividends and Distribution. If the Company declares a non-cash dividend or other distribution on the Series B Preferred Stock or the Company's Common Stock or if a dividend or other distribution on the Series B Preferred Stock or the Company's Common Stock occurs (other than a cash dividend) then, as part of such dividend or distribution, lawful provision shall be made so that there shall thereafter be deliverable upon the exercise of this

Warrant or any portion thereof, in addition to the number of shares of Series B Preferred Stock receivable thereupon and without payment of any additional consideration, the amount of the dividend or other distribution to which the holder of the number of shares of Series B Preferred Stock obtained upon exercise hereof, and the holder of the number of shares of Common Stock into which such Series B Preferred Stock shall be convertible, would have been entitled to receive had the exercise occurred as of the record date for such dividend or distribution.

(e) Liquidation; Dissolution. If the Company shall dissolve, liquidate or wind up its affairs, the Holder shall have the right, but not the obligation, to exercise this Warrant effective as of the date of such dissolution, liquidation or winding up. If any such dissolution, liquidation or winding up results in any cash distribution to the Holder in excess of the aggregate Exercise Price for the shares of Series B Preferred Stock for which this Warrant is exercised, then the Holder may, at its option, exercise this Warrant without making payment of such aggregate Exercise Price and, in such case, the Company shall, upon distribution to the Holder, consider such aggregate Exercise Price to have been paid in full, and in making such settlement to the Holder, shall deduct an amount equal to such aggregate Exercise Price from the amount payable to the Holder.

(f) Other Dilutive Events. If any event occurs as to which the other provisions of this Section 7 are not strictly applicable but the failure to make any adjustment would not fairly protect the purchase rights represented by this Warrant in accordance with the essential intent and principles hereof, then, in each such case, the Company shall appoint a firm of independent public accountants of recognized national standing (which may be the Company's regular auditors) which shall give their opinion upon the adjustment, if any, on a basis consistent with the essential intent and principles established in this Section 7, necessary to preserve, without dilution, the purchase rights represented by this Warrant. Upon receipt of such opinion, the Company shall promptly mail a copy thereof to the Holder and shall make the adjustments described therein.

(g) Certificates and Notices.

(i) Adjustment Certificates. Upon any adjustment of the Exercise Price and/or the number of shares of securities purchasable upon exercise of this Warrant, a certificate signed by (A) the Company's President and Chief Financial Officer, or (B) any independent firm of certified public accounts of recognized national standing the Company selects at its own expense, setting forth in reasonable detail the events requiring the adjustment and the method by which such adjustment was calculated, shall be mailed to the Holder and shall specify the adjusted Exercise Price and the number of shares of securities purchasable upon exercise of the Warrant after giving effect to the adjustment.

(ii) Extraordinary Corporate Events. If the Company, after the date hereof, proposes to effect (A) any transaction described in Section 7(c) hereof, (B) a liquidation, dissolution or winding up of the Company described in Section 7(f) hereof, (C) a sale of assets transaction described in Section 7(a) hereof, or (D) any public offering of securities of the Company or any payment of a dividend or distribution with respect to Series B Preferred Stock or Common Stock of the Company, then, in each such case, the Company shall mail to the Holder a notice describing such proposed action and specifying the date on which the Company's books shall close, or a record shall be taken, for determining the holders of stock entitled to participate in such action, or the date on which such reclassification, liquidation, dissolution, winding up or other action shall take place or commence, as the case may be, and the date as of which it is expected that holders of stock of record shall be entitled to receive securities and/or other property deliverable upon such action, if any such date is to be fixed. Such notice shall be mailed to the Holder at least thirty (30) days prior to the record date for such action in the

case of any action described in clause (A) or clause (C) above, and in the case of any action described in clause (B) above, at least fifteen (15) days prior to the date on which the action described is to take place and at least fifteen (15) days prior to the record date for determining holders of Series B Preferred Stock or Common Stock entitled to receive securities and/or other property in connection with such action.

(h) No Impairment. The Company shall not, by amendment of the Articles of Incorporation or through any reorganization, recapitalization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Company, but shall at all times in good faith assist in the carrying out of all the provisions of this Section 7 and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder against impairment.

(i) Application. Except as otherwise provided herein, all sections of this Section 7 are intended to operate independently of one another. If an event occurs that requires the application of more than one section, all applicable sections shall be given independent effect.

(j) Authorized Shares. The Company covenants that during the period the Warrant is outstanding, it shall reserve from its authorized and unissued Series B Preferred Stock and Common Stock a sufficient number of shares to provide for the issuance of Series B Preferred Stock upon the exercise of this Warrant and issuance of Common Stock upon conversion of such Series B Preferred Stock.

8. Exercise Price Adjustment. The number of shares of Common Stock issuable upon conversion of the Warrant Shares and the terms for such conversion, shall be subject to adjustment from time to time in the manner governing the Company's Series B Preferred Stock in the Company's Certificate of Incorporation. The provisions set forth for the Warrant Shares in the Company's Certificate of Incorporation relating to the above adjustments, as of the date of this Warrant, shall not be amended, modified or waived without the prior written consent of the Holder, unless such amendment, modification or waiver is in accordance with the Company's Certificate of Incorporation and applicable law and affects the Holder in the same manner as it affects all other shareholders of Series B Preferred Stock.

9. Notices. All notices permitted or required hereunder shall be in writing and shall be delivered by hand, by overnight courier providing regular nationwide service or by deposit in the United States mail, postage prepaid, by registered or certified mail, return receipt requested, addressed to the Company or the Holder, as the case may be, at the address of such party below:

(i) if to the Company to:

Cytokinetics, Incorporated
Attn: Robert Blum, Vice President, Business Development
280 East Grand Avenue
South San Francisco, CA 94080

(ii) if to the Holder to:

The Magnum Trust
c/o Peter E.F. Newbald
No. 1 Seaton Place
St. Helier, Jersey JE4 SYJ
Channel Islands

With a copy of any notice to Holder to:

Gregory Tolaram
Hamilton Capital Limited
101 Front Street
Mercury House
Hamilton HM 12, Bermuda

Notices given by mail shall be deemed to be effective on the earlier of the date shown on proof of receipt of such mail or, unless the recipient proves that the notice was received later or not received, five (5) days after the date of mailing thereof. Other notices shall be deemed given on the date of receipt. The Company and any Holder may change the address specified above by written notice to the other party hereto.

10. Miscellaneous. This Warrant may be amended and any term of this Warrant may be waived only by a written instrument signed by the Company and the Warrant holder. This Warrant shall be binding upon any successors or assigns of the Company. This Warrant shall constitute a contract under the laws of the State of California and for all purposes shall be construed in accordance with and governed by the laws of said state applied without reference to conflict of laws principles except to the extent that the Warrant Shares and terms relating thereto are governed by Delaware law.

Dated: As of August 30, 1999

CYTOKINETICS, INCORPORATED

/s/ James Sabry

Name: JAMES SABRY
Title: PRESIDENT AND CEO

EXHIBIT A

NOTICE OF EXERCISE

TO: CYTOKINETICS, INCORPORATED

(1) The undersigned hereby elects to purchase _____ shares of Series B Preferred Stock of Cytokinetics, Incorporated pursuant to the terms of the attached Warrant, and tenders payment of the purchase price in full, together with all applicable transfer taxes, if any.

(2) Please issue a certificate or certificates representing said shares of Series B Preferred Stock in the name of the undersigned.

(3) The undersigned represents that the aforesaid shares of Series B Preferred Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares.

(Date)

_____
(Signature)

_____
(Print Name)

EXHIBIT B

NOTICE OF CONVERSION

To: _____

(1) The undersigned Warrant Holder hereby elects to exercise its conversion rights under Section 2(b) of the Warrant dated as of_____, 1999 between Cytokinetics, Incorporated and such Holder (the "Warrant") and to acquire_____shares of stock of Cytokinetics, Incorporated pursuant to such Section 2(b).

(2) In exercising its rights to convert the Warrant, the undersigned hereby confirms and acknowledges the investment representations and warranties made in Section 3(a) of the Warrant.

(3) Please issue a certificate or certificates representing said shares in the name of the undersigned or in such other name as is specified below.

_____
(name for issuance)

_____
(address)

_____
(address)

WARRANT HOLDER:

_____
(Warrant Holder signature)

Date:_____

EXHIBIT C

INVESTMENT REPRESENTATION STATEMENT

STOCKHOLDER	:	_____
COMPANY	:	Cytokinetics, Incorporated
SECURITY	:	Series B Preferred Stock
AMOUNT	:	
DATE	:	

In connection with the purchase of the above-listed Securities, the undersigned Stockholder represents to the Company the following:

(a) Stockholder is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Stockholder is acquiring these Securities for investment for Stockholder's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Stockholder acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona

fide nature of Stockholder's investment intent as expressed herein. In this connection, Stockholder understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Stockholder's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one year or any other fixed period in the future. Stockholder further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Stockholder further acknowledges and understands that the Company is under no obligation to register the Securities except as described in the Amended and Restated Investor Rights Agreement of even date herewith. Stockholder understands that the certificate evidencing the Securities will be imprinted with a legend which prohibits the transfer of the Securities unless they are registered or such registration is not required in the opinion of counsel satisfactory to the Company, a legend prohibiting their transfer without the consent of the Commissioner of Corporations of the State of California and any other legend required under applicable state securities laws.

(c) Stockholder is familiar with the provision of Rule 144, promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired,

directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions.

The Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which requires the resale to occur not less than one year after the later of the date the Securities were sold by the Company or the date the Securities were sold by an affiliate of the Company, within the meaning of Rule 144; and, in the case of acquisition of the Securities by an affiliate, or by a non-affiliate who subsequently holds the Securities less than two years, the satisfaction of certain conditions of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities may be resold, subject to the satisfaction of certain of the conditions specified by Rule 144, including: (1) the resale being made through a broker in an unsolicited "broker's transaction" or in transactions directly with a market maker (as said term is defined under the Securities Exchange Act of 1934); and, in the case of an affiliate, (2) the availability of certain public information about the Company, (3) the amount of Securities being sold during any three month period not exceeding the limitations specified in Rule 144, and (4) the timely filing of a Form 144, if applicable.

(d) Stockholder further understands that in the event all of the applicable requirements of 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption will be required; and that, notwithstanding the fact that Rule 144 is not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rule 144 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Stockholder understands that no assurances can be given that any such other registration exemption will be available in such event.

Signature of Stockholder;

Date: _____

EXHIBIT 5.1

[WILSON SONSINI GOODRICH & ROSATI LETTERHEAD]

MARCH 11, 2004

Cytokinetics, Incorporated
280 East Grand Avenue
South San Francisco, California 94080

RE: REGISTRATION STATEMENT ON FORM S-1

Ladies and Gentlemen:

We have examined the Registration Statement on Form S-1 (File No. 333-112261) filed with the Securities and Exchange Commission on January 27, 2004 (as amended by Amendment No. 1 thereto filed on March 11, 2004, as such may be amended or supplemented, the "Registration Statement"), in connection with the registration under the Securities Act of 1933, as amended, of 6,670,000 shares of Common Stock (the "Shares") of Cytokinetics, Incorporated (the "Company"). The Shares, which include up to 870,000 shares of Common Stock issuable pursuant to an over-allotment option granted to the underwriters, are to be sold to the underwriters as described in such Registration Statement for sale to the public or issued to the Representatives of the underwriters. As your counsel in connection with this transaction, we have examined the proceedings proposed to be taken in connection with said sale and issuance of the Shares.

It is our opinion that the Shares, when issued and sold in the manner described in the Registration Statement and in accordance with the resolutions adopted by the Board of Directors of the Company, will be legally and validly issued, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to the use of our name wherever appearing in the Registration Statement, including the Prospectus constituting a part thereof, and any amendments thereto.

Sincerely,

WILSON SONSINI GOODRICH & ROSATI
Professional Corporation

/S/ WILSON SONSINI GOODRICH & ROSATI

EXHIBIT 10.1

CYTOKINETICS, INCORPORATED

INDEMNIFICATION AGREEMENT

This Indemnification Agreement ("AGREEMENT") is made as of this ___ day of _____, _____, by and between Cytokinetics, Incorporated, a Delaware corporation (the "COMPANY"), and _____ ("INDEMNITEE").

WHEREAS, the Company and Indemnitee recognize the significant cost of directors' and officers' liability insurance and the general reductions in the coverage of such insurance;

WHEREAS, the Company and Indemnitee further recognize the substantial increase in corporate litigation in general, subjecting officers and directors to expensive litigation risks at the same time as the coverage of liability insurance has been severely limited; and

WHEREAS, the Company desires to attract and retain the services of highly qualified individuals, such as Indemnitee, to serve as officers and directors of the Company and to indemnify its officers and directors so as to provide them with the maximum protection permitted by law.

NOW, THEREFORE, in consideration for Indemnitee's services as an officer or director of the Company, the Company and Indemnitee hereby agree as follows:

1. INDEMNIFICATION.

(a) THIRD PARTY PROCEEDINGS. The Company shall indemnify Indemnitee if Indemnitee is or was a party or is threatened to be made a party to any threatened, pending or completed action, suit, proceeding or any alternative dispute resolution mechanism, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Company) by reason of the fact that Indemnitee is or was a director, officer, employee or agent of the Company, or any subsidiary of the Company, by reason of any action or inaction on the part of Indemnitee while serving in Indemnitee's capacity as a director, officer, employee or agent of the Company or by reason of the fact that Indemnitee is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement (if such settlement is approved in advance by the Company, which approval shall not be unreasonably withheld) actually and reasonably incurred by Indemnitee in connection with such action, suit or proceeding if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, had no reasonable cause to believe Indemnitee's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of NOLO CONTENDERE or its equivalent, shall not, of itself, create a presumption that Indemnitee did not act in good faith and in a manner which Indemnitee reasonably believed to be in or not opposed to the best

interests of the Company, and, with respect to any criminal action or proceeding, had reasonable cause to believe that Indemnitee's conduct was unlawful.

(b) PROCEEDINGS BY OR IN THE RIGHT OF THE COMPANY. The Company shall indemnify Indemnitee if Indemnitee was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding by or in the right of the Company or any subsidiary of the Company to procure a judgment in its favor by reason of the fact that Indemnitee is or was a

director, officer, employee or agent of the Company, or any subsidiary of the Company, by reason of any action or inaction on the part of Indemnitee while serving in Indemnitee's capacity as a director, officer, employee or agent of the Company or by reason of the fact that Indemnitee is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) and, to the fullest extent permitted by law, amounts paid in settlement in each case to the extent actually and reasonably incurred by Indemnitee in connection with the defense or settlement of such action, suit or proceeding if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, except that no indemnification shall be made in respect of any claim, issue or matter as to which Indemnitee shall have been finally adjudicated by court order or judgment (for which no further right of appeal exists) to be liable to the Company in the performance of Indemnitee's duty to the Company unless and only to the extent that the Court of Chancery of the State of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery of the State of Delaware or such other court shall deem proper.

(c) MANDATORY PAYMENT OF EXPENSES. To the extent that Indemnitee has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in Subsections (a) and (b) of this Section 1, or in defense of any claim, issue or matter therein, Indemnitee shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by Indemnitee in connection therewith. Without limiting the foregoing, if any action, suit or proceeding is disposed of, on the merits or otherwise (including a disposition without prejudice), without (i) the disposition being adverse to the Indemnitee, (ii) an adjudication that the Indemnitee was liable to the Company, (iii) a plea of guilty or nolo contendere by the Indemnitee, (iv) an adjudication that the Indemnitee did not act in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company, and (v) with respect to any criminal proceeding, an adjudication that the Indemnitee had reasonable cause to believe his conduct was unlawful, the Indemnitee shall be considered for the purpose hereof to have been wholly successful with respect thereto.

2. EXPENSES; INDEMNIFICATION PROCEDURE.

(a) ADVANCEMENT OF EXPENSES. The Company shall advance all expenses incurred by Indemnitee in connection with the investigation, defense, settlement or appeal of any civil or criminal action, suit or proceeding referenced in Section 1(a) or (b) hereof (but not amounts actually paid in settlement of any such action, suit or proceeding). Indemnitee hereby undertakes to repay such amounts advanced only if, and to the extent that, it shall ultimately be determined that

Indemnitee is not entitled to be indemnified by the Company as authorized hereby. The advances to be made hereunder shall be paid by the Company to Indemnitee within thirty (30) days following delivery of a written request therefor by Indemnitee to the Company.

(b) NOTICE/COOPERATION BY INDEMNITEE. Indemnitee shall, as a condition precedent to his right to be indemnified under this Agreement, give the Company notice in writing as soon as practicable of any claim made against Indemnitee for which indemnification will or could be sought under this Agreement. Notice to the Company shall be directed to the President of the Company at the address shown on the signature page of this Agreement (or such other address as the Company shall designate in writing to Indemnitee). Notice shall be deemed received three business days after the date postmarked if sent by domestic certified or registered mail, properly addressed, five business days if sent by airmail to a country outside of North America; otherwise notice shall be deemed received when such notice shall actually be received by the Company. In

addition, Indemnitee shall give the Company such information and cooperation as it may reasonably require and as shall be within Indemnitee's power.

(c) PROCEDURE. Any indemnification and advances provided for in Section 1 and this Section 2 shall be made promptly, and in any event no later than thirty (30) days after receipt of the written request of Indemnitee. If a claim under this Agreement, under any statute, or under any provision of the Company's Certificate of Incorporation or Bylaws providing for indemnification, is not paid in full by the Company within thirty (30) days after a written request for payment thereof has first been received by the Company, Indemnitee may, but need not, at any time thereafter bring an action against the Company to recover the unpaid amount of the claim and, subject to Section 12 of this Agreement, Indemnitee shall also be entitled to be paid for the expenses (including attorneys' fees) of bringing such action. It shall be a defense to any such action (other than an action brought to enforce a claim for expenses incurred in connection with any action, suit or proceeding in advance of its final disposition) that Indemnitee has not met the standards of conduct which make it permissible under applicable law for the Company to indemnify Indemnitee for the amount claimed but the burden of proving such defense shall be on the Company and Indemnitee shall be entitled to receive interim payments of expenses pursuant to Subsection 2(a) unless and until such defense may be finally adjudicated by court order or judgment from which no further right of appeal exists. It is the parties' intention that if the Company contests Indemnitee's right to indemnification, the question of Indemnitee's right to indemnification shall be for the court to decide, and neither the failure of the Company (including its Board of Directors, any committee or subgroup of the Board of Directors, independent legal counsel, or its stockholders) to have made a determination that indemnification of Indemnitee is proper in the circumstances because Indemnitee has met the applicable standard of conduct required by applicable law, nor an actual determination by the Company (including it Board of Directors, any committee or subgroup of the Board of Directors, independent legal counsel, or its stockholders) that Indemnitee has not met such applicable standard of conduct, shall create a presumption that Indemnitee has or has not met the applicable standard of conduct.

(d) NOTICE TO INSURERS. If, at the time of the receipt of a notice of a claim pursuant to Section 2(b) hereof, the Company has director and officer liability insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with

the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

(e) SELECTION OF COUNSEL. In the event the Company shall be obligated under Section 2(a) hereof to pay the expenses of any proceeding against Indemnitee, the Company, if appropriate, shall be entitled to assume the defense of such proceeding, with counsel approved by Indemnitee, upon the delivery to Indemnitee of written notice of its election to do so. Notwithstanding the foregoing, the Company shall not be permitted to settle any action or claim on behalf of Indemnitee in any manner which would impose any unindemnified liability or penalty on the Indemnitee or require any acknowledgement of wrongdoing on the part of the Indemnitee without Indemnitee's written consent, which consent shall not be unreasonably withheld. The Company agrees that it will not, without the prior written consent of the Indemnitee, settle, compromise or consent to the entry of any judgment in any pending or threatened claim relating to the matters contemplated hereby (if the Indemnitee is a party thereto or has been threatened to be made or would reasonably be expected to be made a party thereto) unless such settlement, compromise or consent includes an unconditional release of the Indemnitee from all liability arising or that may arise out of such claim. The Indemnitee shall not be liable for any settlement of any claim effected against the Indemnitee without Indemnitee's written consent. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable

to Indemnitee under this Agreement for any fees of counsel subsequently incurred by Indemnitee with respect to the same proceeding, provided that (i) Indemnitee shall have the right to employ his counsel in any such proceeding at Indemnitee's expense; and (ii) if (A) the employment of counsel by Indemnitee has been previously authorized by the Company, (B) Indemnitee shall have reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of any such defense, or (C) the Company shall not, in fact, have employed counsel to assume the defense of such proceeding, then the fees and expenses of Indemnitee's counsel shall be at the expense of the Company. The Company shall not be entitled, without the consent of the Indemnitee, to assume the defense of any claim brought by or in the right of the Company or as to which counsel for the Indemnitee shall have reasonably made the conclusion provided for in clause (ii)(B) above.

3. ADDITIONAL INDEMNIFICATION RIGHTS; NONEXCLUSIVITY.

(a) SCOPE. Notwithstanding any other provision of this Agreement, the Company hereby agrees to indemnify the Indemnitee to the fullest extent permitted by law, notwithstanding that such indemnification is not specifically authorized by the other provisions of this Agreement, the Company's Certificate of Incorporation, the Company's Bylaws or by statute. In the event of any change, after the date of this Agreement, in any applicable law, statute, or rule which expands the right of a Delaware corporation to indemnify a member of its board of directors or an officer, such changes shall be, IPSO FACTO, within the purview of Indemnitee's rights and Company's obligations, under this Agreement. In the event of any change in any applicable law, statute or rule which narrows the right of a Delaware corporation to indemnify a member of its board of directors or an officer, such changes, to the extent not otherwise required by such law, statute or rule to be applied

to this Agreement shall have no effect on this Agreement or the parties' rights and obligations hereunder.

(b) NONEXCLUSIVITY. The indemnification provided by this Agreement shall not be deemed exclusive of any rights to which Indemnitee may be entitled under the Company's Certificate of Incorporation, its Bylaws, any agreement, any vote of stockholders or disinterested Directors, the General Corporation Law of the State of Delaware, or otherwise, both as to action in Indemnitee's official capacity and as to action in another capacity while holding such office. The indemnification provided under this Agreement shall continue as to Indemnitee for any action taken or not taken while serving in an indemnified capacity even though he may have ceased to serve in such capacity at the time of any action, suit or other covered proceeding.

4. PARTIAL INDEMNIFICATION. If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of the expenses, judgments, fines or penalties actually or reasonably incurred by him in the investigation, defense, appeal or settlement of any civil or criminal action, suit or proceeding, but not, however, for the total amount thereof, the Company shall nevertheless indemnify Indemnitee for the portion of such expenses, judgments, fines or penalties to which Indemnitee is entitled.

5. MUTUAL ACKNOWLEDGEMENT. Both the Company and Indemnitee acknowledge that in certain instances, Federal law or applicable public policy may prohibit the Company from indemnifying its directors and officers under this Agreement or otherwise. Indemnitee understands and acknowledges that the Company has undertaken or may be required in the future to undertake with the Securities and Exchange Commission to submit the question of indemnification to a court in certain circumstances for a determination of the Company's right under public policy to indemnify Indemnitee.

6. OFFICER AND DIRECTOR LIABILITY INSURANCE. The Company shall, from time to time, make the good faith determination whether or not it is practicable for the Company to obtain and maintain a policy or policies of insurance with reputable insurance companies providing the officers and directors of the

Company with coverage for losses from wrongful acts, or to ensure the Company's performance of its indemnification obligations under this Agreement. Among other considerations, the Company will weigh the costs of obtaining such insurance coverage against the protection afforded by such coverage. In all policies of director and officer liability insurance, Indemnitee shall be named as an insured in such a manner as to provide Indemnitee the same rights and benefits as are accorded to the most favorably insured of the Company's directors, if Indemnitee is a director; or of the Company's officers, if Indemnitee is not a director of the Company but is an officer. Notwithstanding the foregoing, the Company shall have no obligation to obtain or maintain such insurance if the Company determines in good faith that such insurance is not reasonably available, if the premium costs for such insurance are disproportionate to the amount of coverage provided, if the coverage provided by such insurance is limited by exclusions so as to provide an insufficient benefit, or if Indemnitee is covered by similar insurance maintained by a subsidiary or parent of the Company. In the event that the Company determines that it shall eliminate or reduce the level of insurance coverage described herein applicable at any time to Indemnitee, the Company shall

provide Indemnitee with thirty (30) days prior written notice prior to effectuating such elimination or reduction.

7. SEVERABILITY. Nothing in this Agreement is intended to require or shall be construed as requiring the Company to do or fail to do any act in violation of applicable law. The Company's inability, pursuant to court order, to perform its obligations under this Agreement shall not constitute a breach of this Agreement. The provisions of this Agreement shall be severable as provided in this Section 7. If this Agreement or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Company shall nevertheless indemnify Indemnitee to the full extent permitted by any applicable portion of this Agreement that shall not have been invalidated, and the balance of this Agreement not so invalidated shall be enforceable in accordance with its terms.

8. EXCEPTIONS. Any other provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement:

(a) CLAIMS INITIATED BY INDEMNITEE. To indemnify or advance expenses to Indemnitee with respect to proceedings or claims initiated or brought voluntarily by Indemnitee and not by way of defense, except with respect to proceedings brought to establish or enforce a right to indemnification under this Agreement or any other statute or law or otherwise as required under Section 145 of the Delaware General Corporation Law, but such indemnification or advancement of expenses may be provided by the Company in specific cases if the Board of Directors has approved the initiation or bringing of such suit; or

(b) LACK OF GOOD FAITH. To indemnify Indemnitee for any expenses incurred by the Indemnitee with respect to any proceeding instituted by Indemnitee to enforce or interpret this Agreement, if a court of competent jurisdiction determines that each of the material assertions made by the Indemnitee in such proceeding was not made in good faith or was frivolous; or

(c) INSURED CLAIMS. To indemnify Indemnitee for expenses or liabilities of any type whatsoever (including, but not limited to, judgments, fines, ERISA excise taxes or penalties, and amounts paid in settlement) which have been paid directly to Indemnitee by an insurance carrier under a policy of officers' and directors' liability insurance maintained by the Company.

(d) CLAIMS UNDER SECTION 16(B). To indemnify Indemnitee for expenses and the payment of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 16(b) of the Securities Exchange Act of 1934, as amended, or any similar successor statute.

9. CONSTRUCTION OF CERTAIN PHRASES.

(a) For purposes of this Agreement, references to the "Company" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that if Indemnitee is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or

agent of another corporation, partnership, joint venture, trust or other enterprise, Indemnitee shall stand in the same position under the provisions of this Agreement with respect to the resulting or surviving corporation as Indemnitee would have with respect to such constituent corporation if its separate existence had continued.

(b) For purposes of this Agreement, references to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on Indemnitee with respect to an employee benefit plan; and references to "serving at the request of the Company" shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants, or beneficiaries; and if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan, Indemnitee shall be deemed to have acted in a manner "not opposed to the best interests of the Company" as referred to in this Agreement.

10. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which shall constitute an original.

11. SUCCESSORS AND ASSIGNS. This Agreement shall be binding upon the Company and its successors and assigns, including any direct or indirect successor by purchase, merger, consolidation or otherwise to all, substantially all or a substantial part of the business or assets of the Company. This Agreement shall inure to the benefit of Indemnitee and Indemnitee's heirs, legal representatives, executives and administrators. The Company shall require and cause any successor (whether direct or indirect, and whether by purchase, merger, consolidation or otherwise) to all, substantially all or a substantial part of the business or assets of the Company, to assume and agree in writing to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

12. ATTORNEYS' FEES. In the event that any action is instituted by Indemnitee under this Agreement to enforce or interpret any of the terms hereof, Indemnitee shall be entitled to be paid all court costs and expenses, including reasonable attorneys' fees, incurred by Indemnitee with respect to such action, unless as a part of such action, the court of competent jurisdiction determines that each of the material assertions made by Indemnitee as a basis for such action were not made in good faith or were frivolous. In the event of an action instituted by or in the name of the Company under this Agreement or to enforce or interpret any of the terms of this Agreement, Indemnitee shall be entitled to be paid all court costs and expenses, including attorneys' fees, incurred by Indemnitee in defense of such action (including with respect to Indemnitee's counterclaims and cross-claims made in such action), unless as a part of such action the court determines that each of Indemnitee's material defenses to such action were made in bad faith or were frivolous.

13. EFFECTIVENESS OF AGREEMENT. This Agreement shall be effective as of the date set forth on the first page and may apply to acts or omissions of Indemnitee which occurred prior to such date if Indemnitee was an officer, director, employee or other agent of the Company, or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, as the time such act or omission occurred.

14. NOTICE. All notices, requests, demands and other communications under this Agreement shall be in writing and shall be deemed duly given (i) if delivered by hand and receipted for by the party addressee, on the date of such receipt, or (ii) if mailed by domestic certified or registered mail with postage prepaid, on the third business day after the date postmarked. Addresses for notice to either party are as shown on the signature page of this Agreement, or as subsequently modified by written notice.

15. CONSENT TO JURISDICTION. The Company and Indemnitee each hereby irrevocably consent to the jurisdiction of the courts of the State of Delaware for all purposes in connection with any action or proceeding which arises out of or relates to this Agreement and agree that any action instituted under this Agreement shall be brought only in the state courts of the State of Delaware.

16. WAIVER OF JURY. EACH OF THE PARTIES HERETO HEREBY AGREES TO WAIVE ITS RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS AGREEMENT, INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. EACH PARTY HERETO FURTHER REPRESENTS AND WARRANTS THAT IT HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL AND THAT IT KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

17. CHOICE OF LAW. This Agreement shall be governed by and its provisions construed in accordance with the laws of the State of Delaware, as applied to contracts between Delaware residents entered into and to be performed entirely within Delaware without regard to the conflict of law principles thereof.

18. PERIOD OF LIMITATIONS. No legal action shall be brought and no cause of action shall be asserted by or in the right of the Company against Indemnitee, Indemnitee's estate, spouse, heirs, executors or personal or legal representatives after the expiration of two years from the date of accrual of such cause of action, and any claim or cause of action of the Company shall be extinguished and deemed released unless asserted by the timely filing of a legal action within such two-year period; PROVIDED, HOWEVER, that if any shorter period of limitations is otherwise applicable to any such cause of action, such shorter period shall govern.

19. SUBROGATION. In the event of payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all documents required and shall do all acts that may be necessary to secure such rights and to enable the Company effectively to bring suit to enforce such rights.

20. AMENDMENT AND TERMINATION. No amendment, modification, termination or cancellation of this Agreement shall be effective unless it is in writing signed by both the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

The failure of either party to enforce any rights under this Agreement shall not be construed as a waiver of any rights of such party.

21. INTEGRATION AND ENTIRE AGREEMENT. This Agreement sets forth the entire understanding between the parties hereto and supersedes and merges all previous written and oral negotiations, commitments, understandings and agreements relating to the subject matter hereof between the parties hereto

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

CYTOKINETICS, INCORPORATED

SIGNATURE OF AUTHORIZED SIGNATORY

PRINT NAME AND TITLE

Address:

AGREED TO AND ACCEPTED:

INDEMNITEE:

SIGNATURE

PRINT NAME AND TITLE

Address:

Exhibit 10.45

CYTOKINETICS, INCORPORATED

COMMON STOCK PURCHASE AGREEMENT

THIS COMMON STOCK PURCHASE AGREEMENT (the "AGREEMENT") is made as of March ___, 2004 by and among Cytokinetics, Incorporated, a Delaware corporation (the "COMPANY"), and Glaxo Group Limited (the "INVESTOR").

RECITALS

A. Whereas, the Company has authorized the sale and issuance of shares of its Common Stock (the "Stock") at a per share purchase price (the "PER SHARE PRICE") equal to the per share purchase price to the public in the Company's initial public offering of shares of its Common Stock pursuant to a registration statement on Form S-1, as amended (the "REGISTRATION STATEMENT") filed with the Securities and Exchange Commission (the "IPO").

B. Whereas, the Company has determined that it is in the best interests of the Company and its stockholders to allow the Investor to make the investment in the Company provided for, and on the terms and conditions set forth, in this Agreement.

C. Whereas, the Investor desires to make such investment on such terms and conditions.

NOW, THEREFORE, in consideration of the premises and the mutual covenants and conditions herein contained, the Company and the Investor hereby agree as follows:

SECTION 1

PURCHASE AND SALE OF SHARES

1.1 AUTHORIZATION OF THE STOCK. On or prior to the Closing (as defined in SECTION 1.4 below), the Company shall have authorized the sale and issuance of the Stock to the Investor.

1.2 SALE OF THE STOCK. Subject to the terms and conditions hereof, the Company will issue and sell to the Investor, and the Investor will purchase from the Company, at the Closing, that number of whole shares of Stock equal to the quotient obtained by dividing the dollar amount set forth opposite the Investor's name on the Schedule of Purchasers attached hereto as SCHEDULE A by the Per Share Price.

1.3 PRE-CLOSING. A pre-closing to the purchase and sale of the Stock contemplated by this Agreement shall be held at 10:00 a.m. at the offices of Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, CA 94304-1050 on the date one day prior to the Closing (or such other time and date upon which the parties may agree). The Company shall provide to the Investor with notice of the date and time of such pre-closing not later than twenty-four (24) hours prior to the pre-closing. Notwithstanding the provisions of Section 7.4 below, such notice may be oral. At the pre-closing the Investor shall transfer to the Wilson Sonsini Goodrich & Rosati trust account the aggregate purchase price for the Stock to be purchased by the Investor by check payable to the order of the

Company or by wire transfer pursuant to wire transfer instructions delivered to the Investor by the Company, which purchase price shall be held in escrow by Wilson Sonsini Goodrich & Rosati until the Closing.

1.4 CLOSING. The purchase and sale of the Stock shall take place at a closing (the "CLOSING") to be held at the offices of Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, CA 94304-1050, immediately prior to the closing of the Company's IPO (the "CLOSING DATE"). At the Closing, the Company will deliver or cause to be delivered to the Investor a certificate or certificates representing the Stock that the Investor is purchasing and,

concurrently, Wilson Sonsini Goodrich & Rosati shall release from escrow and deliver to the Company by wire transfer the purchase price for such Stock.

SECTION 2

REPRESENTATIONS AND WARRANTIES OF THE COMPANY

The Company hereby represents and warrants as follows:

2.1 ORGANIZATION AND GOOD STANDING AND QUALIFICATIONS. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business as currently conducted and as proposed to be conducted. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which the failure to so qualify would have a material adverse effect on its business or properties. True and accurate copies of the Company's Amended and Restated Certificate of Incorporation (the "RESTATED CERTIFICATE") and Bylaws, as amended, and each as in effect at the Closing have been provided to the Investor.

2.2 AUTHORIZATION. All corporate action on the part of the Company, its officers, directors and stockholders necessary for the authorization, execution and delivery of this Agreement, the performance of all obligations of the Company hereunder, and the authorization, issuance, sale and delivery of the Stock has been taken or will be taken prior to the Closing, and this Agreement constitutes a valid and legally binding obligation of the Company, enforceable in accordance with its terms, subject only to: (i) judicial principles limiting the availability of specific performance, injunctive relief, and other equitable remedies; and (ii) bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect generally relating to or affecting creditors' rights.

2.3 VALID ISSUANCE OF STOCK. The Stock when issued, sold and delivered in accordance with the terms of this Agreement for the consideration expressed herein, will be duly and validly issued, fully paid, and nonassessable, and will be free of restrictions on transfer other than restrictions on transfer under this Agreement and under applicable state and federal securities laws.

2.4 GOVERNMENTAL CONSENTS. No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority on the part of the Company is required in connection with the offer, sale or issuance of the Stock, except for the following: (i) the filing of the Restated Certificate in the office

of the Secretary of State of the State of Delaware, which shall be filed by the Company on or prior to the Closing; (ii) the filing of such notices as may be required under the Securities Act of 1933, as amended (the "SECURITIES ACT"); and (iii) the compliance with applicable state securities laws, which compliance will have occurred within the appropriate time periods therefor. Based in part on the representations of the Investor set forth in Section 3 below, the offer, sale and issuance of the Stock in conformity with the terms of this Agreement are exempt from the registration requirements of Section 5 of the Securities Act and from the registration or qualification requirements of applicable state securities laws.

2.5 COMPLIANCE WITH OTHER INSTRUMENTS. The Company is not in violation or default of any provision of its Restated Certificate or Bylaws, as amended, and each in effect on and as of the Closing. The Company is not in violation or default of any material provision of any instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation to which it is a party or by which it or any of its properties or assets are bound which would materially adversely affect the financial condition, business, property, assets or liabilities of the Company or of any provision of any federal, state or, to its knowledge, local statute, rule or governmental regulation which would materially adversely affect the financial condition, business, property, assets

or liabilities of the Company. The execution, delivery and performance of and compliance with this Agreement, and the issuance and sale of the Stock will not result in any such violation, be in conflict with or constitute, with or without the passage of time or giving of notice, a default under any such provision, require any consent or waiver under any such provision (other than any consents or waivers that have been obtained), or result in the creation of any mortgage, pledge, lien, encumbrance or charge upon any of the properties or assets of the Company pursuant to any such provision.

SECTION 3

REPRESENTATIONS AND WARRANTIES OF THE INVESTOR

The Investor hereby represents and warrants that:

3.1 EXPERIENCE. The Investor is experienced in evaluating companies such as the Company, is able to fend for itself in transactions such as the one contemplated by this Agreement, has such knowledge and experience in financial and business matters that the Investor is capable of evaluating the merits and risks of the Investor's prospective investment in the Company, and has the ability to bear the economic risks of the investment.

3.2 INVESTMENT. The Investor is acquiring the Stock for investment for the Investor's own account and not with the view to, or for resale in connection with, any distribution thereof. The Investor understands that the Stock has not been registered under the Securities Act by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent as expressed herein. The Investor acknowledges and agrees that the Stock purchased by the Investor, until disposition of such Stock in accordance with the provisions of this Agreement, shall remain at all times within the Investor's control. The Investor further represents that it does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participation to any third person with respect to

any of the Stock. The Investor understands and acknowledges that the offering of the Stock pursuant to this Agreement will not be registered under the Securities Act on the ground that the sale provided for in this Agreement and the issuance of securities hereunder is exempt from the registration requirements of the Securities Act.

3.3 RULE 144. The Investor acknowledges that the Stock must be held indefinitely unless subsequently registered under the Securities Act or an exemption from such registration is available. The Investor is aware of the provisions of Rule 144 promulgated under the Securities Act which permit limited resale of shares purchased in a private placement subject to the satisfaction of certain conditions. The Investor covenants that, in the absence of an effective registration statement covering the stock in question, the Investor will sell, transfer, or otherwise dispose of the Stock only in a manner consistent with the Investor's representations and covenants set forth in this Section 3. In connection therewith, the Investor acknowledges that the Company will make a notation on its stock books regarding the restrictions on transfers set forth in this Section 3 and will transfer securities on the books of the Company only to the extent not inconsistent therewith.

3.4 ACCESS TO INFORMATION. The Investor has received and reviewed information about the Company and has had an opportunity to discuss the Company's business, management and financial affairs with its management and to review the Company's facilities. The Investor has carefully reviewed the information prepared by the Company in connection with this offering and has been furnished with all other materials that it considers relevant to its investment in the Stock. The Investor has had a full opportunity to ask questions of and receive answers from the Company, or any person or persons acting on behalf of the Company, concerning the terms and conditions of an investment in the Stock. The Investor understands that such discussions were intended to describe the aspects of the Company's business and prospects which

the Company believes to be material, but were not necessarily a thorough or exhaustive description. No statement or printed material contrary to the information contained in the information has been made or given to the Investor by or on behalf of the Company. The Investor is not relying upon, and has not relied upon, any statement, representation or warranty made by any person, including without limitation, any of the Company's underwriters, except for the statements, representations and warranties contained in this Agreement.

3.5 AUTHORIZATION. This Agreement when executed and delivered by the Investor will constitute a valid and legally binding obligation of the Investor, enforceable in accordance with its terms, subject to: (i) judicial principles respecting election of remedies or limiting the availability of specific performance, injunctive relief, and other equitable remedies; and (ii) bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect generally relating to or affecting creditors' rights.

3.6 INVESTOR STATUS. The Investor acknowledges that it is either (i) an institutional "accredited investor" as defined in Rule 501(a) of Regulation D of the Securities Act (an "Institutional Accredited Investor") or (ii) a "qualified institutional buyer" as defined in Rule 144A of the Securities Act, as indicated on SCHEDULE A hereto, and the Investor shall submit to the Company such further assurances of such status as may be reasonably requested by the Company.

3.7 FOREIGN INVESTOR. The Investor hereby represents that it has satisfied itself as to the full observance of the laws of its jurisdiction in connection with any invitation to subscribe for the Stock or any use of this Agreement, including (i) the legal requirements within its jurisdiction for the purchase of the Stock, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained, and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale, or transfer of the Stock. The Investor's subscription and payment for and continued beneficial ownership of the Stock, will not violate any applicable securities or other laws of the Investor's jurisdiction.

3.8 NO INDUCEMENT. The Investor was not induced by the filing of the Registration Statement in connection with the Company's IPO to participate in the offer and sale of the Stock, and the Investor's decision to so participate was not influenced by the information contained in the Registration Statement.

SECTION 4
CONDITIONS TO INVESTOR'S OBLIGATIONS AT CLOSING

The obligations of the Investor under this Agreement are subject to the fulfillment on or before the Closing of each of the following conditions, any of which may be waived in writing by the Investor:

4.1 NO INJUNCTION, ETC. No preliminary or permanent injunction or other binding order, decree or ruling issued by a court or governmental agency shall be in effect which shall have the effect of preventing the consummation of the transactions contemplated by this Agreement.

4.2 REPRESENTATIONS AND WARRANTIES. The representations and warranties of the Company contained in SECTION 2 shall be true and correct on and as of the Closing with the same effect as though such representations and warranties had been made on and as of the date of the Closing.

4.3 PERFORMANCE. The Company shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before each Closing.

4.4 COMPLIANCE CERTIFICATE. A duly authorized officer of the Company shall deliver to the Investor at the Closing a certificate stating that the conditions specified in Sections 4.2 and 4.3 have been fulfilled.

4.5 SECURITIES LAWS. The offer and sale of the Stock to the Investor pursuant to this Agreement shall be exempt from the registration requirements of the Securities Act and the registration and/or qualification requirements of all applicable state securities laws.

4.6 CORPORATE PROCEEDINGS. All corporate and other proceedings required to carry out the transactions contemplated by this Agreement, and all instruments and other documents relating to such transactions, shall be reasonably satisfactory in form and substance to the Investor and its

counsel, and the Investor shall have been furnished with such instruments and documents as such counsel shall have reasonably requested.

4.7 INITIAL PUBLIC OFFERING. The Registration Statement prepared in connection with the Company's IPO shall have been filed with, and declared effective by, the Securities and Exchange Commission.

4.8 AUTHORIZATIONS. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body that are required in connection with the lawful issuance and sale of the Stock pursuant to this Agreement shall have been duly obtained and shall be effective on and as of the Closing.

SECTION 5

CONDITIONS TO THE COMPANY'S OBLIGATIONS AT CLOSING

The obligations of the Company to the Investor under this Agreement are subject to the fulfillment on or before each Closing of each of the following conditions by the Investor:

5.1 REPRESENTATIONS AND WARRANTIES. The representations and warranties of the Investor contained in Section 3 shall be true and correct on and as of the Closing with the same effect as though such representations and warranties had been made on and as of the Closing.

5.2 SECURITIES LAW COMPLIANCE. The offer and sale of the Stock to the Investor pursuant to this Agreement shall be exempt from the registration requirements of the Securities Act and the registration and/or qualification requirements of all applicable state securities laws.

5.3 AUTHORIZATION. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body that are required in connection with the lawful issuance and sale of the Stock pursuant to this Agreement shall have been duly obtained and shall be effective on and as of the Closing.

5.4 CORPORATE PROCEEDINGS. All corporate and other proceedings contemplated at the Closing hereby, and all documents and instruments incident to these transactions, shall be reasonably satisfactory in substance to the Company and its counsel.

5.5 LOCK-UP AGREEMENT. The Investor shall have delivered to Goldman, Sachs & Co. an executed Lock-Up Agreement in the form attached hereto as EXHIBIT A.

5.6 PAYMENT OF PURCHASE PRICE. The Investor shall have delivered to the Company the purchase price for the Stock as set forth in Section 1.4 hereof.

SECTION 6

INVESTOR COVENANTS

6.1 RESTRICTIONS ON RESALE OF STOCK.

(a) The Investor agrees that during the Research Term (as such term is defined in the Collaboration and License Agreement between the parties dated

June 20, 2001, but not to include any extensions of the initial Research Term (the "Restriction Term")), the Investor shall not offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of in any manner, either directly or indirectly ("Sale" or "Sell"), the Stock purchased pursuant to this Agreement (the "Covenant Shares"), provided that, nothing in the foregoing sentence shall prevent the Investor from participating in, and selling the Covenant Shares through, registrations of the Company's Common Stock ("Common Stock") pursuant to the provisions of Section 1.3 of the Company's Amended and Restated Investors' Rights Agreement dated March 21, 2003, as amended.

(b) After the expiration of such Restriction Term the Investor and the Company agree and acknowledge that it is in their mutual interest that disposition of the Covenant Shares be accomplished in a manner that does not disrupt or undermine the trading market for Common Stock (including any undue adverse reaction to the fact of sale of Covenant Shares by the investor as a research collaborator of the Company), and the parties will work together to explore methods of disposition in order to achieve such goal.

(c) Notwithstanding anything to the contrary in this Section 6.1, after the period that is 180 days after IPO the Investor may sell Covenant Shares, if (i) the publicly traded fair market value per share of publicly traded shares of Common Stock, at the time of the sale by the Investor of Covenant Shares, is greater than two and a half times the per share price (as adjusted for combination, stock splits, stock dividends, subdivisions or split-ups) that shares of Common Stock were initially offered to the public in the IPO (the "IPO Price") and (ii) no sales by the Investor of shares of Covenant Shares are at a price per share less than two and a half times (as adjusted for combination, stock splits, stock dividends, subdivisions or split-ups) the IPO Price. If the Investor intends to sell any Covenant Shares held by it pursuant to the provisions of this Section 6.1(c), the Investor and the Company agree and acknowledge that it is in their mutual interest that disposition of the Covenant Shares be accomplished in a manner that does not disrupt or undermine the trading market for the Company's Common Stock (including any undue adverse reaction to the fact of sale of Covenant Shares by the investor as a research collaborator of the Company), and the parties will work together to explore methods of disposition in order to achieve such goal. Investor agrees to execute a lockup agreement covering sales of Covenant Shares during the 180-day period following the IPO as requested by the underwriters in the IPO.

SECTION 7

MISCELLANEOUS

7.1 GOVERNING LAW. This Agreement shall be governed in all respects by the laws of the State of California as applied to agreements entered into and performed entirely in the State of California by residents thereof.

7.2 SURVIVAL. The representations, warranties, covenants and agreements made herein shall survive any investigation made by the Investor and the closing of the transactions contemplated hereby.

7.3 SUCCESSORS, ASSIGNS. Except as otherwise provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

7.4 NOTICES. All notices and other communications required or permitted hereunder shall be in writing and shall be sent by facsimile or mailed by registered or certified mail, postage prepaid, return receipt requested, or otherwise delivered by hand or by messenger, addressed (a) if to an Investor, at such address as the Investor shall have furnished to the Company in writing, or (b) if to the Company, at the following address:

Cytokinetics, Incorporated
280 E Grand Ave, Suite #2

South San Francisco, CA 94080

or at such other address as the Company shall have furnished to the Investor. If notice is provided by facsimile, it shall be deemed to be given one (1) business day after transmission (with receipt of appropriate confirmation). If notice is provided by U.S. mail, notice shall be deemed to be given four (4) days after proper deposit in a U.S. mailbox, postage prepaid, and addressed to the parties at the addresses provided to the Company or such other address as a party may request by notifying the other in writing. If notice is provided by a messenger service that guarantees "next business day" delivery, it shall be deemed effective one (1) business day after deposit with such messenger service.

7.5 EXPENSES. The Company and the Investor shall bear their own expenses and legal fees incurred on their behalf with respect to this Agreement and the transactions contemplated hereby.

7.6 FINDER'S FEES. The Company and the Investor shall each indemnify and hold the other harmless from any liability for any commission or compensation in the nature of a finder's fee, placement fee or underwriter's discount (including the costs, expenses and legal fees of defending against such liability) for which the Company or the Investor, or any of their respective partners, employees, or representatives, as the case may be, is responsible.

7.7 COUNTERPARTS. This Agreement may be executed in counterparts, each of which shall be enforceable against the party actually executing the counterpart, and all of which together shall constitute one instrument.

7.8 SEVERABILITY. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect without said provision; provided that no such severability shall be effective if it materially changes the economic benefit of this Agreement to any party.

IN WITNESS WHEREOF, the parties have executed this Stock Purchase Agreement as of the date first set forth above.

CYTOKINETICS, INCORPORATED	GLAXO GROUP LIMITED
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____

SIGNATURE PAGE TO CYTOKINETICS, INCORPORATED
COMMON STOCK PURCHASE AGREEMENT

SCHEDULE A

SCHEDULE OF PURCHASERS

Name	Investment Amount	Type of Investor
Glaxo Group Limited	$7,000,000.00	Institutional Accredited Investor

EXHIBIT A

LOCK-UP AGREEMENT

EXHIBIT 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the use in this Amendment No. 1 Registration Statement on Form S-1 of our report dated March 10, 2004, except for Note 13 as to which the date is , 2004, relating to the financial statements and our report dated March 10, 2004 relating to the financial statement schedule of Cytokinetics, Incorporated (a development stage enterprise), which appear in such Registration Statement. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

San Jose, California
March 11, 2004