CYTRX CORP
Form S-1
February 11, 2005

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As filed with the Securities and Exchange Commission on February 11, 2005

Reg. No.

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CytRx Corporation

(Exact name of registrant as specified in its charter)

Delaware	**2836**	**58-1642750**
(State or other jurisdiction of incorporation or organization)	*(Primary Standard Industrial Classification Code Number)*	*(I.R.S. Employer Identification No.)*

CytRx Corporation

11726 San Vicente Boulevard, Suite 650
Los Angeles, California 90049
(Address, including zip code, and telephone number, including area code, of Registrant s principal executive offices)

Steven A. Kriegsman
President and Chief Executive Officer
CytRx Corporation
11726 San Vicente Boulevard, Suite 650, Los Angeles, California 90049
Telephone: (310) 826-5648, Facsimile: (310) 826-6139
(Name, address, including zip code, and telephone number, including area code, of agent for service)

With a copy to:

Sanford J. Hillsberg, Esq.

Troy & Gould Professional Corporation
1801 Century Park East, Suite 1600, Los Angeles, California 90067
Telephone: (310) 553-4441, Facsimile: (310) 201-4746

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

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o

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, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. þ

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. o

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. o

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee(1)
Common stock, par value $0.001	17,334,494	$1.57(1)	$27,215,155.58	$3,203.22
Common stock, par value $0.001	9,909,117(2)	$2.00(3)	$19,818,234.00	$2,332.61
Total Registration Fee				$5,535.83

(1) Estimated solely for the purpose of calculating the registration fee. Based, pursuant to Rule 457, on the average of the high and low sale prices of Registrant s Common Stock as reported on Nasdaq SmallCap Market on February 8, 2005. Each share of our common stock is accompanied by one share of our Series A junior participating preferred stock purchase rights that trades with the common stock. The value attributed to those rights, if any, is reflected in the market price of our common stock. Prior to the occurrence of certain events, none of which has occurred as of this date, the rights will not be exercisable or evidenced separately from the common stock.

(2) Represents shares issuable upon exercise of outstanding warrants. In accordance with Rule 416, there is also being registered hereunder such indeterminate number of additional shares of Common Stock as may become issuable upon exercise of the warrants to prevent dilution resulting from stock splits, stock dividends or similar transactions.

(3) Based, pursuant to Rule 457, on the exercise price of warrants.

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 this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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Information contained in this prospectus is subject to completion or amendment. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold until the registration statement becomes effective. This prospectus is not an offer to sell and is not a solicitation of an offer to buy these securities in any state in which an offer, solicitation or sale is not permitted.

SUBJECT TO COMPLETION, FEBRUARY 11, 2005.

PROSPECTUS

CytRx Corporation

27,243,611 Shares

Common Stock

All of the shares of our common stock offered hereby are being sold by the securityholders listed in this prospectus. See Selling Securityholders. Of the shares offered, 17,334,494 shares are owned by some of the selling securityholders as of the date of this prospectus and 9,909,117 shares are issuable upon the exercise of outstanding warrants to purchase our common stock owned by the selling securityholders. The number of shares offered by the selling securityholders is subject to increase in certain events by reason of so-called antidilution provisions contained in the warrants held by them. The selling securityholders holding warrants must first exercise the warrants and acquire the underlying shares from us before they can resell those shares under this prospectus.

We will receive the exercise price of the warrants described in this prospectus to the extent they are exercised for cash, but we will not otherwise receive any proceeds in connection with the sale of the shares by the selling securityholders. See Use of Proceeds.

Our common stock is traded on the Nasdaq SmallCap Market under the symbol CYTR. On February 10, 2005, the last sale price for the common stock as reported on the Nasdaq SmallCap Market was $1.53.

The selling securityholders may offer the shares from time-to-time to or through brokers, dealers or other agents, or directly to other purchasers, in one or more market transactions or private transactions at prevailing market or at negotiated prices. See Plan of Distribution. We will bear the costs and expenses of registering the shares offered by the selling securityholders. The selling securityholders will bear any commissions and discounts attributable to their sales of the shares.

An investment in our common stock involves a high degree of risk. Before purchasing any shares, you should consider carefully the risks described under Risk Factors beginning on page 3.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved the common stock or determined that this prospectus is complete or accurate. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2005

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You should rely only on the information contained in this prospectus and in any prospectus supplement. We have not authorized any other person to provide you with different or additional information. If anyone provides you with different or additional information, you should not rely on it. This prospectus is not an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and in any supplement is accurate as of its date only. Our business, financial condition, results of operations and prospects may have changed since that date.

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FORWARD-LOOKING STATEMENTS

In addition to the other information contained in this prospectus, prospective purchasers of the shares being offered by the selling securityholders should carefully consider the risk factors disclosed in this prospectus, including those beginning on page 3, in evaluating an investment in our common stock. This prospectus includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements other than statements of historical fact are forward-looking statements for purposes of these provisions, including any financial projections, any statements of the plans and objectives of management for future operations, any statements concerning proposed new products or services, any statements regarding future economic conditions or financial performance, and any statement of assumptions underlying any of the foregoing. In some cases, forward-looking statements can be identified by the use of terms such as may, will, expects, plans, anticipates, estimates, potential, or could or the negative thereof, or comparable terminology. Although we believe that the expectations reflected in the forward-looking statements contained in this prospectus are reasonable, there can be no assurance that such expectations or any of the forward-looking statements will prove to be correct, and actual results could differ materially from those projected or assumed in the forward-looking statements. Our future financial condition and results of operations, as well as any forward-looking statements, are subject to inherent risks and uncertainties, including the risk factors referred to above and for the reasons described elsewhere in this prospectus. All forward-looking statements and reasons why results may differ included in this prospectus are made as of the date hereof, and we assume no obligation to update any such forward-looking statement or reason why actual results might differ.

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PROSPECTUS SUMMARY

The following summary highlights selected information from this prospectus and may not contain all of the information that is important to you. To understand this offering fully, you should read this entire prospectus carefully, including the discussion under Risk Factors and the financial statements and related notes. In this prospectus, we, us and our refer to CytRx Corporation and its subsidiaries.

Our Company

CytRx Corporation is a biopharmaceutical research and development company, based in Los Angeles, California, with an obesity and type 2 diabetes research and development subsidiary, CytRx Laboratories, Inc. (CytRx Laboratories), based in Worcester, Massachusetts. We hold licenses to a portfolio of technologies, including the use of ribonucleic acid interference (RNAi or gene silencing) technology in the treatment of certain specified diseases, including those within the areas of amyotrophic lateral sclerosis (ALS or Lou Gehrig s disease), obesity and type 2 diabetes and human cytomegalovirus (CMV), as well as a DNA-based HIV vaccine technology. In addition, we have entered into strategic alliances with third parties to develop products based on several of our other technologies. On October 4, 2004, we acquired all of the clinical, pharmaceutical and related intellectual property assets of Biorex Research & Development, RT (Biorex), a company focused on the development of novel small molecules with broad therapeutic applications in neurology, diabetes and cardiology. The acquired assets include three oral, clinical stage drug candidates and a library of 500 small molecule drug candidates.

On July 19, 2002, CytRx Corporation completed a merger with Global Genomics Capital, Inc., which became a wholly-owned subsidiary of CytRx Corporation. This subsidiary was renamed GGC Pharmaceuticals, Inc., but we refer to it in this prospectus as Global Genomics.

Our principal executive offices are located at 11726 San Vicente Boulevard, Suite 650, Los Angeles, California 90049, and our telephone number is (310) 826-5648.

The Offering

Common stock that may be offered by the selling security holders	Up to 17,334,494 currently outstanding shares of common stock owned by some of the selling securityholders and up to 9,909,117 shares of common stock which may be issued upon the exercise of warrants held by the selling securityholders.
Common stock to be outstanding after this offering	Approximately 66,957,566 shares of common stock. This includes the 9,909,117 shares offered by the selling securityholders that are issuable upon the exercise of warrants held by the selling securityholders, but does not include an aggregate of 14,260,648 shares that are reserved for issuance pursuant to other outstanding warrants and stock options.
Use of proceeds	We will receive approximately $19,818,234 assuming that the selling securityholders exercise, for cash, all of the warrants relating to shares covered by this prospectus; otherwise, we will not receive any proceeds in connection with the sale of shares by the selling securityholders. We intend to use any proceeds we receive from the exercise of the warrants for working capital and general corporate purposes.
Risk factors	An investment in our common stock is subject to significant risks. Before deciding to purchase shares of our common stock, you should carefully consider the information set forth in the Risk

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Factors section of this prospectus, as well as other information set forth in this prospectus, including the financial statements and related notes.

Nasdaq SmallCap Market symbol CYTR

Summary Selected Historical Consolidated Financial Information

The following summary selected consolidated historical financial information for the years ended December 31, 2003, 2002, 2001, 2000 and 1999 and the nine months ended September 30, 2004 and 2003, have been derived from our financial statements. The information should be read in conjunction with the discussion under Management s Discussion and Analysis of Financial Condition and Results of Operation and the financial statements and related notes.

	Nine Months Ended September 30		Year Ended December 31				
	2004	2003	2003	2002	2001	2000	1999
	(Unaudited)						
Statement of operations data:							
Total revenues	$ 328,000	$	$ 94,000	$ 1,120,000	$4,009,000	$3,025,000	$ 787,000
Net loss	(10,630,000)	(14,737,000)	(17,845,000)	(6,176,000)	(931,000)	(348,000)	(15,029,000)
Net (loss) per share)	$ (0.30)	$ (0.59)	$ (0.65)	$ (0.39)	$ (0.09)	$ (0.04)	$ (1.96)

	September 30		December 31				
	2004	2003	2003	2002	2001	2000	1999
	(Unaudited)						
Balance sheet data:							
Total assets	$5,892,000	$13,520,000	$12,324,000	$9,284,000	$7,611,000	$6,859,000	$6,128,000
Long-term debt							650,000
Total stockholders equity	$2,828,000	$11,936,000	$10,193,000	$7,959,000	$6,583,000	$5,619,000	$1,033,000

Recent Developments

In January 2005, we completed a $21.3 million private equity financing in which we issued 17,334,494 shares of our common stock and warrants to purchase an additional 8,667,247 shares of our common stock at an exercise price of $2.00 per share. Net of investment banking commissions, legal, accounting other fees related to the transaction, we received proceeds of approximately $19.5 million. For additional information regarding the effect of the private equity financing on our financial condition, see Selected Pro Forma Balance Sheet Data on page 16.

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RISK FACTORS

You should consider carefully the following risks before deciding to purchase shares of our common stock. If any of the following risks actually occur, the trading price of our common stock could decline, and you could lose all or part of your investment. You should also refer to the other information in this prospectus, including our financial statements and the related notes.

We Have Operated at a Loss and Will Likely Continue to Operate at a Loss For the Foreseeable Future

We have incurred significant losses over the past five years, including net losses of $10,630,000 for the nine months ended September 30, 2004 (on an unaudited basis), and $17,845,000, $6,176,000 and $931,000 for the years ended December 31, 2003, 2002 and 2001, respectively, and we had an accumulated deficit of approximately $100,432,000 (on an unaudited basis) as of September 30, 2004. Our operating losses have been due primarily to our expenditures for research and development on our products and for general and administrative expenses and our lack of significant revenues. We incurred a significant operating loss in the fourth quarter of 2004, and we are likely to continue to incur operating losses until such time, if ever, that we generate significant recurring revenues. Unless we are able to acquire products from third parties that are already being marketed and that can be profitably marketed by us, we anticipate it will take a minimum of three years (and possibly longer) for us to generate recurring revenues, since we expect that it will take at least that long before the development of any of our licensed or other current potential products is completed, marketing approvals are obtained from the United States Food and Drug Administration (FDA), and commercial sales of any of these products can begin.

We Have No Source of Significant Recurring Revenues, Which May Make Us Dependent on Financing to Sustain Our Operations

Although we generated $3,751,000 in revenues from milestone payments and license fees from our licensees during 2001 and $1,051,000 from these sources during 2002, we generated $94,000 in such revenues in 2003. We earned $228,000 from our license to SynthRx in June 2004 and a $100,000 milestone payment from one of our other licensees in March 2004, but we do not have any significant sources of recurring operating revenues. We will not have significant recurring operating revenues until at least one of the following occurs:

- We are able to complete the development of and commercialize one or more of the products that we are currently developing, which may require us to first enter into license or other arrangements with third parties.
- One or more of our currently licensed products is commercialized by our licensees, thereby generating royalty income for us.
- We are able to acquire products from third parties that are already being marketed or are approved for marketing.

We are likely to incur negative cash flow from operations until such time, if ever, as we can generate significant recurring revenues. On January 26, 2005, we completed a private placement financing and received net proceeds of approximately $19.5 million. Although we believe that we have adequate financial resources to support our currently planned level of operations through the second quarter of 2006, it is likely that we will be dependent on obtaining financing from third parties to continue to meet our obligations to UMass, and maintain our operations, including our planned levels of operations for our obesity and type 2 diabetes subsidiary and our ongoing research and development efforts related to the drugs acquired from Biorex. We have no commitments from third parties to provide us with any additional debt or equity financing. Accordingly, future financing may be unavailable to us or only available on terms that substantially dilute our existing stockholders. A lack of needed financing could force us to reduce the scope of or terminate our operations or to seek a merger with or be acquired by another company. There can be no assurance that we would be able to identify an appropriate company to merge with or be acquired by or that we could consummate such a transaction on terms that would be attractive to our stockholders or at all.

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Most of Our Revenues Have Been Generated by License Fees for TranzFect, Which May Not be a Recurring Source of Revenue for Us

License fees paid to us with respect to our TranzFect technology have represented 30% of our revenue during the nine-months ended September 30, 2004 and 81%, 94% and 94% of our total revenues for the years ended December 31, 2003, 2002 and 2001, respectively. We have already licensed most of the potential applications for this technology, and there can be no assurance that we will be able to generate additional license fee revenues from any new licensees for this technology. Our current licensees for TranzFect, Merck, and Vical, may be required to make further milestone payments to us under their licenses based on their future development of products using TranzFect However, Merck is at an early stage of clinical trials of a product utilizing TranzFect and Vical has only recently commenced a Phase I clinical trial of a product utilizing TranzFect as a component of a vaccine to prevent AIDS. Since TranzFect is to be used as a component in vaccines, we do not need to seek FDA approval, but any vaccine manufacturer will need to seek FDA approval for the final vaccine formulation containing TranzFect. Merck has completed a multi-center, blinded, placebo controlled Phase I trial of an HIV vaccine utilizing TranzFect as a component. In the Merck trials, although the formulation of the tested vaccine using TranzFect was generally safe, well-tolerated and generated an immune response, the addition of TranzFect to the vaccine did not increase this immune response. Moreover, the DNA single-modality vaccine regimen with TranzFect, when tested in humans, yielded immune responses that were inferior to those obtained with the DNA vaccines in macaque monkeys. Accordingly, there is likely to be a substantial period of time, if ever, before we receive any further significant payments from Merck or Vical under their TranzFect licenses.

We Have Changed Our Business Strategy, Which Will Require Us, in Certain Cases, to Find and Rely Upon Third Parties for the Development of Our Products and to Provide Us With Products

Following our merger with Global Genomics, we modified our business strategy of internally developing FLOCOR and the other, then-current, potential products that we had not yet licensed to third parties. Instead, we began to seek to enter into strategic alliances, license agreements or other collaborative arrangements with other pharmaceutical companies that would provide for those companies to be responsible for the development and marketing of those products. In June 2004, we licensed FLOCOR, the primary potential product that we held prior to the Global Genomics merger and which we had not already licensed to a third party, to SynthRx, Inc., a recently formed Houston, Texas-based biopharmaceutical company, under a strategic alliance that we entered into with that company in October 2003. Although we intend to internally fund or carry out a significant portion of the research and development related to at least one of the drugs that we acquired from Biorex, and, through our obesity and type 2 diabetes subsidiary, the early stage development work for certain product applications based on the RNAi and other technologies that we licensed from UMass, and we may seek to fund all of the later stage development work for our potential ALS products, the completion of the development, manufacture and marketing of these products is likely to require, in many cases, that we enter into strategic alliances, license agreements or other collaborative arrangements with larger pharmaceutical companies for this purpose.

There can be no assurance that our products will have sufficient potential commercial value to enable us to secure strategic alliances, license agreements or other collaborative arrangements with suitable companies on attractive terms or at all. If we are unable to enter into collaborative agreements, we may not have the financial or other resources to continue development of a particular product or the development of any of our products. In connection with the Phase I clinical trial currently being conducted by UMass and ABL on an HIV vaccine candidate that utilizes a technology that we licensed from UMass, we do not have a commercial relationship with the company that provided an adjuvant for the vaccine for the trial. If we are not able to enter into an agreement with this company on terms favorable to us or at all, we may be unable to use some or all of the results of the clinical trial as part of our clinical data for obtaining FDA approval of this vaccine, which will delay the development of the vaccine.

If we enter into these collaborative arrangements, we will be dependent upon the timeliness and effectiveness of the development and marketing efforts of our contractual partners. If these companies do not allocate sufficient personnel and resources to these efforts or encounter difficulties in complying with

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applicable regulatory (including FDA) requirements, the timing of receipt or amount of revenues from these arrangements may be materially and adversely affected. By entering into these arrangements rather than completing the development and then marketing these products on our own, we may suffer a reduction in the ultimate overall profitability for us of these products. In addition, if we are unable to enter into these arrangements for a particular product, we may be required to either sell our rights in the product to a third party or abandon it unless we are able to raise sufficient capital to fund the substantial expenditures necessary for development and marketing of the product.

We will also seek to acquire products from third parties that already are being marketed or have previously been marketed. We have not yet identified any of these products. Even if we do identify such products, it may be difficult for us to acquire them with our limited financial resources and, if we acquire products using our securities as currency, we may incur substantial shareholder dilution. We do not have any prior experience in acquiring or marketing products and may need to find third parties to market these products for us. We may also seek to acquire products through a merger with one or more companies that own such products. In any such merger, the owners of our merger partner could be issued or hold a substantial, or even controlling, amount of stock in our company or, in the event that the other company is the surviving company, in that other company.

Our Current Financial Resources May Limit Our Ability to Execute Certain Strategic Initiatives

In June 2004, we licensed FLOCOR to SynthRx, which will be responsible for developing potential product applications for FLOCOR. As a result of this agreement, we may be entitled to receive future milestone payments and royalties. Although we are not doing any further development work on TranzFect, should our two principal licensees for this technology successfully meet the defined milestones, we could receive future milestone payments and, should either of the licensees commercialize products based upon our technology, future royalty payments. However, there can be no assurance that our licensees will continue to develop or ever commercialize any products that are based on our FLOCOR or our TranzFect technology.

Our strategic alliance with UMass will require us to make significant expenditures to fund research at the institution relating to the development of therapeutic products based on the UMass proprietary technologies that we have licensed and pursuant to our collaboration and invention disclosure agreement with UMass. We estimate that the aggregate amount of these expenditures under our current commitments will be $2,000,000 for 2004 (of which approximately $1,500,000 had been expensed through September 30, 2004), approximately $2,350,000 for 2005 and approximately $1,500,000 for 2006. We have also agreed to fund approximately $500,000 of sponsored research at Massachusetts General Hospital during 2004 and 2005 (of which $210,000 had been expensed through September 30, 2004). Our license agreements with UMass also provide, in certain cases, for milestone payments based on the progress we make in the clinical development and marketing of products utilizing the licensed technologies. In the event that we were to successfully develop a product in each of the categories of obesity/type 2 diabetes, ALS, CMV, cancer and an HIV vaccine, under our licenses, those milestone payments could aggregate up to $16,055,000. In addition, the agreement pursuant to which we acquired the clinical and pharmaceutical assets of Biorex provides for milestone payments based on the occurrence of certain regulatory filings and approvals related to the acquired products. In the event that we were to successfully develop any of those products, the milestone payments could aggregate up to $4,150,000. Each of the foregoing milestone payments, however, could vary significantly based upon the milestones we achieve and the number of products we ultimately undertake to develop.

Although we believe that an existing National Institute of Health (NIH) grant will be sufficient to fund substantially all of the costs of an ongoing Phase I trial of the HIV vaccine candidate using the technology we licensed from UMass and Advanced BioScience Laboratories, or ABL, we could be required to fund substantial expenses of the trial not covered by the grant. Under our license for this technology, following the completion of the current Phase I trial, we will be responsible for all of the costs for subsequent clinical trials for this vaccine. The costs of subsequent trials for the HIV vaccine will be very substantial. We do not have any NIH or other governmental funding for these future trials, and there can be no assurance that we will be able to secure such funding for any of these trials.

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The expenditures potentially required under our agreements with UMass and ABL, together with the operating capital requirements of our obesity and type 2 diabetes subsidiary, our planned sponsored research funding for Massachusetts General Hospital and our development of the drugs acquired from Biorex, substantially exceed our current financial resources. Although we raised approximately $21.3 million in January 2005, those required expenditures will nonetheless require us to raise additional capital or to secure a licensee or strategic partner to fulfill our obligations to UMass and to develop any products based on the technologies that we have licensed from UMass or any products that we acquired from Biorex, and to continue the operations of our obesity and type 2 diabetes subsidiary at the currently contemplated level. If we are unable to meet our various financial obligations under license agreements with UMass, we could lose all of our rights under those agreements. If we were to have inadequate financial resources at that time, we also could be forced to reduce the level of, or discontinue, operations at our subsidiary.

If Our Products Are Not Successfully Developed and Approved by the FDA, We May Be Forced to Reduce or Terminate Our Operations

All of our products are at various stages of development and must be approved by the FDA or similar foreign governmental agencies before they can be marketed. The process for obtaining FDA approval is both time-consuming and costly, with no certainty of a successful outcome. This process typically includes the conduct of extensive pre-clinical and clinical testing, which may take longer or cost more than we or our licensees anticipate, and may prove unsuccessful due to numerous factors. Product candidates that may appear to be promising at early stages of development may not successfully reach the market for a number of reasons. The results of preclinical and initial clinical testing of these products may not necessarily indicate the results that will be obtained from later or more extensive testing. Companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials, even after obtaining promising results in earlier trials.

Numerous factors could affect the timing, cost or outcome of our drug development efforts, including the following:

Difficulty in securing centers to conduct trials.

Difficulty in enrolling patients in conformity with required protocols or projected timelines.

Unexpected adverse reactions by patients in trials.

Difficulty in obtaining clinical supplies of the product.

Changes in the FDA s requirements for our testing during the course of that testing.

Inability to generate statistically significant data confirming the efficacy of the product being tested.

Modification of the drug during testing.

Reallocation of our limited financial and other resources to other clinical programs.

It is possible that none of the products we develop will obtain the appropriate regulatory approvals necessary for us to begin selling them. The time required to obtain FDA and other approvals is unpredictable but often can take years following the commencement of clinical trials, depending upon the complexity of the drug candidate. Any analysis we perform of data from clinical activities is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent regulatory approval. Any delay or failure in obtaining required approvals could have a material adverse effect on our ability to generate revenues from the particular drug candidate and we may not have the financial resources to continue to develop our products and may have to terminate our operations.

The Approach We Are Taking to Discover and Develop Novel Drugs Using RNAi and Other Technologies is Unproven and May Never Lead to Marketable Products

The RNAi and other technologies that we have acquired from UMass have not yet been clinically tested by us, nor are we aware of any clinical trials having been completed by third parties involving similar

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technologies. Neither we nor any other company has received regulatory approval to market therapeutics utilizing RNAi. The scientific discoveries that form the basis for our efforts to discover and develop new drugs are relatively new. The scientific evidence to support the feasibility of developing drugs based on these discoveries is both preliminary and limited. Successful development of RNAi-based products will require solving a number of issues, including providing suitable methods of stabilizing the RNAi drug material and delivering it into target cells in the human body. We may spend large amounts of money trying to solve these issues, and never succeed in doing so. In addition, any compounds that we develop may not demonstrate in patients the chemical and pharmacological properties ascribed to them in laboratory studies, and they may interact with human biological systems in unforeseen, ineffective or harmful ways.

The Biorex Products May Not Obtain Regulatory Marketing Approvals

On October 4, 2004, we acquired all of the clinical and pharmaceutical assets and related intellectual property of Biorex, including three drug candidates (arimoclomol, iroxanadine and bimoclomol), and a library of small molecule drug candidates. Although each of arimoclomol, iroxanadine and bimoclomol has undergone clinical testing, significant and costly additional testing will be required in order to bring any product to market. We may be unable to confirm in our pre-clinical or clinical trials with arimoclomol, iroxanadine or bimoclomol the favorable pre-clinical or clinical data previously generated by European investigators for these drug candidates, which could require us to have to modify our development plans for these compounds.

We expect to initiate Phase II clinical testing for arimoclomol for ALS in the second quarter of 2005, however there are no assurances that the clinical testing will be successful. We believe that the FDA may accept the completion of a successful Phase II clinical trial as sufficient to enable us to submit a New Drug Application, or NDA, however there are no guarantees that the FDA will accept our Phase II study in lieu of a Phase III clinical trial. If the FDA requires us to complete a Phase III clinical trial, the cost of development of arimoclomol will increase beyond our estimated costs. In addition, the FDA ultimately could require us to achieve an efficacy end point in the clinical trials for arimoclomol that could be more difficult, expensive and time-consuming than our planned end point. Although we anticipate developing arimoclomol for the treatment of ALS, arimoclomol has also shown therapeutic efficacy in a preclinical animal model of diabetes and we may pursue development of arimoclomol for diabetic indications. However, such development would require significant and costly additional testing. There is no guarantee that arimoclomol would show any efficacy for any other indications.

Iroxanadine has been tested in two Phase I clinical trials and one Phase II clinical trial which showed improvement in the function of endothelial cells in blood vessels of patients at risk of cardiovascular disease. We intend to develop this product to improve endothelial dysfunction in indications such as diabetic retinopathy and wound healing, which will require significant and costly additional testing. There is no guarantee that iroxanadine will show any efficacy in the intended uses we are seeking. We may also attempt to license iroxanadine to larger pharmaceutical or biotechnology companies for cardiovascular indications; however, there is no guarantee that any such company will be interested in licensing iroxanadine from us or on terms that are favorable to us.

Bimoclomol has been tested in two Phase II clinical trials where it was shown to be safe, but where it did not show efficacy for diabetic neuropathy, the indication for which it was tested. We intend to develop this compound for other therapeutic indications, however there can be no guarantee that this compound will be effective in treating any diseases. In addition, the FDA may require us to perform new safety clinical trials, which would be expensive and time consuming and would delay development of bimoclomol. There is no guarantee that any additional clinical trials will be successful or that the FDA will approve any of these products and allow us to begin selling them in the United States.

Our Obesity and Type 2 Diabetes Subsidiary May Not Be Able to Develop Products

In order to develop new obesity and type 2 diabetes products, our subsidiary, CytRx Laboratories, will first need to identify appropriate drug targets and pathways. We will be using novel RNAi-based techniques to

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accelerate this process, but there is no assurance that these techniques will accelerate our work or that we will be able to identify highly promising targets or pathways using these techniques or otherwise. Even if we are successful in identifying these targets or pathways, we will need to then develop proprietary molecules that are safe and effective against these targets. The development process and the clinical testing of our potential products will take a lengthy period of time and involve expenditures substantially in excess of our current financial resources that are available for this purpose. We currently plan to seek a strategic alliance with a major pharmaceutical or biotechnology company at a relatively early stage in our development work to complete the development, clinical testing and manufacturing and marketing of our obesity and type 2 diabetes products, but we may not be able to secure such a strategic partner on attractive terms or at all. We do not have prior experience in operating a genomic and proteomic-based drug discovery company. Accordingly, we will be heavily dependent on the prior experience and current efforts of Dr. Michael P. Czech, the Chairman of the Scientific Advisory Board of our subsidiary, Dr. Jack Barber, our Senior Vice President Drug Development, and Dr. Mark A. Tepper, the President of our subsidiary and a Vice President of CytRx Corporation, in establishing the scientific goals and strategies of our subsidiary.

We Will Be Reliant Upon SynthRx to Develop and Commercialize FLOCOR

In June 2004, we licensed FLOCOR and our other co-polymer technologies to SynthRx and acquired a 19.9% equity interest in that newly formed biopharmaceutical company. SynthRx has only limited financial resources and will have to either raise significant additional capital or secure a licensee or strategic partner to complete the development and commercialization of FLOCOR and these other technologies. SynthRx does not have any commitments from third parties to provide the capital that it will require and there can be no assurance that it will be able to obtain this capital or a licensee or strategic partner on satisfactory terms or at all.

Our prior Phase III clinical trial of FLOCOR for the treatment of sickle cell disease patients experiencing an acute vaso-occlusive crisis did not achieve its primary objective. However, in this study, for patients 15 years of age or younger, the number of patients achieving a resolution of crisis was higher for FLOCOR-treated patients at all time periods than for placebo-treated patients, which may indicate that future clinical trials should focus on juvenile patients. Generating sufficient data to seek FDA approval for FLOCOR will require additional clinical studies which have not yet been funded or commenced by SynthRx, and those studies will entail substantial time and expense for SynthRx.

The manufacture of FLOCOR involves obtaining new raw drug substance and a supply of the purified drug from the raw drug substance, which requires specialized equipment. Should SynthRx encounter difficulty in obtaining the purified drug substance in sufficient amounts and at acceptable prices, SynthRx may be unable to complete the development or commercialization of FLOCOR on a timely basis or at all.

We Are Unlikely to Recover Any Amounts from Global Genomics Portfolio Companies

Due to its inability to raise needed capital, Blizzard, which was Global Genomics principal portfolio company, has been unable to complete the development of any of its products and has been notified by the licensor of its core technologies that it is in default under its license for those technologies. Global Genomics other portfolio company is at a very early stage, is operating without any full-time or salaried employees and has not been able to raise the capital it will need to fund its planned operations and to acquire licenses to certain technologies that it will require. Accordingly, it appears unlikely that either of Global Genomics portfolio companies will generate revenues for us in the future and, in 2003, we recorded a write-off of the carrying value of our investments in those companies.

We May Be Involved in Legal Proceedings That Could Affect Our Business Operations or Financial Condition

The Company may be involved, from time to time, in investigations and proceedings by governmental or self-regulatory agencies, certain of which could result in adverse judgments, fines or other sanctions. In February 2004, we were notified by the Massachusetts State Ethics Commission (Massachusetts Commis-

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sion), that it had initiated a preliminary inquiry into whether our previous retention of a consultant who introduced us to UMMS constituted an improper conflict of interest under Massachusetts ethics laws. UMass has recently advised us that it continues to believe that its agreements with us provided excellent value for UMass, that it anticipates that the Massachusetts Commission s review of the terms of those agreements will confirm that the agreements were fair to UMass, and that it believes that the Massachusetts Commission will concur with the resolution of the conflict proposed by UMass under which the consultant will forfeit to UMass certain of the compensation that the consultant was to receive from us.

We Are Subject to Intense Competition That Could Materially Impact Our Operating Results

We and our strategic partners or licensees may be unable to compete successfully against our current or future competitors. The pharmaceutical, biopharmaceutical and biotechnology industry is characterized by intense competition and rapid and significant technological advancements. Many companies, research institutions and universities are working in a number of areas similar to our primary fields of interest to develop new products. There also is intense competition among companies seeking to acquire products that already are being marketed. Many of the companies with which we compete have or are likely to have substantially greater research and product development capabilities and financial, technical, scientific, manufacturing, marketing, distribution and other resources than at least some of our present or future strategic partners or licensees.

As a result, these competitors may:

Succeed in developing competitive products sooner than us or our strategic partners or licensees.

Obtain FDA and other regulatory approvals for their products before approval of any of our products.

Obtain patents that block or otherwise inhibit the development and commercialization of our product candidates.

Develop products that are safer or more effective than our products.

Devote greater resources to marketing or selling their products.

Introduce or adapt more quickly to new technologies or scientific advances.

Introduce products that render our products obsolete.

Withstand price competition more successfully than us or our strategic partners or licensees.

Negotiate third-party strategic alliances or licensing arrangements more effectively.

Take advantage of other opportunities more readily.

A number of medical institutions and pharmaceutical companies are seeking to develop products based on gene silencing technologies. Companies working in this area include Sirna Therapeutics, Inc., Alnylam Pharmaceuticals, Inc., Benitec Ltd., Nucleonics, Inc. and a number of the multinational pharmaceutical companies. A number of products currently are being marketed by a variety of the multinational or other pharmaceutical companies for treating type II diabetes, including among others the diabetes drugs Avandia by Glaxo SmithKline PLC, Actos by Eli Lilly & Co., Glucophage by Bristol-Myers Squibb Co., and Starlix by Novartis and the obesity drugs Xenical by F. Hoffman-La Roche Ltd. and Meridia by Abbott Laboratories. Many major pharmaceutical companies are also seeking to develop new therapies for these disease indications. Companies developing HIV vaccines that could compete with our HIV vaccine technology include Merck, VaxGen, Inc., Epimmune, Inc., AlphaVax, Inc. and Immunitor Corporation.

Currently, Rilutek, which was developed by Aventis Pharma AG, is the only drug of which we are aware that has been approved by the FDA for the treatment of ALS. Other companies are working to develop pharmaceuticals to treat ALS, including Aelous Pharmaceuticals. In addition, ALS belongs to a family of diseases called neurodegenerative diseases, which includes Alzheimer s, Parkinson s and Huntington s disease. These diseases are similar enough that a new treatment for one ailment potentially could be useful for treating others. There are many companies that are producing and developing drugs used to treat neurodegenerative

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diseases other than ALS, including Amgen, Guilford Pharmaceuticals, Phytopharm plc, Cephalon, Inc. and Ceregene, Inc.

Although we do not expect FLOCOR to have direct competition from other products currently available or that we are aware of that are being developed related to FLOCOR s ability to reduce blood viscosity in the cardiovascular area, there are a number of anticoagulant products that FLOCOR would have to compete against, such as tissue plasminogen activator, or t-PA, and streptokinase (blood clot dissolving enzymes) as well as blood thinners such as heparin and coumatin, even though FLOCOR acts by a different mechanism to prevent damage due to blood coagulation. In the sickle cell disease area, FLOCOR would compete against companies that are developing or marketing other products to treat sickle cell disease, such as Droxia (hydroxyurea) marketed by Bristol-Myers Squibb Co. and Dacogen, which is being developed by SuperGen, Inc. Our TranzFect technology will compete against a number of companies that have developed adjuvant products, such as the adjuvant QS-21 marketed by Antigenics, Inc. and adjuvants marketed by Corixa Corp. Blizzard s products, if ever developed, will compete with a number of currently marketed products, including those offered by Axon Instruments, Inc., Affymetrix, Inc., Applied Precision, LLC, Perkin Elmer, Inc. and Agilent Technologies, Inc.

We Do Not Have the Ability to Manufacture Any of Our Products and Will Need to Rely upon Third Parties for the Manufacture of Our Clinical and Commercial Product Supplies

We do not currently have the facilities or expertise to manufacture any of the clinical or commercial supplies of any of our products. Accordingly, we will be dependent upon contract manufacturers or our strategic alliance partners to manufacture these supplies, or we will need to acquire the ability to manufacture these supplies ourselves, which could be very difficult, time-consuming and costly. We do not have manufacturing supply arrangements for our products, including any of the licensed RNAi technology, the drugs acquired from Biorex or, with the exception of the clinical supplies for the current Phase I trial, the HIV vaccine product that utilizes the HIV vaccine technology that we have licensed from UMass. There can be no assurance that we will be able to secure needed manufacturing supply arrangements, or acquire the ability to manufacture the products ourselves, on attractive terms or at all. Delays in, or a failure to, secure these arrangements or abilities could have a materially adverse effect on our ability to complete the development of our products or to commercialize them.

We May Be Unable to Protect Our Intellectual Property Rights, Which Could Adversely Affect the Value of Our Assets

We believe that obtaining and maintaining patent and other intellectual property rights for our technologies and potential products is critical to establishing and maintaining the value of our assets and our business. Although we believe that we have significant patent coverage for the technologies that we acquired from Biorex and for our TranzFect technologies, there can be no assurance that this coverage will be broad enough to prevent third parties from developing or commercializing similar or identical technologies, that the validity of our patents will be upheld if challenged by third parties or that our technologies will not be deemed to infringe the intellectual property rights of third parties. We have a nonexclusive license to a patent owned by UMass and the Carnegie Institution of Washington that claims various aspects of gene silencing, or genetic inhibition by double-stranded RNA, but there can be no assurance that this patent will withstand possible third party challenge or protect our technologies from competition. The medical applications of the gene silencing technology and the other technologies that we have licensed from the UMass also are claimed in a number of pending patent applications, but there can be no assurance that these applications will result in any issued patents or that those patents will withstand third party challenge or protect our technologies from competition. Moreover, we are aware of at least one other issued patent claiming broad applications for RNAi and many patent applications covering different methods and compositions in the field of RNAi therapeutics have been and are expected to be filed, and certain organizations or researchers may hold or seek to obtain patents that could make it more difficult or impossible for us to develop products based on the gene silencing technology that we have licensed. We are aware that at least one of our competitors is seeking patent coverage in the RNAi field that could restrict our ability to develop certain RNAi-based therapeutics.

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Any litigation brought by us to protect our intellectual property rights or by third parties asserting intellectual property rights against us, or challenging our patents, could be costly and have a material adverse effect on our operating results or financial condition, make it more difficult for us to enter into strategic alliances with third parties to develop our products, or discourage our existing licensees from continuing their development work on our potential products. If our patent coverage is insufficient to prevent third parties from developing or commercializing similar or identical technologies, the value of our assets is likely to be materially and adversely affected.

We are sponsoring research at UMass and Massachusetts General Hospital under agreements that give us certain rights to acquire licenses to inventions, if any, that arise from that research, and we may enter into additional research agreements with those institutions, or others, in the future. We also have a collaboration and invention disclosure agreement with UMass under which UMass has agreed to disclose to us certain inventions it makes and to give us an option to negotiate licenses to the disclosed technologies. There can be no assurance, however, that any such inventions will arise, that we will be able to acquire licenses to any inventions under satisfactory terms or at all, or that any licenses will be useful to us commercially.

We May Incur Substantial Costs from Future Clinical Testing or Product Liability Claims

If any of our products are alleged to be defective, they may expose us to claims for personal injury by patients in clinical trials of our products or by patients using our commercially marketed products. Even if the commercialization of one or more of our products is approved by the FDA, users may claim that such products caused unintended adverse effects. We currently do not carry product liability insurance covering the use of our products in human clinical trials or the commercial marketing of these products. We are in the process of obtaining clinical trial insurance for our planned clinical trial of arimoclomol for the treatment of ALS and will seek to obtain such insurance for any other clinical trials that we conduct, as well as liability insurance for any products that we market, although there can be no assurance that we will be able to obtain such insurance in the amounts we are seeking or at all. We anticipate that our licensees who are developing our products will carry liability insurance covering the clinical testing and marketing of those products. However, if someone asserts a claim against us and our insurance or the insurance coverage of our licensees or if their other financial resources are inadequate to cover a successful claim, such successful claim could have a material adverse effect on our financial condition or cause us to discontinue operations. Even if claims asserted against us are unsuccessful, they may divert management s attention from our operations and we may have to incur substantial costs to defend such claims.

We May Be Delisted from the Nasdaq SmallCap Market if Our Future Filings Are Not Timely

In May 2004, a Nasdaq Listing Qualifications Panel ruled that our common stock would remain listed on the Nasdaq SmallCap Market, notwithstanding the fact that we filed our Annual Report on Form 10-K for the year ended December 31, 2003 with the SEC after the deadline for its filing. In addition, that Panel also ruled that our common stock would be delisted if we failed to timely file any reports with the SEC required for any period ending on or before June 30, 2005, and that we would not be entitled to a hearing before a Nasdaq Listing Qualifications Panel with respect to any finding by Nasdaq s staff of such a filing deficiency. Our inability to receive a hearing would make it extremely difficult, if not impossible, to cure any late filing deficiency. If we fail to comply with this condition for continued listing and our common stock is delisted from the Nasdaq Small Cap Market, we may seek to list our common stock for trading on the American Stock Exchange or a regional stock exchange or to facilitate trading of our common stock in the over-the-counter market. If our common stock is delisted from the Nasdaq SmallCap Market, however, there is no assurance that our common stock will be listed for trading elsewhere, and an active trading market for our common stock may cease to exist and the delisting could materially and adversely impact the market value of our common stock.

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Our Anti-Takeover Provisions May Make It More Difficult to Change Our Management or May Discourage Others From Acquiring Us and Thereby Adversely Affect Stockholder Value

We have a stockholder rights plan and provisions in our bylaws that may discourage or prevent a person or group from acquiring us without the approval of our board of directors. The intent of the stockholder rights plan and our bylaw provisions is to protect our stockholders interests by encouraging anyone seeking control of our company to negotiate with our board of directors.

We have a classified board of directors, which requires that at least two stockholder meetings, instead of one, will be required to effect a change in the majority control of our board of directors. This provision applies to every election of directors, not just an election occurring after a change in control. The classification of our board increases the amount of time it takes to change majority control of our board of directors and may cause our potential purchasers to lose interest in the potential purchase of us, regardless of whether our purchase would be beneficial to us or our stockholders. The additional time and cost to change a majority of the members of our board of directors makes it more difficult and may discourage our existing stockholders from seeking to change our existing management in order to change the strategic direction or operational performance of our company.

Our bylaws provide that directors may only be removed for cause by the affirmative vote of the holders of at least a majority of the outstanding shares of our capital stock then entitled to vote at an election of directors. This provision prevents stockholders from removing any incumbent director without cause. Our bylaws also provide that a stockholder must give us at least 120 days notice of a proposal or director nomination that such stockholder desires to present at any annual meeting or special meeting of stockholders. Such provision prevents a stockholder from making a proposal or director nomination at a stockholder meeting without us having advance notice of that proposal or director nomination. This could make a change in control more difficult by providing our directors with more time to prepare an opposition to a proposed change in control. By making it more difficult to remove or install new directors, the foregoing bylaw provisions may also make our existing management less responsive to the views of our stockholders with respect to our operations and other issues such as management selection and management compensation.

Our Outstanding Options and Warrants and the Registrations of Our Shares Issued in the Global Genomics Merger and Our Recent Private Financings May Adversely Affect the Trading Price of Our Common Stock

As of January 31, 2005, there were outstanding stock options and warrants to purchase approximately 24,169,765 shares of our common stock at exercise prices ranging from $0.01 to $7.75 per share. Our outstanding options and warrants could adversely affect our ability to obtain future financing or engage in certain mergers or other transactions, since the holders of options and warrants can be expected to exercise them at a time when we may be able to obtain additional capital through a new offering of securities on terms more favorable to us than the terms of outstanding options and warrants. For the life of the options and warrants, the holders have the opportunity to profit from a rise in the market price of our common stock without assuming the risk of ownership. To the extent the trading price of our common stock at the time of exercise of any such options or warrants exceeds the exercise price, such exercise will also have a dilutive effect to our stockholders.

In August 2003, we registered a total of 14,408,252 shares of our outstanding common stock and an additional 3,848,870 shares of our common stock issuable upon exercise of outstanding options and warrants, which shares and options and warrants were issued primarily in connection with our merger with Global Genomics and the $5,440,000 private equity financing that we completed in May 2003. In December 2003, we registered a total of 6,113,448 shares of our common stock, consisting of the 5,175,611 shares issued, or that are issuable upon exercise of the warrants issued, in connection with the $8,695,000 private equity financing that we completed in September 2003, and an additional 937,837 shares of our common stock that we issued, or that are issuable upon the exercise of warrants that we issued, to certain other third parties. In April 2004, we became ineligible to continue to use Form S-3 for both of these registrations, so that the holders of these shares could no longer sell their shares under these registrations. Our ineligibility to register resales on

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Form S-3 may have created liability under certain of our registration rights agreements if we are not deemed to have amended certain existing registrations in a reasonable period of time so as to permit the holders to again be able to sell their shares under those registrations. We are in the process of reinstating the registrations so as to permit the holders to again be able to sell their shares under these registrations. In November 2004, we registered 4,000,000 shares of our common stock and an additional 2,800,000 shares of our common stock issuable upon the exercise of warrants in connection with the $4,000,000 private equity financing that we completed in October 2004, as well as an additional 280,000 shares of our common stock that are issuable to Rodman & Renshaw, LLC upon the exercise of warrants issued in connection with that financing, and an additional 1,550,000 shares of our common stock issued or issuable in upon exercise of warrants to other third parties. This prospectus covers a total of 27,243,611 shares of our common stock, including the 26,001,741 shares we issued or that are issuable upon exercise of the warrants that we issued to the investors in connection with the $21.3 million private equity financing in January 2005, and an additional 1,206,301 and 35,569 shares of our common stock that are issuable to Rodman & Renshaw, LLC and Midtown Partners & Co., LLC, respectively, upon the exercise of warrants issued in connection with that financing. Both the availability for public resale of these various shares and the actual resale of these shares could adversely affect the trading price of our common stock.

We May Issue Preferred Stock in the Future, and the Terms of the Preferred Stock May Reduce the Value of Your Common Stock

We are authorized to issue up to 5,000,000 shares of preferred stock in one or more series. Our board of directors may determine the terms of future preferred stock offerings without further action by our stockholders. If we issue preferred stock, it could affect your rights or reduce the value of your common stock. In particular, specific rights granted to future holders of preferred stock may include voting rights, preferences as to dividends and liquidation, conversion and redemption rights, sinking fund provisions, and restrictions on our ability to merge with or sell our assets to a third party.

Changes in Stock Option Accounting Rules May Adversely Impact Our Reported Operating Results, Our Stock Price and Our Competitiveness in the Employee Marketplace

In December 2004, the Financial Accounting Standards Board published new rules that will require companies in 2005 to record all stock-based employee compensation as an expense. The new rules apply to stock options grants, as well as a wide range of other share-based compensation arrangements including restricted share plans, performance-based awards, share appreciation rights, and employee share purchase plans. We will have to apply the new financial accounting rules beginning in the third quarter of 2005. As a small company with limited financial resources, we have depended upon compensating our officers, directors, employees and consultants with such stock based compensation awards in the past in order to limit our cash expenditures and to attract and retain officers, directors, employees and consultants. Accordingly, if we continue to grant stock options or other stock based compensation awards to our officers, directors, employees, and consultants after the new rules apply to us, our future earnings, if any, will be reduced (or our future losses will be increased) by the expenses recorded for those grants. These compensation expenses may be larger than the compensation expense that we would be required to record were we able to compensate these persons with cash in lieu of securities. Since we are a small company, the expenses we may have to record as a result of future options grants may be significant and may materially negatively affect our reported financial results. The adverse effects that the new accounting rules may have on our future financial statements should we continue to rely heavily on stock-based compensation may reduce our stock price and make it more difficult for us to attract new investors. In addition, reducing our use of stock plans to reward and incentivize our officers, directors and employees could result in a competitive disadvantage to us in the employee marketplace.

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We May Experience Volatility in Our Stock Price, Which May Adversely Affect the Trading Price of Our Common Stock

The market price of our common stock has experienced significant volatility in the past and may continue to experience significant volatility from time to time. Our stock price has ranged from $0.21 to $3.74 per share over the past three years. Factors such as the following may affect such volatility:

our quarterly operating results

announcements of regulatory developments or technological innovations by us or our competitors

government regulation of drug pricing

developments in patent or other technology ownership rights

public concern regarding the safety of our products

Other factors which may affect our stock price are general changes in the economy, financial markets or the pharmaceutical or biotechnology industries.

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USE OF PROCEEDS

Other than the exercise of the warrants held by the selling securityholders as described herein (to the extent they may be exercised), we will not receive any of the proceeds from the sale of the shares offered by the selling securityholders. The selling securityholders are not obligated to exercise the warrants held by them, and there can be no assurance that they will choose to do so. The warrants may be exercised for cash or pursuant to the cashless exercise provisions of the warrants.

If the warrants are exercised, in full, for cash, we will receive approximately $19,818,234 upon such exercise. We intend to use any proceeds we receive from the exercise of the warrants for working capital and general corporate purposes.

We will bear the costs and expenses of registering the shares being offered by the selling securityholders.

PRICE RANGE OF COMMON STOCK

Our common stock is traded on the Nasdaq SmallCap Market under the symbol CYTR. The following table sets forth the high and low sale prices for our common stock for the periods indicated as reported by the Nasdaq SmallCap Market. Such prices represent prices between dealers, without adjustment for retail mark-ups, mark-downs or commissions, and may not necessarily represent actual transactions.

	High	Low
Fiscal Year 2004:		
Fourth Quarter	$1.75	$1.10
Third Quarter	$1.80	$0.94
Second Quarter	$2.10	$1.06
First Quarter	$2.43	$1.43
Fiscal Year 2003:		
Fourth Quarter	$2.50	$1.75
Third Quarter	$2.81	$1.58
Second Quarter	$3.74	$0.62
First Quarter	$0.61	$0.23

On January 31, 2005, the closing price of our common stock as reported on the Nasdaq SmallCap Market was $1.52, and there were approximately 860 holders of record of our common stock. The number of record holders does not reflect the number of beneficial owners of our common stock for whom shares are held by brokerage firms and other institutions.

DIVIDEND POLICY

We do not expect to pay any cash dividends on our common stock in the foreseeable future, and plan to retain our earnings to finance our business and operations. The payment of dividends on our common stock will be at the discretion of our board of directors and must comply with applicable law. Any decisions to pay dividends in the future will depend on a number of factors, including our financial condition, capital requirements, future business prospects, any relevant contractual restrictions and other factors that our board of directors deem relevant.

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SELECTED PRO FORMA BALANCE SHEET DATA

In January 2005, we completed a $21.3 million private equity financing in which we issued 17,334,494 shares of our common stock and warrants to purchase an additional 8,667,247 shares of our common stock at an exercise price of $2.00 per share. Net of investment banking commissions, legal, accounting and other fees related to the transaction, we received proceeds of approximately $19.5 million. Included in additional paid-in capital is the value of the warrants to purchase 1,364,406 shares of our common stock that were issued to placement agents in connection with the private equity financing, which we have valued at approximately $345,000, but does not give effect to other events that occurred since September 30, 2004 and thus may not be indicative of our current financial condition. The following unaudited, selected pro forma balance sheet data is derived from our unaudited balance sheet as of September 30, 2004, and gives effect to the completion of that private equity financing. The information should be read in conjunction with our unaudited balance sheet as of September 30, 2004.

	Actual as of September 30, 2004	Adjustments Related to January 2005 Financing	Pro Forma as of September 30, 2004
	(Unaudited)	(Unaudited)	(Unaudited)
ASSETS			
Current assets:			
Cash and short-term investments	$ 4,436,921	$ 19,504,946	$ 24,941,867
Prepaid and other current assets	736,569		736,569
Total current assets	5,173,490	19,504,946	24,678,436
Non-current assets	718,037		718,037
Total assets	$ 5,891,527	$ 19,504,946	$ 25,396,473
LIABILITIES AND STOCKHOLDERS EQUITY			
Total liabilities	$ 2,848,736	$	$ 2,848,736
Minority interest in subsidiary	214,677		214,677
Commitments and contingencies			
Stockholders equity:			
Preferred Stock, $0.01 par value, 5,000,000 shares authorized, including 5,000 shares of Series A Junior Participating Preferred Stock; no shares issued and outstanding			
Common stock, $0.001 par value, 100,000,000 shares authorized; 36,097,381 shares issued at September 30, 2004	36,097	17,334	53,431
Additional paid-in-capital	105,503,456	19,487,611	125,991,067
Treasury stock, at cost (633,816 shares)	(2,279,238)		(2,279,238)
Accumulated deficit	(100,432,201)		(100,432,201)
Total stockholders equity	2,828,114	19,504,946	22,333,060
Total liabilities and stockholders equity	$ 5,891,527	$ 19,504,946	$ 25,396,473

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SELECTED HISTORICAL CONSOLIDATED FINANCIAL INFORMATION

The following selected historical consolidated financial information for the years ended December 31, 2003, 2002, 2000, 2001 and 1999 is derived from our audited consolidated financial statements. Our financial statements for 2003 have been audited by BDO Seidman, LLP, our independent registered public accounting firm. Our financial statements for 2002, 2001, 2000 and 1999 have been audited by Ernst & Young LLP, independent auditors. The following selected financial data for the nine months ended September 30, 2004 and 2003 is unaudited and includes, in our opinion, all adjustments (consisting only of normal recurring adjustments) necessary to present fairly our results of operations for such periods. The results for the nine months ended September 30, 2004 are not necessarily indicative of the results to be expected for the full year. When you read this information, it is important that you also read our financial statements and related notes, as well as the Management s Discussion and Analysis of Financial Condition and Results of Operations section of this prospectus.

	Nine Months Ended September 30,		Year Ended December 31,				
	2004	2003	2003	2002	2001	2000	1999
	(Unaudited)						
STATEMENT OF OPERATIONS DATA:							
Revenues							
Service revenues	$	$	$	$ 22,000	$ 101,000	$ 451,000	$ 323,000
License fees	328,000		94,000	1,051,000	3,751,000	2,000,000	
Grant income				46,000	157,000	349,000	464,000
Other income						225,000	
Total revenues	$ 328,000	$	$ 94,000	$ 1,120,000	$ 4,009,000	$ 3,025,000	$ 787,000
Total expenses	$ (11,125,000)	$ (8,672,000)	$ (11,378,000)	$ (6,726,000)	$ (5,103,000)	$ (4,475,000)	$ (16,661,000)
Loss from continuing operations	$ (10,630,000)	$ (14,737,000)	$ (17,845,000)	$ (6,176,000)	$ (931,000)	$ (1,147,000)	$ (15,270,000)
Income from discontinued operations						800,000	241,000
Net loss	$ (10,630,000)	$ (14,737,000)	$ (17,845,000)	$ (6,176,000)	$ (931,000)	$ (348,000)	$ (15,029,000)
Basic and diluted loss per common share:							
Loss from continuing operations	$ (0.30)	$ (0.59)	$ (0.65)	$ (0.39)	$ (0.09)	$ (0.12)	$ (1.99)
Income from discontinued operations						0.08	0.03
Net Loss	$ (0.30)	$ (0.59)	$ (0.65)	$ (0.39)	$ (0.09)	$ (0.04)	$ (1.96)

	As of September 30,		As of December 31,				
	2004	2003	2003	2002	2001	2000	1999
	(Unaudited)						
BALANCE SHEET DATA:							

Total assets	$5,892,000	$13,520,000	$12,324,000	$9,284,000	$7,611,000	$6,859,000	$6,128,000
Long-term debt							650,000
Other long-term liabilities							1,694,000
Total stockholders equity	$2,828,000	$11,936,000	$10,193,000	$7,959,000	$6,583,000	$5,619,000	$1,033,000

Factors Affecting Comparability

In the third quarter of 2003, we recorded an impairment charge of $5,869,000 related to our investments in Blizzard s acquired developed technology and in Psynomics, based upon our analysis of the recoverability of the carrying amount of these assets in accordance with the Accounting Principles Board Opinion No. 18, *The Equity Method of Accounting for Investments in Common Stock.* This impairment charge represented the

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total net book value of these assets at the time of the write-off. See Note 11 to our audited financial statements.

In 2002, we recorded an impairment charge of $921,000 related to certain equipment and leasehold improvements based on our evaluation of the recoverability of the carrying amount of those assets in accordance with the Financial Accounting Standards Board (FASB) Statement of Financial Accounting Standards No. 144 *Accounting for the Impairment or Disposal of Long-Lived Assets.* This impairment charge represented the total net book value of those assets. See Note 5 to our audited financial statements.

During 2002, we recorded a loss of $478,000 associated with the closure of our Atlanta headquarters and relocation to Los Angeles subsequent to our merger with Global Genomics. This loss represents the total remaining lease obligations and estimated operating costs through the remainder of the lease, which expires in 2008, less estimated sublease income. This accrued charge was combined with deferred rent of $85,000 already recorded, so that the total accrual related to the facility abandonment was $563,000 as of December 31, 2002. To the extent that we are able to negotiate a termination of the Atlanta lease, our operating costs are different or our estimates related to sublease income are different, the total loss ultimately recognized may be different than the amount recorded as of December 31, 2002 and such difference may be material. As of December 31, 2003, we have a remaining lease closure accrual of $418,000.

Pursuant to his employment agreement, our former President and Chief Executive Officer, Jack Luchese, was entitled to a payment of $435,000 upon the execution of the merger agreement between Global Genomics and us and an additional $435,000 upon the closing of the merger. In order to reduce the amount of cash that we had to pay Mr. Luchese, Mr. Luchese and we agreed that approximately $325,000 of the first $435,000 payment would be satisfied by our grant to Mr. Luchese under our 2000 Long-Term Incentive Plan pursuant of an award of 558,060 shares of our common stock. Those shares of stock were issued at a value equal to 85% of the volume weighted average price of our common stock for the 20 trading days ended on February 8, 2002. The cash payment and fair value of the shares issued were recognized as expense (total of $428,000) during the first quarter of 2002.

The terms of our merger with Global Genomics contemplated that its management team would replace ours subsequent to the closing of the merger. On July 16, 2002, we terminated the employment of all of our then-current officers, resulting in total obligations for severance, stay bonuses, accrued vacation and other contractual payments of $1,394,000 (including the final $435,000 owed to Mr. Luchese as discussed above). Prior to the merger closing date, we advanced part of these amounts to three of our officers (through salary continuance), such that the total remaining obligation at the closing date was $1,179,000. Four of our officers agreed to accept an aggregate total of $177,000 of this amount in the form of our common stock, in lieu of cash, resulting in the issuance of 248,799 shares. Thus, the net cash payout in satisfaction of these obligations was $1,002,000, before taxes. The severance payments and fair value of the shares issued (total expense of $1,394,000) was recognized as expense during the third quarter of 2002 and is reported as a separate line item on the accompanying consolidated statement of operations, together with the final payment to Mr. Luchese discussed above.

License fees for 2002 include a $1,000,000 milestone payment received from Merck related to the commencement by Merck of a Phase I human clinical trial incorporating our TranzFect technology.

License fees for 2001 include a $3,750,000 up-front payment received from Vical related to a license of our TranzFect technology.

License fees for 2000 consist of a $2,000,000 signature payment received from Merck related to a license of our TranzFect technology.

From 1987 to 2000, we manufactured, marketed and distributed Titermax, an adjuvant used to produce immune responses in research animals. Effective June 15, 2000, we entered into a Purchase Agreement with Titermax USA, Inc. (an unaffiliated company) whereby Titermax USA purchased the worldwide rights to market and distribute Titermax, including all accounts receivable, inventory and other assets used in the Titermax business. The gross purchase price was $750,000, consisting of $100,000 in cash and a $650,000 five-year secured promissory note bearing interest of 10% annually. Net income associated with the Titermax

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activities included in income (loss) from discontinued operations was approximately $119,000 and $241,000 for 2000 and 1999, respectively. A gain related to the sale of $680,000 was recorded in 2000 and is also classified as discontinued operations.

From 1996 to 2002, we marketed the services of a small group of human resource professionals under the name of Spectrum Recruitment Research, or Spectrum, as a way of offsetting our cost of maintaining this function. In February 2002, the operations of Spectrum were terminated and the rights to use the Spectrum tradenames were transferred to Albert, Isaac & Alexander, Inc., a consulting firm comprised of our former Spectrum employees. Net income (loss) associated with the Spectrum activities included in income (loss) from operations was approximately $5,000, ($18,000), $146,000 and $75,000 for 2002, 2001, 2000, and 1999, respectively.

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MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read together with the discussion under Selected Financial Data and the financial statements and related notes included in this prospectus. This discussion contains forward-looking statements, based on current expectations and related to future events and our future financial performance, that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of many important factors, including those set forth under Risk Factors and elsewhere in this prospectus.

Overview

We are in the process of developing products, primarily in the areas of ribonucleic acid interference (RNAi) and small molecule therapeutics, for the human health care market. RNAi is a new technology for silencing genes in living cells and organisms. Development work on RNAi is still at an early stage, and we are aware of only two clinical tests of medical applications using RNAi that have yet been initiated by any party. In addition to our work in RNAi and small molecule therapeutics, we are involved in the development of a DNA-based HIV vaccine and have entered into strategic alliances with respect to the development of several other products using our other technologies.

Subsequent to our merger with Global Genomics, in July 2002, we modified our business strategy by discontinuing any further research and development efforts for our pre-merger pharmaceutical technologies and began to seek strategic relationships with other pharmaceutical companies to complete the development of those technologies. Instead of continuing research and development for those technologies, we focused our efforts on acquiring new technologies and products to serve as the foundation for the future of the company.

In April 2003, we acquired our first new technologies by entering into exclusive license agreements with the University of Massachusetts Medical School (UMass) covering potential applications for its proprietary RNAi technology in the treatment of specified diseases. At that time, we also acquired an exclusive license from UMass covering its proprietary technology with potential gene therapy applications within the area of cancer. In May 2003, we broadened our strategic alliance with UMass by acquiring an exclusive license from it covering a proprietary DNA-based HIV vaccine technology. In July 2004, we further expanded our strategic alliance with UMass by entering into a collaboration and invention disclosure agreement with UMass under which UMass will disclose to us certain new technologies developed at UMass over the next three years pertaining to RNAi, diabetes, obesity, neurodegenerative diseases (including amyotrophic lateral sclerosis, also known as Lou Gehrig s disease (ALS)) and cytomegalovirus (CMV) and will give us an option, upon making a specified payment, to negotiate an exclusive worldwide license to the disclosed technologies on commercially reasonable terms.

As part of our strategic alliance with UMass, we agreed to fund certain discovery and pre-clinical research at the medical school relating to the use of our technologies, licensed from UMass, for the development of therapeutic products within certain fields. Although we intend to internally fund the early stage development work for certain product applications (including obesity, type 2 diabetes and ALS) and may seek to fund the completion of the development of certain of these product applications (such as ALS), we may also seek to secure strategic alliances or license agreements with larger pharmaceutical companies to fund the early stage development work for other gene silencing product applications and for subsequent development of those potential products where we fund the early stage development work.

On October 4, 2004, we acquired all of the clinical and pharmaceutical and related intellectual property assets of Biorex Research & Development, RT (Biorex), a Hungary-based company focused on the development of novel small molecules with broad therapeutic applications in neurology, diabetes and cardiology. The acquired assets include three oral, clinical stage drug candidates and a library of 500 small molecule drug candidates. The acquisition positions us as a clinical-stage company with a Phase II trial for ALS with one of our new compounds, arimoclomol, expected to be initiated by the second quarter of 2005.

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We have not achieved profitability on a quarterly or annual basis and we expect to continue to incur significant additional losses over the next several years. Our net losses may increase from current levels primarily due to activities related to our collaborations, technology acquisitions, research and development programs and other general corporate activities. We anticipate that our operating results will fluctuate for the foreseeable future. Therefore, period-to-period comparisons should not be relied upon as predictive of the results in future periods.

To date, we have relied primarily upon the sale of equity securities and payments from our strategic partners and licensees to generate the funds needed to finance the implementation of our business plans. We will be required to obtain additional funding in order to execute our long-term business plans. Our sources of potential funding for the next several years are expected to consist primarily of proceeds from sales of equity, but could also include license and other fees, funded research and development payments, and milestone payments under existing and future collaborative arrangements.

Research and Development

Following our 2003 acquisition of rights from UMMS to the new technologies, we initiated research and development programs for products based upon those technologies. Expenditures for research and development activities related to continuing operations were $4,968,000 for the nine months ended September 30, 2004 and $4,388,000, $767,000 and $1,844,000 for the years ended December 31, 2003, 2002 and 2001, respectively, with research and development expenses representing approximately 45% and 39% of our total expenses for the nine months ended September 30, 2004 and fiscal 2003, respectively. Research and development expenses are further discussed below under Critical Accounting Policies and Estimates and Results of Operations.

In September 2003, we invested in a subsidiary to develop orally active small molecule-based drugs for the prevention, treatment and cure of obesity and type 2 diabetes. Utilizing the RNAi technology that we have licensed from UMMS, in combination with state of the art target identification methods, our subsidiary will focus on using a genomic and proteomic based drug discovery approach to accelerate the process of screening and identifying potential drug targets and pathways for these diseases to discover and develop molecular based medicines for the treatment of obesity and type 2 diabetes. We provided our subsidiary in September 2003 with initial capital of approximately $7,000,000 to fund the staffing of its operations with managerial and scientific personnel and its initial drug development activities.

In October 2004, we acquired all of the clinical, pharmaceutical and related intellectual property assets of Biorex Research & Development, RT, or Biorex, a company focused on the development of novel small molecules with broad therapeutic applications in neurology, diabetes and cardiology. The acquired assets include three oral, clinical stage drug candidates and a library of 500 small molecule drug candidates. We expect to initiate a Phase II trial for ALS with one of the compounds, arimoclomol, in the second quarter of 2005, and estimate that the Phase II trial will require us to expend approximately $5,000,000 over a period of twelve to eighteen months, including a $500,000 milestone payment that may become payable to Biorex under certain circumstances.

There is a risk that any drug discovery and development program may not produce revenue because of the risks inherent in drug discovery and development. Moreover, there are uncertainties specific to any new field of drug discovery, including RNAi. The successful development of any product candidate we develop is highly uncertain. We cannot reasonably estimate or know the nature, timing and costs of the efforts necessary to complete the development of, or the period in which material net cash inflows are expected to commence from any product candidate, due to the numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

Our ability to advance product candidates into pre-clinical and clinical trials.

The scope, rate and progress of our pre-clinical trials and other research and development activities.

The scope, rate of progress and cost of any clinical trials we commence.

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The cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights.

Future clinical trial results.

The terms and timing of any collaborative, licensing and other arrangements that we may establish.

The cost and timing of regulatory approvals.

The cost and timing of establishing sales, marketing and distribution capabilities.

The cost of establishing clinical and commercial supplies of our product candidates and any products that we may develop.

The effect of competing technological and market developments.

Any failure to complete any stage of the development of our products in a timely manner could have a material adverse effect on our operations, financial position and liquidity. A discussion of the risks and uncertainties associated with completing our projects on schedule, or at all, and the potential consequences of failing to do so, are set forth in the Risk Factors section of this prospectus.

Critical Accounting Policies and Estimates

Management s discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, management evaluates its estimates, including those related to revenue recognition, bad debts, impairment of long-lived assets, including finite lived intangible assets, accrued liabilities and certain expenses. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from these estimates under different assumptions or conditions.

Our significant accounting policies are summarized in Note 2 to our unaudited financial statements. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements:

Revenue Recognition

Nonrefundable license fee revenue is recognized when collectibility is reasonably assured, which is generally upon receipt, when no continuing involvement on our part is required and payment of the license fee represents the culmination of the earnings process. Nonrefundable license fees received subject to future performance by us or that are credited against future payments due to us are deferred and recognized as services are performed and collectibility is reasonably assured, which is generally upon receipt, or upon termination of the agreement and all related obligations thereunder, whichever is earlier. Our revenue recognition policy may require us to defer significant amounts of revenue.

Research and Development Expenses

Research and development expenses consist of costs incurred for direct and overhead-related research expenses and are expensed as incurred. Costs to acquire technologies which are utilized in research and development and which have no alternative future use are expensed when incurred. Technology developed for use in our products is expensed as incurred, until technological feasibility has been established. Expenditures, to date, have been classified as research and development expense in the consolidated statements of operations and we expect to continue to expense research and development for the foreseeable future.

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Stock-based Compensation

We grant stock options and warrants for a fixed number of shares to key employees and directors with an exercise price equal to the fair market value of the shares at the date of grant. We account for stock option grants and warrants in accordance with APB Opinion No. 25, *Accounting for Stock Issued to Employees* (APB 25) and related interpretations and, accordingly, recognize no compensation expense for the stock option grants and warrants issued to employees for which the terms are fixed.

For stock option grants and warrants which vest based on certain corporate performance criteria, compensation expense is recognized to the extent that the quoted market price per share exceeds the exercise price on the date such criteria are achieved or are probable. At each reporting period end, we must estimate the probability of the criteria specified in the stock based awards being met. Different assumptions in assessing this probability could result in additional compensation expense being recognized.

In October 1995, the FASB issued Statement of Financial Accounting Standards No. 123, *Accounting for Stock-based Compensation* (SFAS 123), which provides an alternative to APB 25 in accounting for stock-based compensation issued to employees. However, we have continued to account for stock-based compensation in accordance with APB 25. See Notes 2 and 13 to our audited financial statements.

We have also granted stock options and warrants to certain consultants and other third parties. Common stock, stock options and warrants granted to consultants and other third parties are accounted for in accordance with SFAS 123 and related interpretations and are valued at the fair market value of the common stock, options and warrants granted, as of the date of grant or services received, whichever is more reliably measurable. Expense is recognized in the period in which a performance commitment exists or the period in which the services are received, whichever is earlier. The Company anticipates that it will continue to rely on the use of consultants and that it will be required to expense the associated costs. The Company anticipates continuing the use of stock options to compensate employees, and continuing to expense the options in accordance with APB 25.

Impairment of Long-Lived Assets

We review long-lived assets, including finite lived intangible assets, for impairment on an annual basis, as of December 31, or on an interim basis if an event occurs that might reduce the fair value of such assets below their carrying values. An impairment loss would be recognized based on the difference between the carrying value of the asset and its estimated fair value, which would be determined based on either discounted future cash flows or other appropriate fair value methods.

In 2002, we recorded an impairment charge of $921,000 related to certain equipment and leasehold improvements based on our evaluation of the recoverability of the carrying amount of these assets in accordance with the FASB Statement of Financial Accounting Standards No. 144 *Accounting for the Impairment or Disposal of Long-Lived Assets* (SFAS 144). This impairment charge represented the total net book value of these assets. See Note 5 to our audited financial statements.

In accordance with the provisions of Accounting Principles Board Opinion No. 18, *The Equity Method of Accounting for Investments in Common Stock* (APB 18), we reviewed the net values on our balance sheet, as of September 30, 2003, assigned to Investment in Minority Owned Entity Acquired Developed Technology resulting from our acquisition of Blizzard Research and Development Company, or Blizzard. Blizzard was recorded as an acquired development stage company and there was an external valuation used for substantiation of the value of the technology and the investment, which was prepared as of the date of the announcement of the transaction February 11, 2002. For our annual audit of fiscal 2002, potential impairment was addressed and the valuation was updated internally using similar methods used for the original investment. Based upon our analysis there was no impairment. Our auditors for that fiscal year concurred. We continued to measure impairment through these methods on a quarterly basis and through the second quarter of 2003, we continued to believe that Blizzard s proprietary technology was commercially viable, subject to its ability to obtain significant financing. At that time we believed there was no impairment. APB 18 requires that a loss in value of an investment, which is other than a temporary decline, should be recognized as an impairment loss.

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Through the third quarter of 2003, Blizzard had been unsuccessful in its attempts to raise a significant amount of financing necessary for it to pursue its commercialization strategy for its products and we subsequently decided not to further invest in this entity. We believe that Blizzard was unable to obtain substantial third party financing primarily because (1) the genomics market, which the Blizzard technology was targeting, had begun to decline in 2003, (2) Blizzard had not completed a production unit of their principal product for testing by potential investors, and (3) certain investors were unwilling to invest without a simultaneous infusion of additional capital from us as Blizzard s 40% shareholder, and we were unable to reach satisfactory terms for such financing. Our analysis consisted of a review of the financial projections prepared by Blizzard, application of a discounted cash flow valuation model of Blizzard s projected cash flows, and consideration of other qualitative factors such as Blizzard s termination of its employees, its office lease and its engagement of its investment banker. Based upon the quantitative and qualitative factors described above, in addition to others, our management determined that the estimated fair value of our investment in Blizzard was $0 and that an impairment charge of $5,869,000 was necessary. In considering the timing of the write-off, we looked to Blizzard s termination of its employees, lease and investment banker in October 2003 as affirmation of conditions that existed at September 2003, and therefore recorded the write-off in the third quarter of 2003. The write-off had no impact upon our cash or working capital position.

Estimated Facility Abandonment Accrual

During 2002, we recorded a loss of $478,000 associated with the closure of our Atlanta headquarters and relocation to Los Angeles, subsequent to our merger with Global Genomics. This loss represents the total remaining lease obligations and estimated operating costs through the remainder of the lease term, less estimated sublease income. This accrued charge was combined with deferred rent of $85,000 already recorded, so that the total accrual related to the facility abandonment was $563,000 as of December 31, 2002. To the extent that we are able to negotiate a termination of the Atlanta lease, our operating costs are different or our estimates related to sublease income are different, the total loss ultimately recognized may be different than the amount recorded as of December 31, 2002 and such difference may be material. As of September 30, 2004, we have a remaining lease closure accrual of $339,000.

Quarterly Financial Data

The following table sets forth unaudited statement of operations data for our most recent two completed fiscal years. This quarterly information has been derived from our unaudited financial statements and, in the opinion of management, includes all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the information for the periods covered. The quarterly financial data should be read in

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conjunction with our financial statements and related notes. The operating results for any quarter are not necessarily indicative of the operating results for any future period.

	Quarter Ended			
	March 31	June 30	September 30	December 31
	(In thousands, except per share data)			
2004				
Total revenues	$ 100	$ 228	$	$ N/A
Net loss	(3,774)	$(4,061)	$(2,796)	$ N/A
Basic and diluted loss per common share:				
Net loss	$ (0.11)	$ (0.12)	$ (0.08)	$ N/A
2003				
Total revenues	$	$ 3	$ 1	$ 90
Net loss	(914)	(5,046)	(8,777)	(3,108)
Basic and diluted loss per common share:				
Net loss	$ (0.04)	$ (0.21)	$ (0.30)	$ (0.09)
2002				
Total revenues	$ 1,054	$ 15	$ 1	$ 50
Gross profit	11			
Net loss	(179)	(931)	(2,547)	(2,519)
Basic and diluted loss per common share:				
Net loss	$ (0.02)	$ (0.08)	$ (0.13)	$ (0.12)

Liquidity and Capital Resources

At September 30, 2004, we had cash, cash equivalents and short-term investments of $4,437,000 and total assets of $5,892,000 compared to $11,644,000 and $12,324,000, respectively, at December 31, 2003. Working capital totaled $2,906,000 at September 30, 2004, compared to $10,761,000 at December 31, 2003.

To date, we have relied primarily upon selling equity securities and payments from our strategic partners and licensees to generate funds needed to finance the implementation of our plans of operations. As a result of the $21.3 million equity financing that we completed in January 2005, we believe that the cash and short-term investments balances will be sufficient to meet our cash requirements through the second quarter of 2006. We nonetheless will be required to obtain significant additional funding in order to execute our business plans. We cannot assure that additional funding will be available on favorable terms, if at all. If we fail to obtain additional funding when needed, we may not be able to execute our business plan and our business may suffer, which would have a material adverse effect on our financial position, results of operations and cash flows.

In the nine-month period ended September 30, 2004, net cash used in investing activities consisted of $321,000 for the purchase of property and equipment primarily relating to the establishment of our obesity and diabetes subsidiary and its continuing needs. We expect capital spending to remain at current levels for the remainder of 2004, and to increase in the second half of 2005 if adequate funding is obtained to provide for increased research and development activities. Net cash provided by investing activities for the year ended December 31, 2003 was $1,200,000, compared to net cash used in investing activities of $2,000,000 in 2002. The change was primarily due to (i) the purchase, in 2002, of held-to-maturity investments, which subsequently matured in 2003, (ii) an increase in fixed asset purchases in 2003, as compared to 2002 and (iii) the absence of acquisition costs in 2003, as compared to 2002.

Cash provided by financing activities in the nine-month period ended September 30, 2004 was $710,000. The cash provided was the result of $526,000 received upon the exercise of stock options and warrants and the sale of shares to a single purchaser for $184,000. Net cash provided by financing activities in the nine-month period ended September 30, 2003 was $14,340,000. Net cash provided by financing activities for the year ended December 31, 2003 was $14,400,000, compared to net cash provided by financing activities of $628,000

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in 2002. In May and September 2003, we completed private equity financings raising net proceeds of $4,851,000 and $7,667,000, respectively. In the nine month period ended September 30, 2003 and for the year ended December 31, 2003, we also received proceeds from the exercise of stock options and warrants totaling $1,822,000 and $1,900,000, respectively. Cash provided by financing activities in 2002 was comprised primarily of the exercise of stock options and warrants.

Our net loss for the nine-month period ended September 30, 2004 was $10,630,000, which resulted in net cash used in operating activities of $7,596,000. Adjustments to reconcile net loss to net cash used in operating activities for the nine-month period ending September 30, 2004 were primarily $940,000 of common stock, options and warrants issued in lieu of cash for selling, general and administrative services. Additionally, we issued $382,000 of common stock, options and warrants in lieu of cash in connection with certain license fees and $952,000 in connection with research and development activities. Our net loss for the nine-month period ended September 30, 2003 was $14,737,000, which resulted in net cash used in operating activities of $3,033,000. Adjustments to reconcile net loss to net cash used in operating activities for the nine-month period ended September 30, 2003 were primarily $6,114,000 of losses from a minority-owned entity, $1,822,000 of common stock, options and warrants issued in lieu of cash for selling, general and administrative services, $1,829,000 of common stock issued in connection with certain license agreements and $723,000 of common stock issued in connection with research and development activities.

Net cash used in operating activities for the year ended December 31, 2003 was $4,300,000, compared to net cash used in operating activities of $3,500,000 in 2002. Net cash inflows decreased, due primarily to significantly higher license revenues in 2002, relating to a $1,000,000 milestone payment received from Merck, during the first quarter, related to the commencement by Merck of a Phase I human clinical trial incorporating our TranzFect technology. In 2002, we paid $1,000,000 in severance and other contractual payments to officers. In 2003, we paid $1,100,000 in licensing, patent and sponsored research fees in connection with our new business strategy.

Based on our internal projections of expected expenses, we believe that we will have adequate working capital to allow us to operate at our currently planned levels through the second quarter of 2006. Our strategic alliance with UMMS may require us to make significant expenditures to fund research at that medical institution relating to developing therapeutic products based on that institution s proprietary gene silencing technology that has been licensed to us. The aggregate amount of these expenditures was approximately $2,010,000 during 2004, of which $1,434,000 had been expensed through September 30, 2004, and is expected under certain circumstances to be approximately $2,375,000 during 2005.

We will require additional capital in order to fund ongoing research and development related to the drugs acquired from Biorex in October 2004. We expect to initiate a Phase II trial for ALS with one of the compounds, arimoclomol, in the second quarter of 2005, and estimate that the Phase II trial will require us to expend approximately $5,000,000 over a period of twelve to eighteen months, including milestone payments that may become payable to Biorex under certain circumstances.

We also may require additional working capital in order to fund any product acquisitions that we consummate. Any additional capital requirements may be provided by potential milestone payments pursuant to our licenses with Merck & Co., or Merck, and Vical Incorporated, or Vical, both of which relate to TranzFect, or by potential payments from future strategic alliance partners or licensees of our technologies. However, Merck is at an early stage of clinical trials of a product utilizing TranzFect and Vical has only recently commenced a Phase I clinical trial of a product using Tranzfect, so there is likely to be a substantial period of time, if ever, before we receive any further significant payments from Merck or Vical.

We intend also to pursue other sources of capital, although we do not currently have commitments from any third parties to provide us with capital. The results of our technology licensing efforts and the actual proceeds of any fund-raising activities will determine our ongoing ability to operate as a going concern. Our ability to obtain future financings through joint ventures, product licensing arrangements, equity financings or otherwise is subject to market conditions and our ability to identify parties that are willing and able to enter into such arrangements on terms that are satisfactory to us. There can be no assurance that we will be able to obtain future financing from these sources. Our ability to obtain future financings may also be limited by our

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ineligibility until April 2005 to register resales by investors of our common stock on a Form S-3 registration statement (although we remain eligible to register such resales on a Form S-1 registration statement), which resulted from the fact that our annual report for the year ending December 31, 2003 was not filed by the deadline under the rules of the Securities and Exchange Commission for that filing. Our ineligibility to register resales on Form S-3 may have created liability under certain of our registration rights agreements if we are not deemed to have amended certain existing registrations in a reasonable period of time so as to permit the holders to again be able to sell their shares under those registrations.

We expect to incur significant losses for the foreseeable future and there can be no assurance that we will become profitable. Even if we become profitable, we may not be able to sustain that profitability.

The above statements regarding our plans and expectations for future financing are forward-looking statements that are subject to a number of risks and uncertainties. Our ability to obtain future financings through joint ventures, product licensing arrangements, equity financings or otherwise is subject to market conditions and our ability to identify parties that are willing and able to enter into such arrangements on terms that are satisfactory to us. There can be no assurance that we will be able to obtain future financing from these sources. Additionally, depending upon the outcome of our fund raising efforts, the accompanying financial information may not necessarily be indicative of future operating results or future financial condition.

Contractual Obligations

We have no current commitments for capital expenditures in 2005; however, we anticipate incurring capital expenditures in connection with the expansion of our subsidiary s laboratory. We have no committed lines of credit or other committed funding or long-term debt. As of December 31, 2004, minimum annual future obligations for operating leases, minimum annual future obligations under various license agreements and minimum annual future obligations under employment agreements consist of the following:

	Operating Leases	License Agreements	Employment Agreements	Total
		(In thousands)		
2005	573	2,560	976	4,108
2006	342	1,459	715	2,516
2007	229	310	240	779
2008	76	330	240	646
2009		330		330
2010 and thereafter		990		990
Total	$1,220	$5,979	$2,170	$9,370

We have employment agreements with our executive officers, the terms of which expire at various times through July 2006. Certain agreements, which have been revised from time to time, provide for minimum salary levels, adjusted annually at the Compensation Committee s determination, as well as for minimum bonuses that are payable. The reported commitment for employment agreements includes, among other things, a total of $1,028,000 of compensation payable to members of our Scientific Advisory Board, and a total of $943,000 of salary and guaranteed bonuses payable to our executives.

License and Collaboration Agreements

In April 2003, we acquired new technologies by entering into exclusive license arrangements with UMMS covering potential applications of the medical institution s proprietary RNAi technology in the treatment of specified diseases, including those within the areas of obesity, type 2 diabetes ALS, CMV and covering UMMS s proprietary technology with potential gene therapy applications within the area of cancer. In consideration of the licenses, we made cash payments to UMMS totaling $186,000 and issued it a total of 1,613,258 shares of our common stock which were valued, for financial statement purposes, at $1,468,000. In May 2003, we broadened our strategic alliance with UMMS by acquiring an exclusive license from that

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institution covering a proprietary DNA-based HIV vaccine technology. In consideration of this license, we made cash payments to UMMS totaling $18,000 and issued it 215,101 shares of our common stock which were valued, for financial statement purposes, at $361,000. In July 2004, we further expanded our strategic alliance with UMMS by entering into a collaboration and invention disclosure agreement with UMMS under which UMMS will disclose to us certain new technologies developed at UMMS over the next three years pertaining to RNAi, diabetes, obesity, neurodegenerative diseases (including ALS) and CMV and will give the Company an option, upon making a specified payment, to negotiate an exclusive worldwide license to the disclosed technologies on commercially reasonable terms. As of December 31, 2004, we have made cash payments to UMMS totaling $187,500 pursuant to the collaboration agreement with UMMS, but have not yet acquired or made any payments to acquire any options under that agreement.

In May 2004, we licensed from the technology transfer company of the Imperial College of Science, Technology & Medicine, or Imperial College, the exclusive rights to intellectual property covering a drug screening method using RIP 140, which is a nuclear hormone co-repressor that has been shown to regulate fat accumulation. In consideration of the license, we made cash payments to Imperial College totaling $87,000 and issued it a total of 75,000 shares of our common stock which were valued, for financial statement purposes, at $108,000. As the drug screening technology from Imperial College and the RNAi technology from UMMS had not achieved technological feasibility at the time of their license by us, had no alternative future uses and, therefore, no separate economic value, the aggregate total of $195,000 in cash payments and stock issued for acquisition of the technology was expensed as research and development in our financial statements.

Net Operating Loss Carryforward

At December 31, 2003, we had consolidated net operating loss carryforwards for income tax purposes of $67,200,000, which will expire in 2004 through 2023 if not utilized. We also have research and development tax credits and orphan drug tax credits available to reduce income taxes, if any, of $6,600,000, which will expire in 2004 through 2020 if not utilized. Based on an assessment of all available evidence including, but not limited to, our limited operating history in our core business and lack of profitability, uncertainties of the commercial viability of our technology, the impact of government regulation and healthcare reform initiatives, and other risks normally associated with biotechnology companies, we have concluded that it is more likely than not that these net operating loss carryforwards and credits will not be realized and, as a result, a 100% deferred tax valuation allowance has been recorded against these assets.

Impairment Test of Intangible Assets

In accordance with the provisions of Accounting Principles Board Opinion No. 18, *The Equity Method of Accounting for Investments in Common Stock* (APB 18), we reviewed the net values on our balance sheet, as of September 30, 2003, assigned to Investment in Minority Owned Entity Acquired Developed Technology resulting from our acquisition of Blizzard. Blizzard was recorded as an acquired development stage company and there was an external valuation used for substantiation of the value of the technology and the investment, which was prepared as of the date of the announcement of the transaction February 11, 2002. For our annual audit of fiscal 2002, potential impairment was addressed and the valuation was updated internally using similar methods used for the original investment. Based upon our analysis there was no impairment. Our auditors for that fiscal year concurred. We continued to measure impairment through these methods on a quarterly basis and through the second quarter of 2003, we continued to believe that Blizzard s proprietary technology was commercially viable, subject to its ability to obtain significant financing. At that time we believed there was no impairment. APB 18 requires that a loss in value of an investment, which is other than a temporary decline, should be recognized as an impairment loss. Through the third quarter of 2003, Blizzard had been unsuccessful in its attempts to raise a significant amount of financing necessary for it to pursue its commercialization strategy for its products and we subsequently decided not to further invest in this entity. We believe that Blizzard was unable to obtain substantial third party financing primarily because (1) the genomics market, which the Blizzard technology was targeting, had begun to decline in 2003, (2) Blizzard had not completed a production unit of their principal product for testing by potential investors, and (3) certain investors were unwilling to invest without a simultaneous infusion of additional capital from us as

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Blizzard s 40% shareholder, and we were unable to reach satisfactory terms for such financing. Our analysis consisted of a review of the financial projections prepared by Blizzard, application of a discounted cash flow valuation model of Blizzard s projected cash flows, and consideration of other qualitative factors such as Blizzard s termination of its employees, its office lease and its engagement of its investment banker. Based upon the quantitative and qualitative factors described above, in addition to others, our management determined that the estimated fair value of our investment in Blizzard was $0 and that an impairment charge of $5,869,000 was necessary. In considering the timing of the write-off, we looked to Blizzard s termination of its employees, lease and investment banker in October 2003 as affirmation of conditions that existed at September 2003, and therefore recorded the write-off in the third quarter of 2003. The write-off had no impact upon our cash or working capital position.

Results of Operations

Comparison of Three and Nine Months Ended September 30, 2004 and 2003

We recorded net losses of $2,796,000 and $10,630,000 for the three and nine-month periods ended September 30, 2004, respectively, as compared to $8,777,000 and $14,737,000 for the same periods in 2003.

We earned no licensing fees during the three-months ended September 30, 2004 relating to the licensing of FLOCOR™ technology to SynthRx, Inc. (SynthRx). During the nine-month period ended September 30, 2004, we earned $328,000 of license fees relating to the SynthRx license and a milestone payment from one of our other licensees. No license fee income was recorded during the three-month or nine-month periods ended September 30, 2003.

Research and development expenses were $1,327,000 and $4,968,000 during the three and nine-month periods ended September 30, 2004, as compared to $1,459,000 and $3,732,000 for the same periods in 2003. The research and development expenses incurred in the first nine months of 2004 relate to (i) our commitments to fund research and development activities conducted at UMass and Massachusetts General Hospital (Mass General), and (ii) the research and development activities of CytRx Laboratories. Although our actual research and development expenses for the balance of 2004 could vary substantially, our research and development expense will remain substantial in the future as a result of our commitment to fund research and development activities conducted at UMass related to the technologies covered by the UMass license agreements, our agreement to make specific cash payments to UMass under our collaboration and invention disclosure agreement in consideration of their agreeing to disclose certain inventions to us and providing us with the right to acquire an option to negotiate exclusive licenses for those disclosed technologies, our commitment to fund the on-going operations of CytRx Laboratories and our ongoing research and development expenses related to the drug candidates purchased from Biorex. Included in each of the periods presented in the accompanying condensed consolidated statements of operations, certain vesting criteria of stock options issued to consultants were achieved, resulting in aggregate non-cash charges of $40,000 and $1,334,000 during the three and nine-month periods ended September 30, 2004, respectively, and $1,072,000 for the three months ended and $2,901,000 for the nine months ended, September 30, 2003, respectively. No common stock and stock options were issued for license fees during the three months ended September 30, 2003 or the three months ended September 30, 2004, and thus no expense was incurred in those periods. Common stock and stock options issued for license fees during the nine-month periods ending September 30, 2003 and September 30, 2004 resulted in aggregate non-cash charges of $1,829,000 and $382,000, respectively.

Depreciation and amortization expense was $32,000 and $74,000 during the three month and nine-month periods ended September 30, 2004, as compared to $183,000 and $549,000 for the same periods in 2003. The amounts for 2004 consist almost entirely of depreciation on assets acquired for our obesity and diabetes subsidiary during the first half of 2004. The amounts for 2003 consist almost entirely of amortization of intangible assets of Global Genomics.

From time to time, we issue shares of our common stock or warrants to purchase shares of our common stock to consultants and other service providers in exchange for services. For financial statement purposes, we value these shares of common stock, stock options, or warrants at the fair market value of the common stock,

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stock options or warrants granted, or the services received, whichever is more reliably measurable, and we recognize the expense in the period in which a performance commitment exists or the period in which the services are received, whichever is earlier. During each of the periods presented in the accompanying condensed consolidated statements of operations, certain vesting criteria of stock options and warrants issued to consultants were achieved, resulting in aggregate non-cash charges of $134,000 and $940,000 during the three and nine-months ended September 30, 2004 and $184,000 and $1,822,000 for the three and nine-months periods ended September 30, 2003.

Selling, general and administrative expenses incurred were $1,360,000 and $5,143,000 during the three and nine-month periods ended September 30, 2004, as compared to $1,016,000 and $2,570,000 for the same periods in 2003. The higher expenses incurred during the nine-month period ended September 30, 2004 were the result of higher accounting fees associated with our change in auditors, severance payments to certain former executives, and legal fees related to both of the foregoing during the second quarter of 2004. We anticipate selling, general and administrative expenses to remain consistent with those of the past quarter.

Interest income was $11,000 and $51,000 for the three and nine-month periods ended September 30, 2004, as compared to $20,000 and $47,000 for the three and nine-month periods ended September 30, 2003. The increase in interest income is due to the higher levels of cash and investments we held during the first eight months of 2004 compared to the smaller amounts in the 2003 periods.

For the three and nine-months ended September 30, 2004, we recorded $46,000 and $116,000 reductions to our losses as a result of the minority interest share in the losses of CytRx Laboratories. This amount is reported as a separate line item in the accompanying condensed consolidated statements of operations.

We have recorded our portion of the losses of Blizzard Genomics, an unconsolidated entity in which we own 40% of the outstanding equity interests, using the equity method. For each of the three and nine-month periods ended September 30, 2003, we recorded $87,000 and $245,000, respectively, as our share in the losses of Blizzard Genomics. Since writing off our entire investment in Blizzard Genomics at the end of the third quarter of fiscal 2003, we did not record any losses from our investment in Blizzard Genomics for the three and nine-months ended September 30, 2004.

Comparison of Fiscal Years 2003, 2002 and 2001

Revenue

	Year Ended December 31, ?		
	2003	**2002**	**2001**
		(In thousands)	
Service revenue	$	$ 23	$ 101
License fees	94	1,051	3,751
Grant revenue		46	157
	$ 94	$1,120	$4,009

Service revenue From 1996 to 2002, we marketed the services of a small group of human resources professionals under the name of Spectrum Recruitment Research as a way of offsetting our cost of maintaining this function. In February 2002, the operations of Spectrum were terminated and the rights to use the Spectrum tradenames were transferred to Albert, Isaac & Alexander, Inc., a consulting firm comprised of former Spectrum employees. Service revenues related to Spectrum were $22,000 in 2002 and $101,000 in 2001. Cost of service revenues was $11,000 in 2002 and $71,000 in 2001, or 50% and 70% of service revenues, respectively.

Grant revenue Grant income was $0 in 2003 compared to $46,000 in 2002 and $157,000 in 2001. Grant income primarily relates to several Small Business Innovative Research, or SBIR, grants we received from the NIH in support of our Flocor studies. We did not seek NIH or other similar grants that would provide us with any funding during 2004.

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License fees License fee income was $94,000 in 2003, $1,051,000 in 2002 and $3,751,000 in 2001 and relates primarily to our licenses of TranzFect to Vical and Merck. License fees for 2002 include a $1,000,000 milestone payment received from Merck, during the first quarter, related to the commencement by Merck of a Phase I human clinical trial incorporating our TranzFect technology. License fees in 2001 include a $3,750,000 up-front payment received from Vical related to a license of our TranzFect technology. Other than a $100,000 milestone fee that we received from Vical in April 2004, we did not receive any significant licensing fee revenue during 2004 with respect to either our Flocor or TranzFect technologies.

Research and development expense

	Year Ended December 31,		
	2003	2002	2001
	(In thousands)		
Research and development expense	$1,485	$689	$1,844
Non-cash research and development expense	2,903		
Acquired in-process research and development expense		78	
	$4,388	$767	$1,844

Research and development expense during 2003 were $4,388,000 versus $767,000 in 2002 and $1,844,000 in 2001. In 2003, as a result of the change in our business strategy following our merger with Global Genomics, our research and development expenditures related primarily to new licensing and sponsored research agreements, and the commencement of our subsidiary s operations. Research and development expenditures for 2002 and 2001 were primarily related to the development of our Flocor technology. The research and development expense for 2002 also includes $78,000 which was allocated from the purchase price of Global Genomics as in-process research and development and, therefore, expensed in connection with the acquisition. Our research and development expenditures for 2004 were somewhat larger than were our research and development expenditures in 2003.

Selling, general and administrative expense

	Year Ended December 31,		
	2003	2002	2001
	(In thousands)		
Common stock, stock options and warrants issued for selling, general and administrative expense	$3,148	$ 230	$1,441
Selling, general and administrative expense	3,841	1,703	1,161
	$6,989	$1,933	$2,602

We recorded non-cash charges of $3,148,000, $230,000, and $1,441,000 during 2003, 2002 and 2001, respectively, related to the issuance of stock warrants to certain consultants and certain vesting events for management stock options. These fees relate primarily to common stock, stock options and warrants issued in connection with the engagement and retention of financial and business development advisors. The significant increase in 2003 was due primarily to the change in our business strategy, which led to an increase in activity and, as a result, a greater use of consultants for financial and business development advisory services. The difference between 2002 and 2001 is primarily due to the warrant that we granted to Cappello Capital, in 2001, as compensation for its services.

Selling, general and administrative expenses during 2003 were $3,841,000 as compared to $1,703,000 in 2002 and $1,161,000 in 2001. The increase in 2003 was due primarily to the change in our business strategy following our merger with Global Genomics, which led to an increase in activity and, as a result, a greater use of consultants for technical, financial and business development advisory services, in addition to higher legal and accounting costs. The increase from 2001 to 2002 is due primarily to the increase in the percentage of facilities costs allocated to administrative expense versus research and development expense, and higher legal and accounting costs subsequent to the merger. Our legal and accounting costs increased during 2004 as a

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result of certain costs associated with our change of accountants during the first half of 2004 and certain pending legal proceedings.

Depreciation and amortization expense Depreciation and amortization expense was $2,000, $794,000 and $586,000 in 2003, 2002 and 2001, respectively. Due to the impairment charge (discussed below), our property balances had been reduced to a nominal amount as of December 31, 2002 and, therefore, our depreciation expense was nominal in 2004 and will be nominal for the foreseeable future.

Severance and other contractual payments to officers Pursuant to his employment agreement, our former President and CEO, Jack Luchese, was entitled to a payment of $435,000 upon the execution of the merger agreement between Global Genomics and us and an additional $435,000 upon the closing of the merger. In order to reduce the amount of cash that we had to pay to Mr. Luchese, Mr. Luchese and we agreed that approximately $325,200 of the first $435,000 payment would be satisfied by CytRx granting a stock award to Mr. Luchese under our 2000 Long-Term Incentive Plan pursuant to which we issued Mr. Luchese 558,060 shares of our common stock. Those shares of stock were issued at a value equal to 85% of the volume weighted average price of our common stock for the 20 trading days ended on February 8, 2002. The cash payment and fair value of the shares issued were recognized as expense (total of $428,000) during the first quarter of 2002.

The terms of our merger with Global Genomics contemplated that their management team would replace ours subsequent to the closing of the merger. On July 16, 2002, we terminated the employment of all of our then current officers, resulting in total obligations for severance, stay bonuses, accrued vacation and other contractual payments of $1,394,000 (including the final $435,000 owed to Mr. Luchese as discussed above). Prior to the merger closing date, we advanced part of these amounts to three of our officers (through salary continuance), such that the total remaining obligation at the closing date was $1,179,000. Four of our officers agreed to accept an aggregate total of $177,000 of this amount in the form of our Common Stock in lieu of cash, resulting in the issuance of 248,799 shares. Thus, the net cash payout in satisfaction of these obligations was $1,002,000, before taxes. The severance payments and fair value of the shares issued (total expense of $1,394,000) was recognized as expense during the third quarter of 2002 and is reported as a separate line item on the accompanying consolidated statement of operations, together with the final payment to Mr. Luchese discussed above.

Asset impairment charge During the fourth quarter of 2002, we recognized an asset impairment charge of approximately $921,000 related to our equipment and facility used for Flocor production. We recorded an impairment loss equal to the net book value of the equipment and related leasehold improvements.

Loss on facility abandonment During the fourth quarter of 2002, we recognized a loss of $478,000 associated with the closure of our Atlanta headquarters and relocation to Los Angeles subsequent to our merger with Global Genomics. This loss represents the difference between the total remaining lease obligations and estimated operating costs through the remainder of the lease, which expires in 2008, less estimated sublease income.

Interest income Interest income was $82,000 in 2003 as compared to $96,000 in 2002 and $162,000 in 2001. The variance between years is primarily attributable to fluctuating cash balances.

Equity Losses from Minority-Owned Entity

	Year Ended December 31,		
	2003	2002	2001
	(In thousands)		
Equity losses from minority-owned entity	$ 245	$330	$
Asset impairment charge	5,869		
Amortization of acquired developed technology	548	335	
	$6,662	$665	$

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We record our portion of the net loss of Blizzard in accordance with the equity method of accounting. In 2003, we recorded $6,662,000 in equity losses, of which $5,869,000 was an asset impairment charge, $237,000 was our 40% share of the net loss in Blizzard and $731,000 was amortization of acquired developed technology. For the period July 19, 2002 (date of acquisition of Global Genomics) to December 31, 2002, we recorded $665,000 in equity losses, of which $330,000 was our share in the net loss of Blizzard and $335,000 was amortization of acquired developed technology.

Minority interest in losses of subsidiary We recorded $20,000 related to the 5% minority interest in losses of our subsidiary, which we established in September 2003.

Recently Issued Accounting Standards

In March 2004, the FASB published an Exposure Draft, Share-Based Payment, an Amendment of FASB Statements No. 123 and 95. The proposed change in accounting would replace existing requirements under SFAS No. 123 and APB Opinion No. 25. The proposed statement would require public companies to recognize the cost of employee services received in exchange for equity instruments, based on the grant-date fair value of those instruments, with limited exceptions. The proposed statement would also affect the pattern in which compensation cost would be recognized, the accounting for employee share purchase plans, and the accounting for income tax effects of share-based payment transactions. The Exposure Draft also notes that the use of a lattice model, such as the binomial model, to determine the fair value of employee stock options, is preferable. The Company currently uses the Black-Scholes pricing model to determine the fair value of its employee stock options. Use of a lattice model to determine the fair value of employee stock options may result in compensation cost materially different from those pro forma costs disclosed in Note 2 to the condensed consolidated financial information. The Company is currently determining what impact the proposed statement would have on its results of operations or financial position.

In May 2003, the FASB issued SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity* (SFAS 150). This statement changes the classification of certain financial instruments from equity to liabilities. The three types of financial instruments requiring the change in classification are: (1) mandatorily redeemable shares, which the issuing company is obligated to buy back in exchange for cash or other assets; (2) put options and forward purchase contracts; and (3) obligations that can be settled with shares, the monetary value of which is fixed, tied solely or predominantly to a variable such as a market index, or varies inversely with the value of the issuer s shares. This statement is effective for all financial instruments entered into or modified after May 31, 2003, and is otherwise effective at the beginning of the first interim period beginning after June 15, 2003. We adopted SFAS 150 as of July 1, 2003, which did not have a material impact on our consolidated financial statements.

Related Party Transactions

Dr. Michael Czech, a 5% shareholder of our subsidiary (see Note 10 to our audited financial statements) and a member of our and our subsidiary s Scientific Advisory Boards, is an employee of UMMS and party, as the principal investigator, to a sponsored research agreement between UMMS and us. We recorded a minority interest liability of $350,000 representing the 5% interest in our subsidiary held by Dr. Czech. Additionally, we have recorded the fair value of 300,000 shares of our common stock as additional paid-in capital for our right to call and the Dr. Czech s right to put the remaining 5% interest to us in exchange for a guaranteed amount of 300,000 shares of our common stock. The fair value of these shares on the purchase date was approximately $723,000. During 2003, Dr. Czech was paid $18,000 for his Scientific Advisory Board services. During 2003, we paid UMMS $403,000 under a sponsored research agreement to fund a portion of Dr. Czech s research. During the three months and year ended December 31, 2004, we incurred expenses related to Dr. Czech s sponsored research agreement of $202,000 and $806,000, respectively, and we paid $22,500 and $75,000, respectively, to Dr. Czech for his services on the Scientific Advisory Board. No payments were made to UMMS under the sponsored research agreement or to Dr. Czech for the same periods in fiscal 2003.

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Off-Balance Sheet Arrangements

We have not entered into off-balance sheet financing arrangements, other than operating leases.

Quantitative and Qualitative Disclosures About Market Risk

Our financial investments that are sensitive to changes in interest rates are our investments and cash equivalents. As of December 31, 2004, we held no investments other than amounts invested in money market accounts. We are not subject to any other material market risks.

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CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Effective as of January 20, 2004, the Audit Committee of our board of directors dismissed Ernst & Young LLP, or E&Y, as our independent auditors. Effective as of January 30, 2004, our Audit Committee engaged PricewaterhouseCoopers LLP, or PwC, as our new independent auditors and to audit our financial statements for the year ended December 31, 2003. During the years ended December 31, 2002 and December 31, 2001 and the subsequent period through January 30, 2004, neither we nor anyone on our behalf consulted with PwC regarding either (i) the application of accounting principles to a specified transaction, either completed or proposed or the type of audit opinion that might be rendered on our financial statements, and either a written report was provided to us or oral advice was provided that PwC concluded was an important factor considered by us in reaching a decision as to the accounting, auditing or financial reporting issue; or (ii) any matter that was either the subject of a disagreement, as that term is defined in Item 304(a)(1)(iv) of SEC Regulation S-K and the related instructions thereof, or a reportable event, as that term is defined in Item 304(a)(1)(v) of SEC Regulation S-K.

On April 12, 2004, our Audit Committee dismissed PwC as our independent auditors. PwC was dismissed prior to completing its audit procedures and did not issue any report on our financial statements. On April 14, 2004, our Audit Committee engaged BDO Seidman, LLP, or BDO, which completed its client acceptance process on that date, to serve as our independent auditors and to audit our financial statements for the year ended December 31, 2003. Based on our desire to have the audit of these financial statements completed in as expeditious a fashion as possible, our Audit Committee had concluded that it was in our best interests to dismiss PwC and to engage new independent accountants to complete the audit of these financial statements.

During the period from January 30, 2004 through April 12, 2004, there had been no disagreements with PwC on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements if not resolved to the satisfaction of PwC would have caused it to make reference thereto in its report had it completed an audit and issued a report on our financial statements, except as disclosed in the sixth paragraph below. In addition, for the same period, there had been no reportable events (as defined in SEC Regulation S-K Item 304(a)(1)(v)), except as described in the sixth paragraph below. We recorded all material adjustments that were communicated to us by PwC during PwC s engagement or to BDO prior to BDO s engagement.

In our Current Report on Form 8-K filed with the SEC on April 1, 2004, we indicated that we were reviewing, with the assistance of PwC, the accounting treatment of our July 2002 acquisition of Global Genomics and Global Genomics assets at the time of its merger with us, which included Global Genomics investments in two genomics companies, Blizzard and Psynomics. These investments had an aggregate carrying value on our financial statements, as of September 30, 2003, of approximately $5.87 million. This accounting review delayed the completion of our financial statements for the year ended December 31, 2003 and the filing with the SEC of our Annual Report on Form 10-K.

Although we had previously disclosed, in our Current Report on Form 8-K dated January 16, 2004, that we would write off our investments in Blizzard and Psynomics in the quarter ended December 31, 2003, the following principal issues were identified during our accounting review:

- Whether a portion of the purchase price in our July 2002 merger with Global Genomics (accounted for as a purchase of a group of assets, not a business combination) should have been allocated to an acquired assembled workforce, which would have reduced the amount of the purchase price allocated to the Blizzard and Psynomics investments ($7,309,000 and $78,000, respectively) and whether the amount originally determined to be the fair value of the Blizzard investment was overstated.

- Whether an other-than-temporary impairment charge should have been taken by us against the appropriate carrying value of the Blizzard investment earlier than in the fourth quarter of 2003.

The resolution of these issues in a manner that would result in a different accounting than originally reported would have had no effect on our cash or working capital position for any accounting period nor would it have had a material effect on our net worth as of December 31, 2003. One possible resolution could,

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however, have resulted in our net loss for the year ended December 31, 2002 being materially larger than that reported by us in our financial statements for that year and in our reporting a net worth significantly lower than the net worth we reported in our financial statements for that year. Such a resolution, in turn, could have required a restatement of those financial statements as well as our unaudited financial statements for the quarterly periods ended March 31, 2003, June 30, 2003 and September 30, 2003. Other possible resolutions could have resulted in the recognition of an other-than-temporary impairment charge in an earlier 2003 quarter and could have required a restatement of our unaudited financial statements for that and any subsequent quarter. However, the impact of the resolution of these issues on our net loss for the year ended December 31, 2002 and/or subsequent periods were not readily estimable by us, because it would have depended on the amount of the purchase price to be allocated to other assets and the nature of those assets and the valuation of our investment in Blizzard as of December 31, 2002 and as of the end of each of the three subsequent quarters, each of which would be dependent upon various assumptions and valuation methods.

As a result of the issues that were brought to our attention by PwC, we thoroughly re-reviewed, in late March and early April 2004, the prior accounting treatment for the Global Genomics acquisition and the Blizzard investment. This review included, among other things, (i) our submission of additional documentation to PwC, (ii) discussions of these issues by our Audit Committee with PwC, (iii) discussions between PwC and us, (iv) discussions between E&Y and us and (v) the retention of a nationally respected valuation firm to review certain of the methodologies that were used by us in connection with the purchase price allocation for Global Genomics, including amounts, if any, that would be attributable to an acquired assembled workforce and methodologies utilized in our other-than-temporary impairment analyses and to assess what amount of the purchase price for Global Genomics could appropriately have been attributable to an acquired assembled work force, if any.

Following our re-review of the accounting treatment for the purchase price for the Global Genomics merger and the carrying value of the Blizzard investment, we advised PwC, in early April 2004, that we continued to believe that our prior accounting treatment was correct in all material respects. We also advised PwC that our valuation firm had concluded that, even if any amount were to be allocated to an acquired assembled workforce, the valuation of such an acquired workforce would be only $250,000.

During the course of its engagement PwC informed us that it disagreed with the timing of the fourth quarter 2003 other-than-temporary impairment charge that we had recorded related to our investment in Blizzard. PwC also informed us that PwC needed to significantly expand the scope of its audit procedures with respect to the matters identified in the fourth paragraph above, including procedures designed to understand the impact, if any, of certain third party comments regarding indicators of value, and that it had not completed audit procedures regarding the nature and timing of our impairment of Blizzard and the original purchase price allocation upon our acquisition of Global Genomics in 2002. PwC has advised us that, as a result of their dismissal, they were unable to complete their expanded audit procedures, and as a consequence, PwC had not formed a view as to whether our accounting for these matters was in conformity with accounting principles generally accepted in the United States.

E&Y s report on our financial statements for the years ended December 31, 2001 and December 31, 2002 did not contain any adverse opinion or a disclaimer of an opinion or any qualification as to uncertainty, audit scope or accounting principles. In connection with E&Y s audits for those years there were no disagreements or reportable events as defined in Item 304 of SEC Regulation S-K, except as described in this paragraph. However, we were informed by E&Y, in April 2004, that, until such time as the impact of the third party comments regarding indicators of value concerning Blizzard, referred to by PwC, were further evaluated, E&Y was not able to conclude as to whether the prior accounting treatment was appropriate in all material respects. E&Y advised us that, depending upon the outcome of those procedures, the financial statements for the year ended December 31, 2002, audited by E&Y, or the unaudited interim financial statements for the quarters ended March 31, June 30, and September 30, 2003, might require restatement. However, E&Y has not withdrawn its opinion on our 2002 audited financial statements.

A special committee consisting of two of our Audit Committee members subsequently performed an evaluation of the impact of the third party comments regarding indicators of value concerning Blizzard. This special committee concluded that we did not withhold from E&Y any documents that would have changed the

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conclusions reached by E&Y relative to the carrying value of Blizzard and its audit of our financial statements. After reviewing this evaluation, E&Y advised us that it had concluded that our audited 2002 financial statements and our unaudited interim financial statements for the quarters ended March 31, 2003 and June 30, 2003 did not require any restatement. Accordingly, no information has come to the Company s attention that would lead us to believe that an investor could no longer rely on E&Y s opinion on our 2002 audited financial statements.

In connection with the preparation of our financial statements for the year ended December 31, 2003, we believed that we had a reasonable basis for taking the Blizzard impairment charge in the fourth quarter of 2003; however, after further review of the issues relating to the timing of this charge, we determined in May 2004 that this charge should have been taken in the third quarter of 2003. We filed an amended Form 10-Q for the period ended September 30, 2003 in May 2004 to reflect the impairment charges taken during that period.

During our two fiscal years ended December 31, 2002 and December 31, 2003 and the interim period through the date of our engagement of BDO to perform the audit of our financial statements for the year ended December 31, 2003, we did not consult with BDO regarding (i) the application of accounting principles to a specified transaction, either completed or proposed or the type of audit opinion that might be rendered on our financial statements, and either a written report was provided to us or oral advice was provided that BDO concluded was an important factor considered by us in reaching a decision as to an accounting, auditing or financial reporting issue or (ii) any matter that was either the subject of a disagreement (as defined in paragraph 304(a)(1)(iv) of SEC Regulation S-K and the related instructions to this item) or a reportable event (as described in paragraph 304(a)(1)(v) of SEC Regulation S-K), except as follows:

On April 2, 2004, our Audit Committee engaged BDO to perform agreed-upon procedures with respect to our financial statements for the year ended December 31, 2003. Due to our Audit Committee s concerns that the concurrent involvement of two auditing firms might create the appearance that we were shopping for a particular audit opinion, the terms of our April 2, 2004 engagement of BDO stated that BDO was not to conduct a compilation, review or audit, but rather was to conduct only certain agreed upon procedures. We agreed with BDO that the procedures would be conducted solely in order to assist BDO in completing a potential future audit of our financial statements in the event the Audit Committee subsequently engaged BDO to opine on our financial statements. Since the agreed upon procedures specified in our engagement agreement were to be conducted in preparation for a possible future audit, they included a majority of the procedures that would have been necessary in order for BDO to opine with respect to our financial statements. The specific procedures were proposed by BDO and were jointly accepted by BDO and us without modification. We have been advised by BDO that, as of April 14, 2004, the date on which we engaged BDO to become our independent auditor, BDO had completed approximately 64% of the hours that they eventually worked to complete their audit, but a significant portion of the manager and partner review had not yet been completed.

Subsequent to engaging BDO to perform these agreed-upon procedures, we consulted with BDO concerning the need to include separate audited financial statements of Blizzard in our Annual Report for the year ended December 31, 2003. BDO orally advised us that separate audited Blizzard financial statements were required to be included in this Annual Report. This advice was consistent with the advice previously received by us from PwC on this issue, no disagreement on this issue existed between PwC and us, and we subsequently filed these financial statements in our Annual Report for the year ended December 31, 2003, together with our financial statements.

During the course of BDO s performance of the above agreed-upon procedures, we did not solicit or receive any oral or written opinion from BDO with respect to the proper accounting treatment for the allocation of the purchase price paid by us in connection with our merger with Global Genomics or the subsequent carrying value of our investment in Blizzard. However, we did discuss with BDO our views on the proper accounting treatment for these items and provided BDO with certain of our accounting records, a valuation analysis prepared by a valuation firm in 2002 utilized by management in connection with its allocation of the purchase price for the Global Genomics merger and an analysis prepared in April 2004 by another valuation firm covering certain aspects of the allocation of that purchase price and the subsequent carrying value of Blizzard.

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BUSINESS

General

CytRx Corporation is a biopharmaceutical research and development company, based in Los Angeles, California, with an operating obesity and type 2 diabetes subsidiary in Worcester, Massachusetts. We are in the process of developing products, primarily in the areas of ribonucleic acid interference, or RNAi, and small molecule therapeutics, for the human health care market. RNAi is a new technology for silencing genes in living cells and organisms. In addition to our work in RNAi and small molecule therapeutics, we are involved in the development of a DNA-based HIV vaccine and have entered into strategic alliances with respect to the development of several other products using our other technologies.

Since our incorporation in Delaware 1985, we have been engaged in the development of pharmaceutical products. July 2002, when we merged with Global Genomics Capital, Inc., or Global Genomics, marked a change in the focus of our company. Subsequent to the Global Genomics merger, we modified our corporate business strategy by discontinuing any further research and development efforts for our pre-merger pharmaceutical technologies and began to seek strategic relationships with other pharmaceutical companies to complete the development of those technologies. Instead of continuing research and development for those technologies, we focused our efforts on acquiring new technologies and products to serve as the foundation for the future of the company.

In April 2003, we acquired our first new technologies by entering into exclusive license agreements with the University of Massachusetts Medical School, or UMMS, covering potential applications for the medical school s proprietary RNAi technology in the treatment of specified diseases, including those within the areas of obesity and type 2 diabetes; amyotrophic lateral sclerosis, or ALS, commonly referred to as Lou Gehrig s disease, which is a progressive neurodegenerative disease that results in motor neuron degeneration of the brain and spinal cord and eventual paralysis; and human cytomegalovirus, or CMV, which is a herpes virus that often affects HIV patients. At that time, we also acquired an exclusive license from UMMS covering the medical school s proprietary technology with potential gene therapy applications within the area of cancer. In May 2003, we broadened our strategic alliance with UMMS by acquiring an exclusive license from that institution covering a proprietary DNA-based HIV vaccine technology. In July 2004, we further expanded our strategic alliance with UMMS by entering into a collaboration and invention disclosure agreement with UMMS under which UMMS will disclose to us certain new technologies developed at UMMS over the next three years pertaining to RNAi, diabetes, obesity, neurodegenerative diseases (including ALS) and CMV and will give us an option, upon making a specified payment, to negotiate an exclusive worldwide license to the disclosed technologies on commercially reasonable terms.

As part of our strategic alliance with UMMS, we agreed to fund certain discovery and pre-clinical research at the medical school relating to the use of our technologies, licensed from UMMS, for the development of therapeutic products within certain fields. To date, we have entered into agreements with UMMS to sponsor research in the areas of obesity and type 2 diabetes, ALS and CMV retinitis. In addition, we have entered into an agreement with Massachusetts General Hospital to sponsor research at that institution that will utilize our proprietary gene silencing technology in the area of ALS.

In conjunction with our work with UMMS, in September 2003, we formed a subsidiary to develop RNAi-based and small molecule therapeutics for the prevention, treatment and cure of obesity and type 2 diabetes. This subsidiary will focus on using genomic and proteomic based drug discovery technologies combined with our proprietary gene silencing technology to accelerate the process of screening and identifying potential drug targets and pathways for these diseases. Through this subsidiary, we will seek to develop orally active drugs against promising targets and pathways relevant to obesity and type 2 diabetes.

On October 4, 2004, we acquired all of the clinical and pharmaceutical and related intellectual property assets of Biorex Research & Development, RT, or Biorex, a Hungary-based company focused on the development of novel small molecules with broad therapeutic applications in neurology, diabetes and cardiology. The acquired assets include three oral, clinical stage drug candidates and a library of 500 small

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molecule drug candidates. The acquisition positions us as a clinical-stage company with a Phase II trial for ALS with one of our new compounds, arimoclomol, expected to be initiated by the second quarter of 2005.

Although we intend to internally fund or carry out the research and development related to the drugs that we acquired from Biorex, and, through our obesity and type 2 diabetes subsidiary, the early stage development work for certain product applications based on the RNAi and other technologies that we licensed from UMMS, we may also seek to secure strategic alliances or license agreements with larger pharmaceutical companies to fund the early stage development work for other gene silencing product applications and for subsequent development of those potential products where we fund the early stage development work.

Prior to 2003, our primary technologies consisted of Flocor, an intravenous agent for treatment of sickle cell disease and other acute vaso-occlusive disorders, and TranzFect, a delivery technology for DNA and conventional-based vaccines. In October 2003, we entered into a strategic relationship with another entity, which was recently formed, to complete the development of Flocor. Our TranzFect technology has been licensed to two companies. We have granted a third party an option to license our TranzFect technology for development as a potential DNA-based prostate cancer adjuvant and may also seek to license this technology as a potential conventional adjuvant for hepatitis C, human pappiloma virus, herpes simplex virus and other viral diseases. Adjuvants are agents added to a vaccine to increase its effectiveness. In addition, we may seek to license TranzFect for use as a non-clinical research reagent to increase transfection *in vitro* or in laboratory animals. Flocor and TranzFect are further described under Pre-Global Genomics Merger Technologies.

In addition, through our merger with Global Genomics, we acquired minority interests in two development stage genomics companies, Blizzard and Psynomics. In 2003, we recorded a write-off of our investments in those companies. Our decision to record the write-off was based upon several factors. Those investments, and the write-off of those investments, are further described under Genomics Investments.

RNAi Technology

RNAi technology is a recently discovered technology that uses short double-stranded RNA, or dsRNA, molecules to silence targeted genes and, as a result, is commonly referred to as gene silencing. RNAi has been shown to effectively silence targeted genes within living cells with great specificity and potency. As a result, RNAi technology is able to effectively silence targeted genes without impacting other, non-targeted, genes.

RNA is a polymeric constituent of all living cells and many viruses, consisting of a long, usually single-stranded chain of alternating phosphate and ribose units with the bases adenine, guanine, cytosine, and uracil bonded to the ribose. The structure and base sequence of RNA are determinants of protein synthesis and the transmission of genetic information. RNAi is a technique of using short pieces of double-stranded RNA to precisely target the messenger RNA, or mRNA, of a specific gene. The end result is the destruction of the specific mRNA, thus silencing that gene.

RNAi is regarded as a significant advancement in gene silencing and was featured in *Science* magazine as the Breakthrough of the Year in 2002. Delivery of RNAi can be *in vitro* and *in vivo* to target specific mRNAs, thus reducing the levels of the specific protein product coded for by that gene in the targeted cells. This allows the use of RNAi either as an effective drug discovery tool or potentially as a therapeutic product itself. We intend to develop RNAi technology as both a discovery tool for classical, orally-available small molecule drugs and for direct therapeutic applications when technically feasible. As a drug discovery tool, we intend to use RNAi to identify and validate novel targets, which could then be used to discover small molecule therapeutics for the treatment and prevention of obesity and type 2 diabetes. As a therapeutic, we will seek to demonstrate its efficacy in human clinical trials using RNAi to silence specific genes that cause ALS and CMV retinitis. In January 2004, Tariq Rana, a scientific authority in delivery and stability of RNAi, and in March 2004, Dr. Craig Mello, the co-discoverer of RNAi, each joined our Scientific Advisory Board and they will act in an advisory capacity to help us develop therapeutics for specific diseases.

In mammals and human cells, gene silencing can be triggered by delivering dsRNA molecules directly into the cell s cytoplasm (the region inside the cell membrane but outside the cell nucleus). Specific enzymes

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(proteins) in the cell called dicer enzymes cut the dsRNA to form small interfering RNA, or siRNA. These siRNA are approximately 21 to 25 nucleotide long pieces of RNA. The siRNA then interact with other cellular proteins to form the RNA-induced silencing complex, or RISC, which causes the unwinding of the bound siRNA. This unwound strand of the siRNA can then act as a template to seek out and bind with the complementary target mRNA, which carries the coding, or instructions, from the cell nucleus DNA. These instructions determine which proteins the cell will produce. When the siRNA-loaded RISC binds with the corresponding mRNA, that message is degraded and the cell does not produce the specific protein that it encodes. Since the siRNA can be designed to specifically interact with a single gene through its mRNA, it can prevent the creation of a specific protein without affecting other genes.

One reason for the potential of RNAi to be effective, where previous nucleic acid-based technologies have, to date, been unsuccessful, is that the cell already has in place all of the enzymes and proteins to effectively silence genes once the dsRNA is introduced into the cell. This is in direct contrast to the older technology of antisense, where there were no known proteins present in the cells to facilitate the recognition and binding of the antisense molecule to its corresponding mRNA.

Another reason for the interest in RNAi is its potential to completely suppress or eliminate the viral replicon. A replicon is a DNA or RNA element that can act as a template to replicate itself. Once a virus is established in a cell, there are very few drugs that are effective in eliminating the virus. The RNAi process, however, has the potential of eliminating viral nucleic acids and, therefore, to cure certain viral diseases. Development work on RNAi is still at an early stage, and we are aware of only two clinical trials using RNAi, namely safety trials for age-related macular degeneration by Acuity Pharmaceuticals and Sirna Therapeutics.

Molecular Chaperone Co-inducers

The synthesis of proteins is a normal part of every cell s activity that is essential for life. Proteins are linear chains of building blocks known as amino acids. In order to function normally in a cell, proteins must fold into particular three dimensional shapes. During stressful conditions (*e.g.* during certain disease states), proteins can fold into inappropriate shapes that result in aggregation of proteins, which can be toxic to the cell. As an example, it is believed that inappropriate folding and aggregation of certain mutated forms of the Superoxide Dismutase 1 (SOD1) protein leads to the death of motor neurons that causes ALS.

In nature, the cell has developed a way to deal with these potentially toxic mis-folded proteins. Molecular chaperone proteins are a key component of a universal cellular protection, maintenance and repair mechanism that helps ensure that newly synthesized proteins are complete, taken to the correct position within the cell s structure, and correctly folded. Molecular chaperones detect proteins that are mis-folded, and they have the ability to refold those proteins into the appropriate, non-toxic shape. However, if the protein is so badly mis-folded that it cannot be repaired, the molecular chaperones also have the ability to tag the toxic protein for destruction by the cell. This tag, called ubiquitin, directs the mis-folded protein to a cellular apparatus called the proteasome, whose function is to degrade the protein into its constituent amino acids for recycling.

A core element of the cell s stress-management techniques is known as the heat shock response. Although this response was so-named because it was initially discovered by subjecting cells to heat stress, it is now known that the heat shock response is generally induced by a variety of physical and chemical stresses. As a cell comes under stress, proteins begin to mis-fold into toxic shapes. The heat shock response (also referred to as the stress response) increases the synthesis of molecular chaperones that then repair the mis-folded proteins.

The stress response can be an important mechanism for cellular survival during certain acute physical stresses. For instance, prior induction of the stress response can protect tissue culture cells from heat-induced cell death. However, it appears that the constant stress that occurs as a result of chronic disease dulls the stress response and erodes the effectiveness of the mechanism. For instance, although the stress response is slightly induced in the motor neurons of transgenic mice that express the human mutated SOD1 gene that causes certain cases of ALS, the level of expression is apparently insufficient to repair the damage and the mice still die from the disease.

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We believe that by boosting the stress response to higher levels, the progression of chronic disease can be slowed, halted or reversed and affected cells can be restored to full functionality. In *in vitro* studies, mammalian cells engineered to over-express molecular chaperones have increased cross-protection against a variety of otherwise lethal and toxic stresses. In *in vivo* studies, transgenic mice engineered to over-express a molecular chaperone had improved myocardial function, preserved metabolic function and reduced infarct size after ischemia/reperfusion. Increased molecular chaperone expression also significantly increased the lifespan in a mouse model for the motor neuron disease, spinal and bulbar muscular atrophy. We believe that these studies give substantial support within the scientific community for new drugs that are capable of activating a cytoprotective stress response.

Among the assets recently acquired from Biorex were several drug candidates whose mechanism of action is believed to be the co-induction of the stress response, meaning that they do not seem to activate the stress response by themselves, but instead they amplify the production of molecular chaperone proteins that are already activated by disease-induced cellular stress. These drugs thus may selectively amplify molecular chaperone proteins specifically in diseased tissue, which would minimize potential drug side-effects. The amplification of this fundamental protective mechanism may have powerful therapeutic and prophylactic potential, with the potential for an extremely broad field of medical therapeutic utility.

We believe that the drug candidates acquired from Biorex can potentially improve the cell s natural capability to resist the toxic effects of protein mis-folding, caused by both acute and chronic diseases. Thus, these orally available small molecule drugs may accomplish the same goal as RNAi, but accomplish it by repairing or degrading the offending proteins, instead of degrading their corresponding mRNAs. Since the specificity for the recognition of mis-folded proteins is an intrinsic feature of the amplified molecular chaperones, it is not necessary to identify the actual molecular target of the stress-induced damage. As a result, these drugs may allow broader therapeutic utility for the removal of damaged proteins compared to that of RNAi.

We are not aware of other pharmaceutical companies developing small molecule co-inducers of molecular chaperones. At present, a few potential drug candidates have been reported in the literature to activate molecular chaperone expression, but these do not require pre-activation of the stress response, and therefore these drugs may simply represent a stress to the cell.

Product Development

University of Massachusetts Medical School

Through our strategic alliance with UMMS, we have acquired the rights to a portfolio of technologies, including the rights to use UMMS s proprietary RNAi technology with potential therapeutic applications in certain defined areas that include obesity, type 2 diabetes, ALS and CMV, as well as a DNA-based HIV vaccine technology and a cancer therapeutic technology. In addition, we have entered into a collaboration and invention disclosure agreement with the UMMS under which UMMS will disclose to us certain new technologies developed at UMass over the next three years pertaining to RNAi, diabetes, obesity, neurodegenerative diseases (including ALS) and CMV and will give us an option, upon making a specified payment, to negotiate an exclusive worldwide license to the disclosed technologies on commercially reasonable terms.

The HIV subunit vaccine technology that we have licensed from UMMS is based upon a unique mixture of pieces of human HIV-1 primary isolates from several genetic subtypes of HIV. These pieces, called HIV envelope proteins, are not sufficient for viral replication and therefore cannot lead to accidental infection by HIV. This polyvalent naked DNA (isolated, purified DNA) vaccine approach has the potential advantages of maintaining efficacy despite the high mutation rate of HIV, a broader immune response against divergent HIV-1 glycoproteins and the possible ability to neutralize a wide spectrum of HIV-1 viruses. UMMS has conducted animal studies of this vaccine, and UMMS and Advanced BioScience Laboratories, or ABL, which provides an adjuvant for use with the vaccine, have received a $16 million grant from the NIH. This grant will fund a Phase I clinical trial of a vaccine candidate using our licensed technology. The investigational new drug application, or IND, for that trial was filed in January 2004 and allowed, by the FDA, to go into effect in

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March 2004. Enrollment of volunteers for this trial began in April 2004, and we anticipate completing this trial in the second half of 2005. We have a commercial relationship with ABL which gives us the ownership of, and responsibility for, the further development of the vaccine and subsequent FDA registration following the completion of the Phase I trial, which is being conducted by UMMS and ABL. We do not have a commercial relationship with a company that is providing another adjuvant for the HIV vaccine candidate in the current Phase I clinical trial. We may also elect to use a different adjuvant in conjunction with our HIV vaccine technology, in which case we may not be able to utilize some or all of the results of the currently planned trial as part of our clinical data for obtaining FDA approval of a vaccine.

Finally, we have also licensed a cancer treatment technology from UMMS that is based on a naked DNA approach in which the DNA material will be delivered by direct injection into the tumor or other localized administration.

Our agreements with UMMS may require us to make significant expenditures to fund research at the institution relating to developing therapeutic products based on UMMS s proprietary technologies that have been licensed to us. We estimate that the aggregate amount of these sponsored research expenditures under our current commitments will be approximately $1,670,000 for 2004, approximately $2,035,000 for 2005 and approximately $842,000 for 2006. Our license agreements with UMMS require us to make payments of an aggregate of up to $105,000 per year to maintain all of our licenses, with such aggregate annual payments increasing to as much as $145,000 if we are not then conducting certain sponsored research at the institution. Our UMMS license agreements also provide, in certain cases, for milestone payments, from us to UMMS, based on the progress we make in the clinical development and marketing of products utilizing the technologies licensed from UMMS. In addition, our license agreements with UMMS require us to reimburse UMMS for legal expenses that they incur in prosecuting and maintaining of the related licenses patents. We estimate these legal expenses to be approximately $200,000 per year. In the event that we were to successfully develop a product in each of the categories of obesity/type 2 diabetes, ALS, CMV, cancer and an HIV vaccine, under our licenses, those milestone payments could aggregate up to $16,055,000. Those milestone payments, however, could vary significantly based upon the milestones we achieve and the number of products we ultimately undertake to develop. In addition, our collaboration and invention disclosure agreement with UMMS requires us to make payments totaling $750,000 in 2005 in consideration for the option, upon making a specified payment, to negotiate an exclusive worldwide license to certain disclosed technologies.

Obesity and Type 2 Diabetes

Obesity and type 2 diabetes are significant health problems. The World Health Organization estimates that, on a worldwide basis, there are more than 250 million cases of obesity and 176 million cases of type 2 diabetes. According to the American Obesity Association, there are currently more than 55 million cases of obesity in the United States, and the American Diabetes Association reports that there are more than 16 million cases of type 2 diabetes in the United States. Scientists at UMMS, as part of our strategic alliance, are researching, with funding that we have provided, the specific genetic relationship of type 2 diabetes to obesity. The research is focused on using cultured adipocytes (fat cells) as a model system for studying the regulation of gene expression involved in adipocyte differentiation and function. This research may lead to the identification of specific drug targets which regulate insulin signaling as well as other metabolic pathways regulating glucose and fatty acids. With this understanding, the program will focus on drug discovery of small molecule therapeutics and potentially RNAi-based therapeutics for type 2 diabetes (e.g., drugs that act as insulin sensitizers and compounds that alleviate obesity). We believe that RNAi could potentially be a reliable method to selectively inhibit certain genes and their corresponding protein expression in adipocytes.

In May 2004, we licensed from the technology transfer company of the Imperial College of Science, Technology & Medicine the exclusive rights to intellectual property covering a drug screening method using RIP 140, which is a nuclear hormone co-repressor that has been shown to regulate fat accumulation. This proprietary technology is covered by a pending patent application. We paid the licensor a license fee in the form of cash and shares of our common stock, and we will be required to make defined milestone and royalty payments based on sales of products developed using this technology. We believe this license provides us with

an important potential drug target in the area of obesity and type 2 diabetes in conjunction with our gene silencing technology.

In addition, one of the drug candidates acquired from Biorex, iroxanadine, was shown to be well tolerated in two Phase I and one Phase II clinical trials and demonstrated significant improvement of vascular function in the brachial artery of hypertensive patients. We plan to evaluate the preclinical efficacy of this drug for two diabetic complications that involve vascular dysfunction, retinopathy and wound healing. If the drug proves to be efficacious in preclinical work and the FDA agrees that it is appropriate to proceed with a Phase II clinical trial, we believe that a Phase II clinical trial for either of these indications could begin in the second half of 2005.

Although we initially intend to develop arimoclomol, another of the drug candidates acquired from Biorex, for the treatment of ALS, the drug also showed efficacy in preclinical animal models of diabetes. If efficacy is observed in additional preclinical models, we would also consider beginning a Phase II clinical trial for diabetes in 2005, as arimoclomol has already been tested in two Phase I clinical trials.

Research and Development Subsidiary

In addition to the obesity and diabetes work being done under our sponsored research agreement with UMMS, in September 2003, we purchased 95% of CytRx Laboratories, Inc. (formerly known as Araios, Inc.), our research and development subsidiary, which had been recently formed by Dr. Michael P. Czech to develop orally active small molecule and RNAi-based drugs for the prevention, treatment and cure of obesity and type 2 diabetes. Our business strategy is to use our portfolio of state of the art drug discovery technologies and our relationships with leading diabetes and obesity researchers to discover and develop first in class medicines to prevent, treat and cure obesity and type 2 diabetes. Utilizing the RNAi target validation technology that we have licensed from UMMS, in combination with state of the art target identification methods, our research and development subsidiary will focus on using a structure based drug discovery approach to accelerate the process of screening and identifying potential drug targets and pathways for these diseases. Through our subsidiary, we will seek to develop orally administered drugs that are based on promising targets and pathways that we may be able to identify.

Dr. Czech is a prominent scientist in the fields of obesity and type 2 diabetes at UMMS, is a member of our Scientific Advisory Board, heads our subsidiary s Scientific Advisory Board and holds a 5% equity interest in the subsidiary. We provided the subsidiary in September 2003 with initial capital of approximately $7,000,000 to fund the staffing of its operations with managerial and scientific personnel and its initial drug development activities.

Through our license and sponsored research agreement with UMMS, we have secured rights to novel drug targets believed to be involved in obesity and type 2 diabetes. We will seek to validate these targets using the proprietary high throughput RNAi technology that we have licensed from UMMS and will apply state of the art structure-based medicinal chemistry to develop small molecules and RNAi-based therapeutic products.

ALS

The development of therapeutics for the treatment of various forms of ALS is an area of significant interest for us. ALS is a debilitating disease. According to the ALS Survival Guide, 50% of ALS patients die within 18 months of diagnosis and 80% of ALS patients die within five years of diagnosis. According to the ALS Association, in the United States, alone, approximately 30,000 people are living with ALS and nearly 6,000 new cases are diagnosed each year.

In October 2003, we entered into sponsored research agreements with UMMS and Massachusetts General Hospital, pursuant to which we will sponsor certain ALS research at those institutions utilizing our proprietary gene silencing technology targeted at the mutant SOD1 gene, which is the subject of the ALS technology we have licensed from UMMS. The mutant SOD1 gene is responsible for causing ALS in a subset of the 10% of all ALS patients who suffer from the familial, or genetic, form of the disease.

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Dr. Zuoshang Xu, an Associate Professor of Biochemistry and Molecular Pharmacology at UMMS, is the principal investigator under our sponsored research agreement with UMMS. We have funded approximately $302,000 of research under that agreement during its first year, and have committed to fund approximately $280,000 of research under that agreement during its second year and approximately $288,000 of research under that agreement during the third year of the program.

Dr. Robert B. Brown, Jr., a Professor of Neurology at Harvard Medical School, Founder and Director of the Cecil B. Day Laboratory for Neuromuscular Research and a co-discoverer of the mutant SOD1 gene as a cause for certain ALS cases, is the principal investigator under our sponsored research agreement with Massachusetts General Hospital. Under the agreement, we have agreed to fund approximately $487,000 of sponsored research at Massachusetts General Hospital through the end of 2005. In March 2004, Dr. Brown joined our Scientific Advisory Board and entered into a consulting agreement with us.

Finally, the drug candidate arimoclomol, acquired from Biorex in October 2004, was previously shown to be well tolerated in two Phase I clinical trials in healthy volunteers. Based on this and the published efficacy data of the drug in animal models of ALS, we expect to begin a Phase II clinical trial with arimoclomol for the treatment of ALS in the second quarter of 2005. We intend to discuss the proposed Phase II clinical trial with the FDA in the coming months.

Cardiovascular Disease

Preclinical results by third parties with our drug candidate, iroxanadine, indicate that it has therapeutic potential for the treatment of cardiovascular atherosclerosis. If iroxanadine proves to be effective in additional preclinical work, we plan to seek a strategic alliance with a larger company to support the subsequent clinical development for this indication.

Pre-Global Genomics Merger Technologies

Therapeutic Copolymer Program

Prior to the merger with Global Genomics, our primary focus was on CRL-5861 (purified poloxamer 188), which we also call Flocor. Flocor is an intravenous agent for the treatment of sickle cell disease and other acute vaso-occlusive disorders. Sickle cell disease is an inherited disease caused by a genetic mutation of hemoglobin in the blood, and acute vaso-occlusive disorders are a blockage of blood flow caused by deformed, or sickled, red blood cells which can cause intense pain in sickle cell disease patients. In June 2004, we licensed our copolymer technologies, including Flocor, on an exclusive basis, to SynthRx, Inc., a Houston, Texas-based biopharmaceutical company that was recently formed by Dr. Robert Hunter. As a result of the SynthRx license, we received a 19.9% ownership interest in SynthRx and a cash payment from SynthRx of approximately $228,000, in return for our rights to the licensed technologies. In addition, upon commercialization of any products developed under our alliance with SynthRx, we may also receive significant milestone payments and royalties. Prior to the change in our business strategy that led us to seek licensees for our Flocor technology, we had internally developed Flocor. In December 1999, we reported results from a Phase III clinical study of Flocor for treatment of acute sickle cell crisis. Although the study did not demonstrate statistical significance in the primary endpoint, or objective, of the study, statistically significant and clinically important benefits associated with Flocor were observed in certain subgroups.

Vaccine Enhancement and Gene Therapy

Gene therapy and gene-based vaccines are mediated through the delivery of DNA containing selected genes into cells by a process known as transfection. We refer to our gene delivery technology as TranzFect. A large majority of the revenues we have generated over the past three years has been due to license fees paid to us with respect to our TranzFect technology, representing 30% of our revenue for the nine-month period ended September 30, 2004 and 81%, 94% and 94% of our total revenues for 2003, 2002 and 2001, respectively.

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Merck License

In November 2000, we entered into an exclusive, worldwide license agreement with Merck & Co., Inc. whereby we granted Merck the right to use our TranzFect technology in DNA-based vaccines for HIV and three other targets. To date, Merck has focused its efforts on the HIV application, which is still at an early stage of clinical development, and, in July 2003, Merck notified us that it was returning to us the rights to the three other targets covered by its license, which we are now able to license to other third parties. In November 2000, Merck paid us a signature payment of $2 million. In February 2002, we received an additional $1 million milestone fee related to the commencement of Merck s first FDA Phase I study for a product incorporating TranzFect designed for the prevention and treatment of HIV. Merck completed a multi-center, blinded, placebo controlled Phase I trial of an HIV vaccine utilizing TranzFect as a component. Although the formulation of this tested vaccine was generally safe, well-tolerated and generated an immune response, the addition of TranzFect to the vaccine did not increase this immune response. Moreover, the DNA single-modality vaccine regimen with TranzFect, when tested in humans, yielded immune responses that were inferior to those obtained with the DNA vaccines in macaque monkeys. All amounts paid to us by Merck are non-refundable upon termination of the agreement and require no additional effort on our part.

Vical License

In December 2001, we entered into a license agreement with Vical Incorporated granting Vical exclusive, worldwide rights to use or sublicense our TranzFect poloxamer technology to enhance viral or non-viral delivery of polynucleotides, such as DNA and RNA, in all preventive and therapeutic human and animal health applications, except for (1) the four targets previously licensed by us to Merck, (2) DNA vaccines or therapeutics based on prostate-specific membrane antigen, or PSMA, and (3) sale of a non-regulated product for use as a non-clinical research reagent to increase transfection *in vitro* or in laboratory animals. In addition, the Vical license permits Vical to use TranzFect poloxamer technology to enhance the delivery of proteins in prime-boost vaccine applications that involve the use of polynucleotides (short segments of DNA or RNA). Under the Vical license, we received a non-refundable up-front payment of $3,750,000, and we have the potential to receive milestone and royalty payments in the future based on criteria described in the agreement. In April 2004, we received an additional $100,000 milestone fee related to the commencement of Vical s first FDA Phase I clinical trial for a product incorporating our TranzFect technology. All amounts paid to us by Vical are non-refundable upon termination of the agreement and require no additional effort on our part.

2002 Merger with Global Genomics

On July 19, 2002, we completed the acquisition of Global Genomics. The acquisition of Global Genomics was accomplished through a merger of our wholly-owned subsidiary, GGC Merger Corporation, with and into Global Genomics. Global Genomics was the surviving corporation in the merger with GGC Merger Corporation and is now our wholly-owned subsidiary. We have changed Global Genomics name to GGC Pharmaceuticals, Inc., but for purposes of this prospectus, we will continue to refer to the company as Global Genomics. For accounting purposes, we were deemed the acquiror of Global Genomics.

In the Global Genomics merger, each outstanding share of common stock of Global Genomics was converted into 0.765967 shares of our common stock. Accordingly, a total of 8,948,204 shares of our common stock, or approximately 41.7% of our common stock outstanding immediately after the merger, were issued to the common stockholders of Global Genomics, and an additional 1,014,677 shares of our common stock were reserved for issuance upon the exercise of the outstanding Global Genomics warrants that we assumed in the merger. Other than the foregoing stock, we paid no other consideration to the Global Genomics shareholders.

At the time of the Global Genomics merger, there were no material relationships between Global Genomics or any of its shareholders or affiliates and us, except that on July 16, 2002, Global Genomics three designees to our board of directors, Steven A. Kriegsman, Louis J. Ignarro, Ph.D. and Joseph Rubinfeld, Ph.D., were elected directors and Mr. Kriegsman became our Chief Executive Officer. Mr. Kriegsman was Global Genomics Chairman and Dr. Ignarro was a director of Global Genomics at that

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time. On the date of the merger, the controlling shareholder of Global Genomics was Mr. Kriegsman, who beneficially owned, on a fully diluted basis, approximately 40.4% of Global Genomics equity interests.

Genomics Investments

In connection with our merger with Global Genomics, we acquired indirectly equity interests in two development-stage genomics companies, a 40% equity interest in Blizzard and a 5% equity interest in Psynomics. In the fourth quarter of 2003, we decided that we would cease funding our investments in those genomics companies to focus on our core strategy of developing human therapeutics for large market indications. In May 2004, we determined that a write-off of those investments in the third quarter of 2003 should have been made. Our decision to record the write-off was based upon several factors, including Blizzard s lack of success in raising a significant amount of the financing necessary for it to pursue the commercialization strategy for its products, current financial projections prepared by Blizzard, application of a discounted cash flow valuation model of Blizzard s projected cash flows and the consideration of other qualitative factors. Based upon the quantitative and qualitative factors described above, in addition to others, we determined that the investment in Blizzard had no remaining value as of September 30, 2003 and that a write-off of this investment should have been made in the third quarter of 2003.

Research and Development Expenditures

Expenditures for research and development activities related to continuing operations were $1,327,000 and $4,968,000 during the three and nine months ended September 30, 2004, respectively, and $4,388,000, $767,000 and $1,844,000 during the years ended December 31, 2003, 2002 and 2001, respectively.

Manufacturing

We do not have the facilities or expertise to manufacture any of the clinical or commercial supplies of any of our products. To be successful, our products and the products of our partners must be manufactured in commercial quantities in compliance with regulatory requirements and at an acceptable cost. To date, we have not commercialized any products, nor have we demonstrated that we can manufacture commercial quantities of our product candidates in accordance with regulatory requirements. If we cannot manufacture products in suitable quantities and in accordance with regulatory standards, either on our own or through contracts with third parties, it may delay clinical trials, regulatory approvals and marketing efforts for such products. Such delays could adversely affect our competitive position and our chances of achieving profitability. We cannot be sure that we can manufacture, either on our own or through contracts with third parties, such products at a cost or in quantities, which are commercially viable. We currently rely and intend to continue to rely on third-party contract manufacturers to produce materials needed for research, clinical trials and, ultimately, for product commercialization.

Patents and Proprietary Technology

We actively seek patent protection for our technologies, processes, uses, and ongoing improvements and consider our patents and other intellectual property to be critical to our business. We have filed applications for a number of patents and have been granted patents related to technologies, primarily TranzFect and Flocor, we were developing prior to our 2002 merger with Global Genomics. Subsequent to the merger, we acquired patents in connection with our acquisition of intellectual property rights of Biorex and we have licensed additional technologies covered by patents or patent applications, most of which are in the RNAi field.

As part of our development process, we evaluate the patentability of new inventions and improvements developed by us or our collaborators. Whenever appropriate, we will endeavor to file United States and international patent applications to protect these new inventions and improvements. However, we cannot be certain that any of the current pending patent applications we have filed or licensed, or any new patent applications we may file or license, will ever be issued in the United States or any other country. Even if issued, there can be no assurance that those patents will be sufficiently broad to prevent others from using our products or processes. Furthermore, our patents, as well as those we have licensed or may license in the future,

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may be held invalid or unenforceable by a court, or third parties could obtain patents that we would need to either license or to design around, which we may be unable to do. Current and future competitors may have licensed or filed patent applications or received patents, and may acquire additional patents and proprietary rights relating to RNAi technology, small molecule technology, DNA-based vaccines or other compounds, products or processes competitive with ours.

In addition to patent protection, we also attempt to protect our proprietary products, processes and other information by relying on trade secrets and non-disclosure agreements with our employees, consultants and certain other persons who have access to such products, processes and information. Under the agreements, all inventions conceived by employees are our exclusive property. Nevertheless, there can be no assurance that these agreements will afford significant protection against misappropriation or unauthorized disclosure of our trade secrets and confidential information.

Competition

The RNAi field, though at an early stage of development, is already a competitive one and the competition is expected to increase. We face competition on many fronts ranging from large and small pharmaceutical, chemical and biotechnology companies to universities, government agencies and other public and private research organizations. Examples of companies that are focusing their commercial efforts in the RNAi field are Sirna Therapeutics, Alnylam Pharmaceuticals and Benitec Ltd. A number of the multinational pharmaceutical companies also either have their own gene silencing product development programs or are working with smaller biopharmaceutical companies in this area. In addition to our RNAi competitors, companies in other fields may be using other technologies to target the same diseases that we are targeting. The competition from other firms and institutions will manifest itself not only in our potential product markets but also, and importantly at this stage in development of RNAi technology, in recruiting and retaining key scientific and management personnel.

Currently, Rilutek, which was developed by Aventis Pharma AG, is the only drug of which we are aware that has been approved by the FDA for the treatment of ALS. Other companies are working to develop pharmaceuticals to treat ALS, including Aelous Pharmaceuticals. In addition, ALS belongs to a family of diseases called neurodegenerative diseases, which includes Alzheimer s, Parkinson s and Huntington s disease. These diseases are similar enough that a new treatment for one ailment potentially could be useful for treating others. There are many companies that are producing and developing drugs used to treat neurodegenerative diseases other than ALS, including Amgen, Guilford Pharmaceuticals, Phytopharm plc, Cephalon, Inc. and Ceregene, Inc.

Companies developing HIV vaccines that could compete with our HIV vaccine technology include Merck, VaxGen, Inc., Epimmune, Inc., AlphaVax, Inc. and Immunitor Corporation, and ABL may also seek to develop competing HIV vaccines that could utilize a portion of the technology that we have licensed from UMMS and ABL.

With respect to both our RNAi and non-RNAi products, many companies, including large pharmaceutical and biotechnology firms with financial resources, research and development staffs, and facilities that may, in certain cases, be substantially greater than those of ours or our strategic partners or licensees, are engaged in the research and development of pharmaceutical products that could compete with our potential products. To the extent that we seek to acquire, through license or otherwise, existing or potential new products, we will be competing with numerous other companies, many of which will have substantially greater financial resources, large acquisition and research and development staffs that may give those companies a competitive advantage over us in identifying and evaluating these drug acquisition opportunities. Any products that we acquire will be competing with products marketed by companies that in many cases will have substantially greater marketing resources than we have. The industry is characterized by rapid technological advances and competitors may develop their products more rapidly and such products may be more effective than those currently under development or that may be developed in the future by our strategic partners or licensees. Competitive products for a number of the disease indications that we have targeted are currently being marketed by other

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parties, and additional competitive products are under development and may also include products currently under development that we are not aware of or products that may be developed in the future.

Government Regulation

The marketing of pharmaceutical products requires the approval of the FDA and comparable regulatory authorities in foreign countries. The FDA has established guidelines and safety standards which apply to the pre-clinical evaluation, clinical testing, manufacture and marketing of pharmaceutical products. The process of obtaining FDA approval for a new drug product generally takes a number of years and involves the expenditure of substantial resources. The steps required before such a product can be produced and marketed for human use in the United States include preclinical studies in animal models, the filing of an Investigational New Drug (IND) application, human clinical trials and the submission and approval of a New Drug Application (NDA) or a Biologics License Application (BLA). The NDA or BLA involves considerable data collection, verification and analysis, as well as the preparation of summaries of the manufacturing and testing processes, preclinical studies, and clinical trials. The FDA must approve the NDA or BLA before the drug may be marketed. There can be no assurance that we or our strategic alliance partners or licensees will be able to obtain the required FDA approvals for any of our products.

The manufacturing facilities and processes for our products, which we anticipate will be manufactured by our strategic partners or licensees or other third parties, will be subject to rigorous regulation, including the need to comply with Federal Good Manufacturing Practice regulations. Our manufacturers also will be subject to regulation under the Occupational Safety and Health Act, the Environmental Protection Act, the Nuclear Energy and Radiation Control Act, the Toxic Substance Control Act and the Resource Conservation and Recovery Act.

Employees

As of December 31, 2004, we had 23 full-time employees, 14 of whom were engaged in research and development activities and nine of whom were involved in management and administrative operations. All of the employees engaged in research and development activities hold Ph.D. degrees, and one also holds an M.D. degree.

Properties

Our operations are based in Los Angeles, California, and Worcester, Massachusetts. The lease for our headquarters facility in Los Angeles consists of approximately 3,300 square feet of office space and expires in June 2005. The lease for our subsidiary in Worcester consists of approximately 6,900 square feet of office and laboratory space and expires in December 2005 and is suitable and adequate for our current operations. We have the right to extend the Worcester lease until December 2007.

Legal Proceedings

We are occasionally involved in claims arising out of our operations in the normal course of business, none of which are expected, individually or in the aggregate, to have a material adverse effect on us.

In February 2004, we were notified by the Massachusetts State Ethics Commission, or the Massachusetts Commission, that it had initiated a preliminary inquiry into whether our previous retention of a consultant who introduced us to UMMS constituted an improper conflict of interest under Massachusetts ethics laws. UMMS has advised us that it continues to believe that its agreements with us provided excellent value for UMMS, that it anticipates that the Massachusetts Commission s review of the terms of those agreements will confirm that the agreements were fair to UMMS, and that it believes that the Massachusetts Commission will concur with the resolution of the conflict proposed by UMMS under which the consultant will forfeit to UMMS certain of the compensation that the consultant was to receive from us.

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MANAGEMENT

Directors and Executive Officers

The following table provides information concerning our directors and executive officers:

Name	Age	Class of Directors(1)	Position
Max Link	64	III	Director, Chairman of the Board(2)(3)
Steven A. Kriegsman	62	II	Director, Chief Executive Officer, President
Marvin R. Selter	77	II	Director, Vice Chairman of the Board(2)(3)(4)
Louis Ignarro, Ph.D.	63	I	Director
Joseph Rubinfeld, Ph.D.	72	I	Director(2)(4)
Richard L. Wennekamp	61	II	Director(2)(3)(4)
Mark A. Tepper, Ph.D.	47		Vice President; President, CytRx Laboratories, Inc.
Matthew Natalizio	49		Chief Financial Officer, Treasurer
Jack R. Barber, Ph.D.	49		Senior Vice President Drug Development
Benjamin S. Levin	28		General Counsel and Corporate Secretary

(1) Class I directors serve until the 2007 annual meeting of stockholders, Class II directors serve until the 2005 annual meeting of stockholders and Class III directors serve until the 2006 annual meeting of stockholders.

(2) These directors constitute the members of our Audit Committee. Mr. Selter is the Chairman of the Committee.

(3) These directors constitute the members of our Nominating and Corporate Governance Committee. Mr. Wennekamp is Chairman of the Committee.

(4) These directors constitute the members of our Compensation Committee. Dr. Rubinfeld is Chairman of the committee.

Max Link has been a director since 1996. Dr. Link has been retired from business since 1994. From May 1993 to June 1994, Dr. Link served as the Chief Executive Officer of Corange U.S. Holdings, Inc. (the holding company for Boehringer Mannheim Therapeutics, Boehringer Mannheim Diagnostics and DePuy International). From 1992 to 1993, Dr. Link was Chairman of Sandoz Pharma, Ltd.. From 1987 to 1992, Dr. Link was the Chief Executive Officer of Sandoz Pharma and a member of the Executive Board of Sandoz, Ltd., Basel. Prior to 1987, Dr. Link served in various capacities with the United States operations of Sandoz, including President and Chief Executive Officer. Dr. Link also serves as a director of Access Pharmaceuticals, Inc., Alexion Pharmaceuticals, Inc., Cell Therapeutics, Inc., Celsion Corporation, Columbia Laboratories, Inc., Discovery Laboratories, Inc., Human Genome Sciences, Inc. and Protein Design Laboratories, Inc.

Steven A. Kriegsman has been a director and our President and Chief Executive Officer since July 2002. He previously served as a director and the Chairman of Global Genomics since June 2000. Mr. Kriegsman is Chairman and founder of Kriegsman Capital Group LLC, a financial advisory firm specializing in the development of alternative sources of equity capital for emerging growth companies. Mr. Kriegsman has advised such companies as Closure Medical Corporation, Novoste Corporation, Miravant Medical Technologies, Maxim Pharmaceuticals and Supergen Inc. Mr. Kriegsman has a B.S. degree from New York University in accounting and completed the Executive Program in Mergers and Acquisitions at New York University, The Management Institute. Mr. Kriegsman serves as a director of Bradley Pharmaceuticals, Inc.

Marvin R. Selter has been a director since October 2003. He has been the President of CMS, Inc. since he founded that firm in 1968. CMS, Inc. is a national management consulting firm. Mr. Selter serves on the Executive Committee of the SFV Economic Alliance, is Chairman of the Valley Economic Development

Center, is a member of the Business Tax Advisory Committee-City of Los Angeles, and is a member of the Small Business Board and Small Business Advisory Commission-State of California. He has served, and continues to serve, as a member of boards of directors of various hospitals, universities, private medical companies and other organizations. Mr. Selter attended Rutgers University and majored in Accounting and Business Administration.

Louis Ignarro, Ph.D. has been a director since July 2002. He previously served as a director of Global Genomics since November 20, 2000. Dr. Ignarro serves as the Jerome J. Bezler, M.D. Distinguished Professor of Pharmacology in the Department of Molecular and Medical Pharmacology at the UCLA School of Medicine. Dr. Ignarro has been at the UCLA School of Medicine since 1985 as a professor, acting chairman and assistant dean. Dr. Ignarro received the Nobel Prize for Medicine in 1998. Dr. Ignarro received a B.S. in pharmacy from Columbia University and his Ph.D. in Pharmacology from the University of Minnesota.

Joseph Rubinfeld, Ph.D. has been a director since July 2002. He co-founded SuperGen, Inc. in 1991 and has served as its Chief Executive Officer and President and as a director since its inception until December 31, 2003. He remains as Chairman Emeritus of SuperGen, Inc. Dr. Rubinfeld was also Chief Scientific Officer of SuperGen from 1991 until September 1997. Dr. Rubinfeld is also a founder of, and currently serves as the Chairman and Chief Executive Officer of, JJ Pharma. Dr. Rubinfeld was one of the four initial founders of Amgen, Inc. in 1980 and served as a Vice President and its Chief of Operations until 1983. From 1987 until 1990, Dr. Rubinfeld was a Senior Director at Cetus Corporation and from 1968 to 1980, Dr. Rubinfeld was employed at Bristol-Myers Company, International Division in a variety of positions. Dr. Rubinfeld received a B.S. degree in chemistry from C.C.N.Y. and an M.A. and Ph.D. in chemistry from Columbia University.

Richard L. Wennekamp has been a director since October 2003. He has been the Senior Vice President-Credit Administration of Community Bank since October 2002. From September 1998 to July 2002, Mr. Wennekamp was an executive officer of Bank of America Corporation, holding various positions, including Managing Director-Credit Product Executive for the last four years of his 22-year term with the bank. From 1977 through 1980, Mr. Wennekamp was a Special Assistant to former President of the United States, Gerald R. Ford, and the Executive Director of the Ford Transition Office. Prior thereto, he served as Staff Assistant to the President of the United States for one year, and as the Special Assistant to the Assistant Secretary of Commerce of the U.S.

Mark A. Tepper, Ph.D. has been the President and co-founder of our subsidiary CytRx Laboratories (formerly Araios, Inc.) and our Corporate Vice President since September 2003. From November 2002 to August 2003, he served as an independent pharmaceutical consultant. Prior to that, from April 2002 to October 2002, he served as President and CEO of Arradial, Inc., an Oxford Biosciences Venture-backed company developing a novel microfluidics based drug discovery platform. From April 1995 to March 2002, Dr. Tepper served in a number of senior management roles at Serono including Vice President, Research and Operations for the US Pharmaceutical Research Institute and Executive Director of Lead Discovery. From 1988 to 1995, Dr. Tepper was Sr. Research Investigator at the Bristol Myers Squibb Pharmaceutical Research Institute where he worked on the discovery and development of novel drugs in the area of Oncology and Immunology. Prior to that, Dr. Tepper was a post-doctoral fellow at the University of Massachusetts Medical School in the laboratory of Dr. Michael Czech. Dr. Tepper received a B.A. in Chemistry from Clark University with highest honors, and a Ph.D. in Biochemistry and Biophysics from Columbia University.

Matthew Natalizio has been our Chief Financial Officer and Treasurer since July 2004. From November 2002 to December 2003, he was President and General Manager of a privately held furniture manufacturing company Prior to that, from January 2000 to October 2002, he was Chief Financial Officer at Qualstar Corporation, a publicly traded designer and manufacturer of data storage devices. He was also the Vice President of Operations Support, the Vice President Finance and Treasurer of Superior National Insurance Group, a publicly traded workers compensation insurance company. Mr. Natalizio is a CPA who worked at Ernst and Young as an Audit Manager and Computer Audit Executive and was a Senior Manager at KPMG. He earned his Bachelor of Arts degree in Economics from the University of California, Los Angeles.

Jack Barber, Ph.D. has been our Senior Vice President Drug Development since July 2004. He previously served as Chief Technical Officer and Vice President of Research and Development at Immusol, a

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biopharmaceutical company based in San Diego, California, since 1994. Prior to that, Dr. Barber spent seven years in various management positions at Viagene, most recently serving as Associate Director of Oncology. Dr. Barber received both his B.S. and Ph.D. in Biochemistry from the University of California, Los Angeles. He also carried out his post-doctoral fellowship at the Salk Institute for Biological Studies in La Jolla, California.

Benjamin S. Levin has been our General Counsel, Vice President Legal Affairs and Corporate Secretary since July 2004. From November 1999 to June 2004, Mr. Levin was an associate in the transactions department of the Los Angeles office of O Melveny & Myers LLP. Mr. Levin received his S.B. in Economics from the Massachusetts Institute of Technology, and a J.D. from Stanford Law School.

Our board of directors has determined that Messrs. Link, Rubinfeld, Selter and Wennekamp are independent under the current independence standards of both the Nasdaq Stock Market and the SEC, and have no material relationships with us (either directly or as a partner, shareholder or officer of any entity) which could be inconsistent with a finding of their independence as members of our board of directors or as the members of our Audit Committee. In making these determinations, our board of directors has broadly considered all relevant facts and circumstances, recognizing that material relationships can include commercial, banking, consulting, legal, accounting, and familial relationships, among others.

Our board of directors has determined that Mr. Selter, one of the independent directors serving on our Audit Committee, also is an audit committee financial expert as defined by the SEC s rules.

Executive Compensation

Summary Compensation Table

The following table presents summary information concerning all compensation paid or accrued by us for services rendered in all capacities during the fiscal years ended December 31, 2004, 2003 and 2002 by Steven A. Kriegsman, our President and Chief Executive Officer, and four other most highly compensated executive officers:

				Long-Term Compensation	
Name and Principal Position	Year	Salary	Bonus	Securities Underlying Options (#)	All Other Compensation
Steven A. Kriegsman	2004	$361,173	$150,000		$42,617(1)
President and Chief Executive Officer	2003	$313,772	$150,000	1,000,000(2)	
	2002(3)	$110,000			
Jack R. Barber, Ph.D.	2004(4)	$112,910	$	100,000	
Vice President-Drug Development					
Mark A. Tepper, Ph.D.	2004	$200,699	$ 50,000		
Senior Vice President and President,	2003(6)	$ 58,333	$	400,000(5)	
CytRx Laboratories, Inc.					
Matthew Natalizio	2004(7)	$ 82,900	$	100,000(5)	
Chief Financial Officer and Treasurer					
Benjamin S. Levin	2004(8)	$ 80,881	$	160,000(5)	
General Counsel and Corporate Secretary					

(1) The amount shown includes approximately $5,000 in insurance premiums paid by us with respect to a life insurance policy for Mr. Kriegsman which has a face value of approximately $1.4 million as of December 31, 2004 and under which Mr. Kriegsman s designee is the beneficiary. The amount shown also includes approximately $37,617 of legal fees and expenses paid or reimbursed by us in accordance with the terms of Mr. Kriegsman s employment agreement described below under Employment Agreement with Steven A. Kriegsman.

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(2) 250,000 of the options shown vested on each of June 20, 2003 and June 20, 2004. The remaining 500,000 of the options shown vest in twenty-four monthly installments of 1/24th each on the 20th day of each month beginning on June 20, 2004, subject to Mr. Kriegsman s remaining in our continuous employ through such dates.

(3) Mr. Kriegsman has been our President and Chief Executive Officer since July 2002.

(4) Dr. Barber was hired on July 6, 2004.

(5) The options shown are subject to vesting in three annual installments of 1/3rd each on each of the first three anniversaries of the named executive officer s date of hire, subject to his remaining in our continuous employ through such dates.

(6) Dr. Tepper was hired on September 20, 2003.

(7) Mr. Natalizio was hired on July 12, 2004.

(8) Mr. Levin was hired on July 15, 2004.

Option Grants in Last Fiscal Year

The following table contains information concerning grants of stock options during the fiscal year ended December 31, 2004 to the executive officers named in the Summary Compensation Table:

Option Grants in Twelve Months Ended December 31, 2004

	Individual Grants			Potential Realized Value at Assumed Annual Rates of Stock Price Appreciation for Option Term(1)	
Name	Number of Shares Underlying Options Granted	% of Total Options Granted to Employees In Fiscal Year	Exercise Price	5%	10%
Steven A. Kriegsman		%		$	$
Jack R. Barber, Ph.D.	100,000	16.2%	$1.13	$ 71,065	$180,093
Mark A. Tepper, Ph.D.		%		$	$
Matthew Natalizio	100,000	16.2%	$1.11	$ 69,807	$176,905
Benjamin S. Levin	160,000	25.9%	$1.39	$139,866	$354,448

(1) The potential realizable value shown in this table represents the hypothetical gain that might be realized based on assumed 5% and 10% annual compound rates of stock price appreciation over the full option term. These prescribed rates are not intended to forecast possible future appreciation of the common stock.

Fiscal Year-End Option Values

The following table sets forth the number of options and total value of unexercised in-the-money options and warrants at December 31, 2004 for the executive officers named in the Summary Compensation Table, using the price per share of our common stock of $1.40 on December 31, 2004. No stock options were exercised during 2004 by the executive officers named.

	Number of Securities Underlying Unexercised Options at December 31, 2004 (#)		Value of Unexercised In-the-Money Options at December 31, 2004($)	
Name	Exercisable	Unexercisable	Exercisable	Unexercisable
Steven A. Kriegsman(1)	971,852	487,500	$638,499	$

Jack R. Barber, Ph.D.		100,000	$	$27,000
Mark A. Tepper, Ph.D.	133,333	266,667	$	$
Matthew Natalizio		100,000	$	$29,000
Benjamin S. Levin		160,000	$	$ 1,600

(1) Includes warrants issued to Mr. Kriegsman by Global Genomics prior to our merger with that company covering 459,352 shares of our common stock.

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Compensation of Directors

Periodically, our board of directors reviews our director compensation policies and, from time to time, makes changes to such policies based on various criteria the board deems relevant. During 2004, directors who were employees of our company received no compensation for their service as directors or as members of board committees.

During 2004, our non-employee directors received a quarterly retainer of $1,500 and a fee of $1,500 for each board meeting attended ($750 for meetings attended by teleconference and for board actions taken by unanimous written consent) and $750 for each committee meeting attended. Non-employee directors who chair the board or a board committee receive an additional $250 for each meeting attended as the chair. In May 2004 we made a payment of $7,500, plus reimbursement of certain expenses, to each of Messrs. Selter and Wennekamp in connection with their services as members of our Audit Committee. We grant options to purchase 15,000 shares of common stock at an exercise price equal to the current market value of our common stock to each non-employee director annually, usually in the summer of each year. Such option grants are made subject to vesting in annual increments of 1/3rd each, subject to the director remaining as a director.

Equity Compensation Plans

The following table sets forth certain information as of December 31, 2004 regarding securities authorized for issuance under our equity compensation plans. This table excludes warrants previously issued to Steven A. Kriegsman by Global Genomics that we assumed in connection with our merger with that company.

	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	(b) Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	(c) Number of Securities Remaining Available for Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by our stockholders:			
1994 Stock Option Plan	35,834	$0.97	65,850
1995 Stock Option Plan			22,107
1998 Long-Term Incentive Plan	132,541	1.00	29,517
2000 Long-Term Incentive Plan	4,560,667	1.96	5,439,333
Equity compensation plans not approved by our stockholders:			
Outstanding warrants(1)	4,383,237	1.07	
Total:	9,112,279	$1.51	5,556,807

(1) Issued as compensation for various services.

Perquisites

In general, we afford our directors and executive officers no perquisites apart from the compensation and stock option benefits described above and any benefits specifically provided for under the terms of any employment agreement as described below. We do, however, bear the cost of outside counsel employed by us to assist directors and executive officers in preparing reports of changes in beneficial ownership under Section 16 of the Securities Exchange Act of 1934 and other Section 16 compliance matters. We also permit Mr. Kriegsman, our President and Chief Executive Officer, and our directors to fly first-class for business travel, which is an exception to our usual practice for business travel by our officers and employees.

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Employment Agreements; Change in Control Agreements

Employment Agreement with Steven A. Kriegsman

Mr. Kriegsman is employed as our Chief Executive Officer pursuant to an employment agreement that was amended and restated as of June 10, 2003 to continue through July 15, 2006. The employment agreement will automatically renew in July 2006 for an additional one-year period, unless either Mr. Kriegsman or we elect not to renew it.

Under his employment agreement, Mr. Kriegsman is entitled to an annual base salary of $360,000. Our board of directors (or its Compensation Committee) will review the base salary annually and may increase (but not decrease) it in its sole discretion. In addition to his annual salary, Mr. Kriegsman is eligible to receive an annual bonus as determined by our board of directors (or its Compensation Committee) in its sole discretion, but not to be less than $150,000. Pursuant to his employment agreement with us, we have agreed that he shall serve on a full-time basis as our Chief Executive Officer and that he may continue to serve as President of the Kriegsman Group only so long as necessary to complete certain current assignments.

Mr. Kriegsman is eligible to receive grants of options to purchase shares of our common stock. The number and terms of those options, including the vesting schedule, will be determined by our board of directors (or its Compensation Committee) in its sole discretion.

Under Mr. Kriegsman s employment agreement, we have agreed that, if he is made a party, or threatened to be made a party, to a suit or proceeding by reason of his service to us, we will indemnify and hold him harmless from all costs and expenses to the fullest extent permitted or authorized by our certificate of incorporation or bylaws, or any resolution of our board of directors, to the extent not inconsistent with Delaware law. We also have agreed to advance to Mr. Kriegsman such costs and expenses upon his request if he undertakes to repay such advances if it ultimately is determined that he is not entitled to indemnification with respect to the same. These employment agreement provisions are not exclusive of any other rights to indemnification to which Mr. Kriegsman may be entitled and are in addition to any rights he may have under any policy of insurance maintained by us.

In the event we terminate Mr. Kriegsman s employment without cause (as defined), or if Mr. Kriegsman terminates his employment with good reason (as defined), (i) we have agreed to pay Mr. Kriegsman a lump-sum equal to his salary and prorated minimum annual bonus through to his date of termination, plus his salary and minimum annual bonus for a period of two years after his termination date, or until the expiration of the amended and restated employment agreement, whichever is later, (ii) he will be entitled to immediate vesting of all stock options or other awards based on our equity securities, and (iii) he will also be entitled to continuation of his life insurance premium payments and continued participation in any of our health plans through to the later of the expiration of the amended and restated employment agreement or 24 months following his termination date. Mr. Kriegsman will have no obligation in such events to seek new employment or offset the severance payments to him by the Company by any compensation received from any subsequent reemployment by another employer.

Under Mr. Kriegsman s employment agreement, he and his affiliated company, The Kriegsman Group, are to provide us during the term of his employment with the first opportunity to conduct or take action with respect to any acquisition opportunity or any other potential transaction identified by them within the biotech, pharmaceutical or health care industries and that is within the scope of the business plan adopted by our board of directors. Mr. Kriegsman s employment agreement also contains confidentiality provisions relating to our trade secrets and any other proprietary or confidential information, which provisions shall remain in effect for five years after the expiration of the employment agreement with respect to proprietary or confidential information and for so long as our trade secrets remain trade secrets.

Change in Control Agreement with Steven A. Kriegsman

Mr. Kriegsman s employment agreement contains no provision for payment to him in the event of a change in control of CytRx. If, however, a change in control (as defined in our 2000 Long-Term Incentive Plan) occurs during the term of the employment agreement, and if, during the term and within two years after

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the date on which the change in control occurs, Mr. Kriegsman s employment is terminated by us without cause or by him for good reason, then, to the extent that any payment or distribution of any type by us to or for the benefit of Mr. Kriegsman resulting from the termination of his employment is or will be subject to the excise tax imposed under Section 4999 of the Internal Revenue Code of 1986, as amended, we have agreed to pay Mr. Kriegsman, prior to the time the excise tax is payable with respect to any such payment (through withholding or otherwise), an additional amount that, after the imposition of all income, employment, excise and other taxes, penalties and interest thereon, is equal to the sum of (i) the excise tax on such payments plus (ii) any penalty and interest assessments associated with such excise tax.

Employment Agreement with Matthew Natalizio

Matthew Natalizio became our Chief Financial Officer on July 12, 2004 pursuant to a one-year employment agreement with us. Mr. Natalizio is entitled under his employment agreement to an annual base salary of $175,000 and is eligible to receive an annual bonus as determined by our board of directors (or its Compensation Committee) in its sole discretion. As an incentive to enter the employment agreement, Mr. Natalizio was granted as of July 12, 2004 a ten-year, nonqualified option under our 2000 Long-Term Incentive Plan to purchase 100,000 shares of our common stock at a price of $1.11 per share. This option will vest as to 1/3rd of the shares covered thereby on each of the first three anniversaries of the employment agreement, provided that Mr. Natalizio remains in our continuous employ.

In the event we terminate Mr. Natalizio s employment without cause (as defined), we have agreed to pay him a lump-sum equal to his accrued but unpaid salary and vacation, plus an amount equal to 1/360th of his salary for each four days (prorated for any period of less than four days) that he was employed prior to the date of his termination.

Employment Agreement with Jack R. Barber, Ph.D.

Jack R. Barber, Ph.D., became our Senior Vice President Drug Development on July 6, 2004 pursuant to a one-year employment agreement with us. Under his employment agreement, Dr. Barber is entitled to an annual base salary of $230,000 and is eligible to receive an annual bonus as determined by our board of directors (or its Compensation Committee) in its sole discretion. As an incentive to enter the employment agreement, Dr. Barber was granted as of July 6, 2004 a ten-year, nonqualified option under our 2000 Long-Term Incentive Plan to purchase 100,000 shares of our common stock at a price of $1.13 per share. This option will vest as to 1/3rd of the shares covered thereby on each of the first three anniversaries of the employment agreement, provided that Dr. Barber remains in our continuous employ.

In the event we terminate Dr. Barber s employment without cause (as defined), we have agreed to pay him a lump-sum equal to his accrued but unpaid salary and vacation, plus an amount equal to 1/360th of his salary for each four days (prorated for any period of less than four days) that he was employed prior to the date of his termination.

Employment Agreement with Mark A. Tepper, Ph.D.

Mark A. Tepper, Ph.D., became President of our CytRx Laboratories, Inc. subsidiary on September 17, 2003 pursuant to a two-year employment agreement with CytRx Laboratories, Inc. Under his employment agreement, Dr. Tepper is entitled to an annual base salary of $200,000 and is eligible to receive an annual bonus targeted at $50,000 based upon achievement of certain milestones as agreed upon by Dr. Tepper and the board of directors of CytRx Laboratories, Inc. As an incentive to enter into the employment agreement, Dr. Tepper was granted ten-year, nonqualified options under our 2000 Long-Term Incentive Plan to purchase 120,000 shares of our common stock at a price of $2.41 per share and a separate ten-year nonqualified option under the Plan to purchase 280,000 shares at an exercise price of $2.35 per share. These options will vest as to 1/3rd of the shares covered thereby on each of the first three anniversaries of the employment agreement, provided that Dr. Tepper remains in our continuous employ.

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In the event Dr. Tepper s employment is terminated without cause (as defined), we have agreed to continue to pay Dr. Tepper his salary and other employee benefits for a period of six months following his termination and to immediately vest in Dr. Tepper all of his stock options referred to above.

Employment Agreement with Benjamin S. Levin

Benjamin S. Levin became our Vice President Legal Affairs, General Counsel and Secretary on July 15, 2004 pursuant to a one-year employment agreement with us. Mr. Levin is entitled under his employment agreement to an annual base salary of $175,000 and is eligible to receive an annual bonus as determined by our board of directors (or its Compensation Committee) in its sole discretion. As an incentive to enter into the employment agreement, Mr. Levin was granted as of July 15, 2004 a ten-year, nonqualified option under our 2000 Long-Term Incentive Plan to purchase 160,000 shares of our common stock at a price of $1.39 per share. This option will vest as to 1/3rd of the shares covered thereby on each of the first three anniversaries of the employment agreement, provided that Mr. Levin remains in our continuous employ.

In the event we terminate Mr. Levin s employment without cause (as defined), we have agreed to pay Mr. Levin a lump-sum equal to his accrued but unpaid salary and vacation, plus an amount equal to an additional three months salary under his employment agreement (or six months salary if the employment agreement has been renewed as provided above).

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SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information with respect to the beneficial ownership of our common stock as of January 31, 2005 by:

Each person who is known by us to own beneficially more than 5% of our common stock.

Each of our directors.

Mr. Kriegsman.

All executive officers and directors as a group.

Beneficial ownership is determined in accordance with the SEC rules. Shares of common stock subject to any warrants or options that are presently exercisable, or exercisable within 60 days of January 31, 2005, which are indicated by footnote, are deemed outstanding for the purpose of computing the percentage ownership of the person holding the warrants or options, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person. The percentage ownership reflected in the table is based on 57,048,449 shares of our common stock outstanding as of January 31, 2005. Except as otherwise indicated, the holders listed below have sole voting and investment power with respect to all shares of common stock shown, subject to applicable community property laws. An asterisk represents beneficial ownership of less than 1%.

	Shares of Common Stock	
Name of Beneficial Owner**	Number	Percent
Louis Ignarro, Ph.D.(1)	405,982	*
Steven A. Kriegsman(2)	4,539,850	7.9%
Max Link(3)	48,749	*
Joseph Rubinfeld(4)	11,999	*
Marvin R. Selter(5)	360,784	*
Richard Wennekamp(6)	8,333	*
All executive officers and directors as a group (ten persons)(7)	5,509,030	9.4%

** The address of each of the beneficial owners listed below is c/o CytRx Corporation, 11726 San Vicente Boulevard, Suite 650, Los Angeles, CA 90049.

(1) Includes 314,066 shares subject to options or warrants.

(2) Includes 978,102 shares subject to options or warrants.

(3) Includes 19,542 shares subject to options or warrants.

(4) Includes 11,999 shares subject to options or warrants.

(5) The shares shown are owned, of record, by the Selter Family Trust or Selter IRA Rollover. Includes 3,333 shares subject to options or warrants owned by Mr. Selter.

(6) Includes 3,333 shares subject to options or warrants.

(7) Includes 1,463,708 shares subject to options or warrants.

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CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

On January 1, 2001, we entered into an agreement with Cappello Capital Corp. in which Cappello Capital Corp. served as our exclusive financial advisor. Alexander L. Cappello, who was one of our directors, is Chairman and Chief Executive Officer of Cappello Group, Inc., an affiliate of Cappello Capital Corp. The initial term of such agreement was for a period of twelve months and was subsequently extended for an additional twelve month period, expiring on December 31, 2002. Under the agreement, Cappello Capital Corp. assisted us with analysis of potential transactions and strategic alternatives. As compensation for its services, we granted Cappello Capital Corp. a ten-year warrant to purchase 1,272,492 shares of our common stock (subject to downward adjustment under certain conditions) with an exercise price of $1.00 per share. We valued these warrants for financial statement purposes at $1,063,000. Pursuant to that agreement, we also paid Cappello Capital Corp. a fee upon the closing of the merger with Global Genomics of 448,330 shares of our common stock, or 4.5% of the shares issuable in the merger. The value of these shares at the date of issuance was $247,000. Under the terms of the extension, we paid Cappello Capital Corp. a monthly retainer fee of $10,000 for the six-month period ending on June 30, 2002. We believe that the terms under which we engaged Cappello Capital Corp. were at least as favorable to us as could have been obtained from an unrelated third party.

We paid Cappello Capital Corp. a placement fee of approximately $688,000 in connection with our September 2003 private equity financing. At the request of Cappello Capital Corp., we issued all of the warrants to purchase a total of 427,203 shares of our common stock at an exercise price of $2.10 per share that we had agreed to issue to Cappello Capital Corp. in connection with the September 2003 private placement to certain persons designated by that firm. One of the designees was the Alexander L. and Linda Cappello 2001 Family Trust, to which we issued warrants to purchase 197,848 shares of our common stock at $2.10 per share. The placement fee was paid to Cappello Capital Corp. under the financial advisory agreement that we entered into with Cappello Capital Corp. in May 2003 that also provides for us to pay that firm a monthly retainer fee of $20,000. This agreement expired May 15, 2004, although it provided for additional payments in the event that we closed any financing transaction prior to May 15, 2006 that included any of a list of certain specified investors. Mr. Cappello was a related party, and we believe that the terms under which we engaged Cappello Capital Corp. were at least as favorable to us as could have been obtained from an unrelated third party. We valued all of the warrants that were issuable to Cappello Capital Corp. to purchase 427,203 of shares of our common at approximately $1,008,000 and the warrants issued to the Alexander L. and Linda Cappello 2001 Family Trust to purchase a total of 197,848 shares of our common stock at approximately $467,000 for financial statement purposes. In December 2004, in consideration for the termination of certain future payment obligations on our part under the May 2003 agreement, we agreed to pay Cappello Capital Corp. $100,000 per year for three years, we issued Cappello Capital Corp. 50,000 shares of our common stock and warrants to purchase an additional 100,000 shares of our common stock at an exercise price of $1.26 per share, and we agreed to reduce the exercise price of 200,000 previously issued warrants from between $2.02 and $2.94 per share to $1.26 per share. As a result of that transaction, we recorded expenses of approximately $446,000 in December 2004.

We previously paid Cappello Capital Corp. a placement fee of $408,000 in connection with our May 2003 private equity financing. At the request of Cappello Capital Corp., we issued warrants to purchase a total of 294,054 shares of our common stock at an exercise price of $1.85 per share and 73,515 shares of our common stock at an exercise price of $3.05 that we had agreed to issue to Cappello Capital Corp. in connection with the May 2003 private equity financing to certain persons designated by that firm. One of the designees was the Alexander L. and Linda Cappello 2001 Family Trust, to which we issued warrants to purchase 133,767 shares of our common stock at $1.85 per share and warrants to purchase 33,132 shares of our common stock at $3.05 per share. Alexander L. Cappello, one of our directors, is Chairman and Chief Executive Officer of Cappello Group, Inc., an affiliate of Cappello Capital Corp. The placement fee was paid to Cappello Capital Corp. under the financial advisory agreement that we entered into with Cappello Capital Corp. in May 2003. Mr. Cappello is a related party, and we believe that the terms under which we engaged Cappello Capital Corp. were at least as favorable to us as could have been obtained from an unrelated third party. We valued all of the warrants that were issuable to Cappello Capital Corp. to purchase 367,569 of shares of our common stock at

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approximately $1,060,000 and the warrants issued to the Alexander L. and Linda Cappello 2001 Family Trust to purchase a total of 166,899 shares of our common stock at approximately $481,000 for financial statement purposes.

Since July 16, 2002, Steven A. Kriegsman has been our Chief Executive Officer and one of our directors. In July 2002, we entered into an agreement with the Kriegsman Capital Group, or KCG, an affiliate of Mr. Kriegsman, whereby KCG agreed to provide us with office space and certain administrative services. In 2003, we paid a total of approximately $70,000 to KCG under this agreement. The charges were determined based upon actual space used and estimated percentages of employee time used. In October 2003, the services and facilities agreement with KCG was terminated as substantially all of the on-going operations of KCG have ceased. The obligations under the facility lease at our headquarters were transferred from KCG to us in July 2003. We believe that the terms under which we paid KCG for rent and other expenses are at least as favorable to us as could have been obtained from an unrelated third party.

We entered into an agreement, dated as of July 17, 2003 (and subsequently amended on October 18, 2003), with Louis Ignarro, Ph.D., one of our current directors. Pursuant to the agreement, Dr. Ignarro agreed to serve as our Chief Scientific Spokesperson to the medical and financial communities. As payment for his services, Dr. Ignarro was granted a non-qualified stock option under our 2000 Long-Term Incentive Plan to purchase 350,000 registered shares of our common stock at an exercise price equal to $1.89, the closing price for our common stock on Nasdaq on the date of grant. The option has a term of seven years, and from July 17, 2003 to October 17, 2003, vested monthly at the rate of 4,839 shares for each day of services provided by Dr. Ignarro in that month and, from October 18, 2003, vests monthly at a rate of 15,975 shares for the remaining term of the agreement. Either party may terminate the agreement at any time, and any unvested shares under the option as of the date of termination of the agreement will be cancelled. As of January 31, 2005, 270,117 shares of common stock under the option had vested.

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SELLING SECURITYHOLDERS

Selling Securityholder Table

The following table sets forth certain information regarding the beneficial ownership of our common stock by the selling securityholders as of January 31, 2005. Beneficial ownership is determined in accordance with SEC rules. Shares of common stock subject to any warrants or options that are presently exercisable, or exercisable within 60 days of January 31, 2005, which are indicated by footnote, are deemed outstanding for the purpose of computing the percentage ownership of the person holding the warrants or options, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person. The percentage ownership reflected in the table is based on 57,048,449 shares of our common stock outstanding as of January 31, 2005. To our knowledge, each of the selling securityholders has sole voting and investment power with respect to the shares of common stock shown, subject to applicable community property laws. For purposes of the following table we have assumed that the selling securityholders will sell all the shares of our common stock being offered in this prospectus, including all of the shares of our common stock issuable upon exercise of warrants held by them. An asterisk denotes beneficial ownership of less than 1%.

	Beneficial Ownership Before Offering			Beneficial Ownership After Offering	
	Number of Shares	Percent	Number of Shares Being Offered	Number of Shares	Percent
Alpha Capital AG	661,122(1)	1.2	609,756(1)	51,366	*
Basso Private Opportunity Holding Fund Ltd.	353,848(2)	*	256,098(2)	97,750	*
Basso Multi-Strategy Holding Fund Ltd.	1,290,664(3)	2.3	963,414(3)	327,250	*
Bristol Investment Fund, Ltd	2,354,268(4)	4.1	1,829,268(4)	525,000	*
Brookstone Biotech Ventures, LP	304,878(5)	*	304,878(5)	0	0
Cohanzick Absolute Return Master Fund, Ltd.	65,853(6)	*	65,853(6)	0	0
Cranshire Capital, L.P.	1,660,030(7)	2.9	1,219,512(7)	440,518	*
Crescent International Ltd.	838,743(8)	1.5	549,000(8)	289,743	*
DKR Soundshore Oasis Holding Fund Ltd.	628,980(9)	1.1	304,878(9)	324,102	*
Excalibur Limited Partnership	853,659(10)	1.5	853,659(10)	0	0
Gabriel Capital, L.P.	300,000(11)	*	300,000(11)	0	0
Gryphon Master Fund, LP	651,728(12)	1.1	187,500(12)	464,228	*
GSSF Master Fund, LP	350,000(13)	*	187,500(13)	162,500	*
JGB Capital LP	609,756(14)	1.1	609,756(14)	0	0
Walter J. Lack	1,806,626(15)	3.2	304,878(15)	1,501,748	2.6
Langley Partners, L.P.	2,549,139(16)	4.4	2,437,500(16)	111,639	*
Nite Capital LP	609,758(17)	1.1	609,758(17)	0	0
Omicron Master Trust	1,127,460(18)	2.0	914,634(18)	212,826	*
Panacea Fund, LLC	365,853(19)	*	365,853(19)	0	0
Portside Growth and Opportunity Fund	1,313,084(20)	2.3	1,219,512(20)	93,572	*
Prolate LLC	749,756(21)	1.3	609,756(21)	140,000	*
Lindsey A. Rosenwald	609,756(22)	1.1	609,756(22)	0	0
SF Capital Partners Ltd.	750,000(23)	1.3	750,000(23)	0	0
Silverback Life Sciences Master Fund Ltd.	365,853(24)	*	365,853(24)	0	0
Silverback Master, Ltd.	1,463,415(25)	2.6	1,463,415(25)	0	0

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	Beneficial Ownership Before Offering			Beneficial Ownership After Offering	
	Number of Shares	Percent	Number of Shares Being Offered	Number of Shares	Percent
Smithfield Fiduciary LLC	4,515,056(26)	7.7	3,963,414(26)	551,642	*
Solomon Strategic Holdings, Inc.	121,950(27)	*	121,950(27)	0	0
Stonestreet Limited Partnership	592,805(28)	1.0	487,805(28)	105,000	*
The Tail Wind Fund Limited	1,429,512(29)	2.5	1,219,512(29)	210,000	*
Truk International Fund, LP	91,464(30)	*	91,464(30)	0	0
Truk Opportunity Fund, LLC	1,432,928(31)	2.5	1,432,928(31)	0	0
Vicis Capital Master Fund	304,878(32)	*	304,878(32)	0	0
Whalehaven Capital Fund Limited	592,805(33)	1.0	487,805(33)	105,000	*
Midtown Partners & Co. LLC	17,785(34)	*	35,569(34)	0	0
Richard Henri Kreger	8,892(35)	*	8,892(35)	0	0
J. Rory Rohan	8,892(36)	*	8,892(36)	0	0
Rodman & Renshaw LLC	1,486,301(37)	2.6	1,206,301(37)	280,000	*

(1) Represents 437,933 shares of our common stock and 223,189 shares of our common stock issuable upon exercise of warrants, which includes 406,504 shares of our common stock and 203,252 shares of our common stock issuable upon exercise of warrants included in this prospectus. Konrad Ackerman and Raizer Posch have voting and investment control over these securities. Messrs. Ackerman and Posch disclaim beneficial ownership of these securities.

(2) Represents 228,232 shares of our common stock and 125,616 shares of our common stock issuable upon exercise of warrants, which includes 170,732 shares of our common stock and 85,366 shares of our common stock issuable upon exercise of warrants included in this prospectus. Basso Capital Management, L.P. (Basso) is the Investment Manager to Basso Private Opportunity Holding Fund Ltd. Howard I. Fischer is a managing member of Basso GP, LLC, the General Partner of Basso, and as such has investment power and voting control over these securities. Mr. Fischer disclaims beneficial ownership of these securities.

(3) Represents 834,776 shares of our common stock and 455,888 shares of our common stock issuable upon exercise of warrants, which includes 642,276 shares of our common stock and 321,138 shares of our common stock issuable upon exercise of warrants included in this prospectus. Basso Asset Management, L.P. (Basso) is the Investment Manager to Basso Multi-Strategy Holding Fund Ltd. Howard I. Fischer is a managing member of Basso GP, LLC, the General Partner of Basso, and as such has investment power and voting control over these securities. Mr. Fischer disclaims beneficial ownership of these securities.

(4) Represents 1,219,512 shares of our common stock and 1,134,756 shares of our common stock issuable upon exercise of warrants, which includes 1,219,512 shares of our common stock and 609,756 shares of our common stock issuable upon exercise of warrants included in this prospectus. Paul Kessler as manager of Bristol Capital Advisors, LLC, the investment advisor to Bristol Investment Fund, Ltd., has voting and investment control over the securities held by Bristol Investment Fund, Ltd. Mr. Kessler disclaims beneficial ownership of the securities held by Bristol Investment Fund, Ltd.

(5) Includes 203,252 shares of our common stock and 101,626 shares of our common stock issuable upon exercise of warrants. Robert L. Carver is the President of Brookstone Capital, Inc., the general partner of Brookstone Biotech Ventures, LP, and as such has voting and investment control over these securities. Mr. Carver disclaims beneficial ownership of the securities held by Brookstone Capital, Inc.

(6) Includes 43,902 shares of our common stock and 21,951 shares of our common stock issuable upon exercise of warrants. David Sherman is the authorized agent for Cohanzick Absolute Return Master Fund, Ltd. and has voting and investment control over these securities. Mr. Sherman disclaims beneficial ownership of the securities held by Cohanzick Absolute Return Master Fund, Ltd.

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(7) Represents 813,008 shares of our common stock and 847,022 shares of our common stock issuable upon exercise of warrants, which includes 813,008 shares of our common stock and 406,504 shares of our common stock issuable upon exercise of warrants included in this prospectus. Mitchell P. Kopin, President of Downsview Capital, Inc., the general partner of Cranshire Capital, L.P., has sole investment and voting control of these securities held by Cranshire Capital, L.P. Each of Mr. Kopin and Downsview Capital, Inc. disclaims beneficial ownership of the securities.

(8) Represents 366,000 shares of our common stock and 472,743 shares of our common stock issuable upon exercise of warrants, which includes 366,000 shares of our common stock and 183,000 shares of our common stock issuable upon exercise of warrants included in this prospectus. Mel Craw and Maxi Brezzi as managers for Greenlight (Switzerland) SA, the investment advisor to Crescent International Ltd., have voting control and investment discretion over these securities owned by Crescent International, Ltd. Messrs. Craw and Brezzi disclaim beneficial ownership of the securities held by Crescent International, Ltd.

(9) Represents 352,354 shares of our common stock and 276,626 shares of our common stock issuable upon exercise of warrants, which includes 203,252 shares of our common stock and 101,626 shares of our common stock issuable upon exercise of warrants included in this prospectus. DKR SoundShore Oasis Holding Fund Ltd. (the Fund) is a master fund in a master-feeder structure, whose investment manager is DKR Oasis Management Company LP (DKR Oasis). DKR Oasis has the authority to do any and all acts on behalf of the Fund. Mr. Seth Fischer is the managing partner of Oasis Management Holdings LLC, one of the general partners of DKR Oasis. Mr. Fischer has ultimate responsibility for trading with respect to the Fund. Mr. Fischer disclaims beneficial ownership of these securities.

(10) Includes 569,106 shares of our common stock and 284,553 shares of our common stock issuable upon exercise of warrants. William Hechter, President of Excalibur Limited Partnership, has voting and investment control over these securities. Mr. Hechter disclaims beneficial ownership of the securities held by Excalibur Limited Partnership.

(11) Includes 200,000 shares of our common stock and 100,000 shares of our common stock issuable upon exercise of warrants. David K. Sherman is the authorized agent for Gabriel Capital, L.P. and has voting and investment control over these securities. Mr. Sherman disclaims beneficial ownership of the securities held by Gabriel Capital, L.P.

(12) Represents 200,000 shares of our common stock and 451,728 shares of our common stock issuable upon exercise of warrants, which includes 125,000 shares of our common stock and 62,500 shares of our common stock issuable upon exercise of warrants included in this prospectus. Mr. E. B. Lyon, IV is authorized agent of the Fund. Mr. Lyon disclaims beneficial ownership of these securities.

(13) Represents 200,00 shares of our common stock and 150,000 shares of our common stock issuable upon exercise of warrants, which includes 125,000 shares of our common stock and 62,500 shares of our common stock issuable upon exercise of warrants included in this prospectus. Mr. E. B. Lyon, IV is authorized agent of the Fund. Mr. Lyon disclaims beneficial ownership of these securities.

(14) Includes 406,504 shares of our common stock and 203,252 shares of our common stock issuable upon exercise of warrants. Brett Cohen, President of JGB Management, Inc., the general partner of JGB Capital L.P., has voting and investment control over these securities. Mr. Cohen disclaims beneficial ownership of the securities held by JGB Capital L.P.

(15) Represents 1,530,000 shares of our common stock and 276,626 shares of our common stock issuable upon exercise of warrants, which includes 203,252 shares of our common stock and 101,626 shares of our common stock issuable upon exercise of warrants included in this prospectus.

(16) Represents 1,625,000 shares of our common stock and 924,139 shares of our common stock issuable upon exercise of warrants, which includes 1,625,000 shares of our common stock and 812,500 shares of our common stock issuable upon exercise of warrants included in this prospectus. Langley Capital, LLC is the general partner of Langley Partners, LP. Jeffrey Thorp, the managing member of Langley Capital, LLC, has voting and investment control over the securities held by Langley Partners, LP.

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(17) Includes 406,505 shares of our common stock and 203,253 shares of our common stock issuable upon exercise of warrants. Keith Goodman is the manager of the general partner of Nite Capital LP, and as such has voting and investment control over these securities. Mr. Goodman disclaims beneficial ownership of the securities held by Nite Capital, LP.

(18) Represents 609,756 shares of our common stock and 517,704 shares of our common stock issuable upon exercise of warrants, which includes 609,756 shares of our common stock and 304,878 shares of our common stock issuable upon exercise of warrants included in this prospectus. Omicron Capital, L.P., which serves as investment manager to Omicron Master Trust, Omicron Capital, Inc., which serves as a general partner of Omicron Capital, L.P., and Winchester Global Trust Company Limited, which serves as the trustee of Omicron Master Trust, and Oliver H. Morali and Bruce T. Bernstein, who are officers of Omicron Capital, Inc., could each be deemed to be beneficial owners of the foregoing shares and warrants. Each of the foregoing entities and individuals disclaims beneficial ownership of the foregoing shares and warrants.

(19) Includes 243,902 shares of our common stock and 121,951 shares of our common stock issuable upon exercise of warrants. William Harris Investors, Inc. is the manager of the Panacea Fund LLC and has voting and investment control over the securities held by the Panacea Fund LLC.

(20) Represents 813,008 shares of our common stock and 500,076 shares of our common stock issuable upon exercise of warrants, which includes 813,008 shares of our common stock and 406,504 shares of our common stock issuable upon exercise of warrants included in this prospectus. The investment advisor to Portside Growth and Opportunity Fund is Ramius Capital Group, LLC whose managing member is C4S & Co., LLC, whose managing members are Peter Cohen, Morgan Stark, Jeffrey Solomon and Thomas Strauss, who, therefore, could be deemed to be beneficial owners of the foregoing shares and warrants. Messrs. Cohen, Stark, Solomon and Strauss each disclaim beneficial ownership of these shares and warrants.

(21) Represents 406,504 shares of our common stock and 343,252 shares of our common stock issuable upon exercise of warrants, which includes 406,504 shares of our common stock and 203,252 shares of our common stock issuable upon exercise of warrants included in this prospectus. S. Donald Sussman is the owner of the general partner of the manager of Prolate LLC, and as such has voting and investment control over these securities. Mr. Sussman disclaims pecuniary interest in these securities beneficially owned by him.

(22) Includes 406,504 shares of our common stock and 203,252 shares of our common stock issuable upon exercise of warrants.

(23) Includes 500,000 shares of our common stock and 250,000 shares of our common stock issuable upon exercise of warrants. Michael A. Roth and Brian J. Stark have voting and investment control over these securities held by SF Capital Partners Ltd. Messrs. Roth and Stark disclaim beneficial ownership of these securities held by SF Capital Partners Ltd.

(24) Includes 243,902 shares of our common stock and 121,951 shares of our common stock issuable upon exercise of warrants included in this prospectus. Silverback Asset Management, LLC is the investment manager of Silverback Life Sciences Master Fund Ltd. and has voting and dispositive power and investment discretion over securities held by Silverback Life Sciences Master Fund Ltd. Elliot Bossen controls Silverback Asset Management, LLC. Each of Silverback Asset Management, LLC and Elliot Bossen disclaim beneficial ownership of the securities held by Silverback Life Sciences Master Fund Ltd.

(25) Includes 975,610 shares of our common stock and 487,805 shares of our common stock issuable upon exercise of warrants included in this prospectus. Silverback Asset Management, LLC is the investment manager of Silverback Master, Ltd. and has voting and dispositive power and investment discretion over securities held by Silverback Master, Ltd. Elliot Bossen controls Silverback Asset Management, LLC. Each of Silverback Asset Management, LLC and Elliot Bossen disclaim beneficial ownership of the securities held by Silverback Master, Ltd.

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(26) Represents 2,947,976 shares of our common stock and 1,567,080 shares of our common stock issuable upon exercise of warrants, which includes 2,642,276 shares of our common stock and 1,321,138 shares of our common stock issuable upon exercise of warrants included in this prospectus. Highbridge Capital Management, LLC is the trading manager of Smithfield Fiduciary LLC and has voting control and investment discretion over securities held by Smithfield Fiduciary LLC. Glenn Dubin and Henry Swieca control Highbridge Capital Management, LLC. Each of Highbridge Capital Management LLC, Glenn Dubin and Henry Swieca disclaims beneficial ownership of the securities held by Smithfield Fiduciary LLC.

(27) Includes 81,300 shares of our common stock and 40,650 shares of our common stock issuable upon exercise of warrants. A.P. MacKellar and Westlaw Ltd. have voting and investment control over these securities held by Solomon Strategic Holdings, Inc.

(28) Represents 325,203 shares of our common stock and 267,602 shares of our common stock issuable upon exercise of warrants, which includes 325,203 shares of our common stock and 162,602 shares of our common stock issuable upon exercise of warrants included in this prospectus. Michael Finkelstein is President of Stonestreet Limited Partnership and has voting and investment control over these securities. Mr. Finkelstein disclaims beneficial ownership of the securities owned by Stonestreet Limited Partnership.

(29) Represents 813,008 shares of our common stock and 616,504 shares of our common stock issuable upon exercise of warrants, which includes 813,008 shares of our common stock and 406,504 shares of our common stock issuable upon exercise of warrants included in this prospectus. Tail Wind Advisory & Management Ltd., a UK corporation authorized and regulated by the Financial Services Authority of Great Britain (TWAM), is the investment manager for the Tail Wind Fund Ltd., and David Crook is the CEO and controlling shareholder of TWAM. Each of TWAM and David Crook expressly disclaims any equitable or beneficial ownership of, or pecuniary interest in, the shares being registered hereunder and held by The Tail Wind Fund Ltd.

(30) Includes 60,976 shares of our common stock and 30,488 shares of our common stock issuable upon exercise of warrants. Michael E. Fein and Stephen E. Saltzstein, as principals of Atoll Asset Management, LLC, the Managing Member of Truk International Fund, LP, exercise investment and voting control over the securities owned by Truk International Fund, LP. Both Mr. Fein and Mr. Saltzstein disclaim beneficial ownership of the securities owned by Truk International Fund, LP.

(31) Includes 955,285 shares of our common stock and 477,643 shares of our common stock issuable upon exercise of warrants. Michael E. Fein and Stephen E. Saltzstein, as principals of Atoll Asset Management, LLC, the Managing Member of Truk Opportunity Fund, LLC, exercise investment and voting control over the securities owned by Truk Opportunity Fund, LLC. Both Mr. Fein and Mr. Saltzstein disclaim beneficial ownership of the securities owned by Truk Opportunity Fund, LLC.

(32) Includes 203,252 shares of our common stock and 101,626 shares of our common stock issuable upon exercise of warrants. Richard Han is portfolio manager for Vicis Capital Master Fund and has voting and investment control over these securities. Mr. Han disclaims beneficial ownership of these securities owned by Vicis Capital Master Fund.

(33) Represents 325,203 shares of our common stock and 267,602 shares of our common stock issuable upon exercise of warrants, which includes 325,203 shares of our common stock and 162,602 shares of our common stock issuable upon exercise of warrants included in this prospectus. Evan Schemenauer, Arthur Jones and Jennifer Kelly have voting and investment control for these securities held by Whalehaven Capital Fund Limited. Messrs. Schemenauer and Jones and Ms. Kelly disclaim beneficial ownership of these securities held by Whalehaven Capital Fund Limited.

(34) Represents 17,785 shares of our common stock issuable upon exercise of warrants included in this prospectus that we issued to Midtown Partners & Co., LLC in consideration for services rendered as a placement agent in our January 2005 private placement. Bruce Jordan is President and Managing Director of Midtown Partners & Co. Mr. Jordan disclaims beneficial ownership of these securities.

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(35) Represents 8,892 shares of our common stock issuable upon exercise of warrants included in this prospectus that we issued to Richard H. Kreger, an employee of Midtown Partners & Co., LLC in consideration for services rendered as a placement agent in our January 2005 private placement.

(36) Represents 8,892 shares of our common stock issuable upon exercise of warrants included in this prospectus that we issued to J. Rory Rohan, an employee of Midtown Partners & Co., LLC in consideration for services rendered as a placement agent in our January 2005 private placement.

(37) Represents shares of our common stock issuable upon exercise of warrants, which include 1,206,301 shares of our common stock issuable upon exercise of warrants included in this prospectus that we issued to Rodman & Renshaw LLC in consideration for services rendered as a placement agent in our January 2005 private placement. Thomas G. Pinou is Chief Financial Officer of Rodman & Renshaw, LLC. Mr. Pinou disclaims beneficial ownership of these securities.

Relationships with Selling Securityholders

The selling securityholders include certain institutional and other investors who acquired a total of 17,334,494 shares of our common stock and warrants to purchase a total of 8,667,247 shares of our common stock in a private equity financing that we closed in January 2005. Certain of these institutional investors are affiliated with registered broker-dealers, but these investors acquired the securities covered by this prospectus in the ordinary course of business and, at the time of their acquisition of these securities, they had no agreements or understandings with any person, whether directly, or indirectly, to distribute these securities. The selling securityholders also include Rodman & Renshaw, LLC, or Rodman, and Midtown Partners & Co., LLC, to whom we issued warrants to purchase 1,206,301 shares and 35,569 shares, respectively, and paid placement fees of $1,483,750 and $43,750, respectively, for placement agent services rendered in connection with the foregoing private equity financing. In October 2004, we also issued to Rodman warrants to purchase 280,000 shares and paid a placement fee of approximately $310,000 for placement agent services rendered in connection with the private equity financing that we consummated that month, and we paid Rodman a placement fee of approximately $240,000 in connection with an acquisition of certain assets of Biorex Research & Development Company.

Other than as set forth above, none of the selling securityholders has had any position, office, or other material relationship with us or any of our affiliates within the past three years.

The information in the above table is as of the date of this prospectus. Information concerning the selling securityholders may change from time to time and any such changed information will be described in supplements to this prospectus if and when necessary.

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PLAN OF DISTRIBUTION

Each selling securityholder of our common stock, $.001 par value per share (together with a Series A Junior Participating Preferred Stock Purchase Right that is associated with each share) and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their shares on the NASDAQ Stock Market or any other stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. A selling securityholder may use any one or more of the following methods when selling shares:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

settlement of short sales entered into after the date of this prospectus;

broker-dealers may agree with the selling securityholders to sell a specified number of such shares at a stipulated price per share;

a combination of any such methods of sale;

through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise; or

any other method permitted pursuant to applicable law.

The selling securityholders may also sell shares under Rule 144 under the Securities Act of 1933, as amended, if available, rather than under this prospectus.

Broker-dealers engaged by the selling securityholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling securityholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. Each selling securityholder does not expect these commissions and discounts relating to its sales of shares to exceed what is customary in the types of transactions involved.

In connection with the sale of our common stock or interests therein, the selling securityholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling securityholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling securityholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling securityholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be underwriters within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling securityholder has informed us that it does not have any agreement or understanding, directly or indirectly, with any person to distribute its shares.

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We are required to pay certain fees and expenses incurred by us incident to the registration of the shares. We have agreed to indemnify the selling securityholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because selling securityholders may be deemed to be underwriters within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. Each selling securityholder has advised us that they have not entered into any agreements, understandings or arrangements with any underwriter or broker-dealer regarding the sale of the resale shares. There is no underwriter or coordinating broker acting in connection with the proposed sale of the resale shares by the selling securityholders.

We have agreed to keep this prospectus effective until the earlier of (i) the date on which the shares may be resold by the selling securityholders without registration pursuant to rule 144(k) or (ii) all of the shares have been sold pursuant to the prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to our common stock for a period of two business days prior to the commencement of the distribution. In addition, the selling securityholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of our common stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale.

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DESCRIPTION OF CAPITAL STOCK

General

We are authorized to issue up to 100,000,000 shares of common stock, $.001 par value per share, and 5,000,000 shares of preferred stock, $.01 par value per share, of which 5,000 shares have been designated as Series A Junior Participating Preferred Stock. As of January 31, 2005, 57,048,449 shares of common stock were issued and outstanding. We have no preferred stock outstanding. All of our outstanding shares of common stock, including the shares being offered by the selling securityholders, are or will be, fully paid and non-assessable.

Common Stock

Holders of common stock are entitled to one vote per share on all matters submitted to a vote of our stockholders, including with respect to the election of directors.

Holders of common stock are entitled to receive dividends in cash or in property on an equal basis, if and when dividends are declared on the common stock by our board of directors, subject to any preference in favor of outstanding shares of preferred stock, if there are any.

In the event of our liquidation, all holders of common stock will participate on an equal basis with each other in our net assets available for distribution after payment of our liabilities and any liquidation preference in favor of outstanding shares of preferred stock, if there are any.

Holders of common stock are not entitled to preemptive rights, and the common stock is not subject to redemption.

The rights of holders of common stock are subject to the rights of holders of any preferred stock that we designate or have designated. The rights of preferred stockholders may adversely affect the rights of the common stockholders.

Preferred Stock

Our board of directors has designated 5,000 shares of our authorized preferred stock as Series A Junior Participating Preferred Stock, which have the rights, preferences and privileges summarized below. There are no outstanding shares of Series A Junior Participating Preferred Stock.

Holders of Series A Junior Participating Preferred Stock will be entitled to vote on any matter with the holders of common stock. The number of votes per whole share of Series A Junior Participating Preferred Stock will be equivalent to the number of votes to which a holder of 100 shares, as adjusted from time to time, of our common stock would be entitled.

Holders of Series A Junior Participating Preferred Stock will be entitled to receive dividends on each date dividends are paid to the holders of common stock in an amount per whole share of Series A Junior Participating Preferred Stock equivalent to the amount a holder of 100 shares, as adjusted from time to time, of our common stock would receive. Holders of Series A Junior Participating Preferred Stock also will be entitled to receive an additional quarterly dividend in an amount per whole share equal to the excess (if any) of $1.00 over the aggregate dividends paid per whole share of Series A Junior Participating Preferred Stock during the quarter. Dividends on the Series A Junior Participating Preferred Stock shall be cumulative.

As long as any shares of Series A Junior Participating Preferred Stock are outstanding, no dividend on our common stock (other than a dividend in common stock or other stock ranking junior to Series A Junior Participating Preferred Stock) may be paid, unless the full cumulative dividends on all outstanding shares of Series A Junior Participating Preferred Stock have been paid.

In the event of a merger, consolidation, reclassification or other transaction where our common stock is exchanged for other stock, securities, cash or any other property, any outstanding shares of Series A Junior Participating Preferred Stock will similarly be exchanged in an amount per whole share equal to the aggregate

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amount of stock, securities, cash, or other property a holder of 100 shares, as adjusted from time to time, of common stock would receive.

In the event of our liquidation, before any distribution or payment is made to the holders of common stock or to any other stock ranking junior to the Series A Junior Participating Preferred Stock, a holder of Series A Junior Participating Preferred Stock will be entitled to, per whole share of Series A Junior Participating Preferred Stock, the greater of $1.00 or the equivalent of the aggregate amount distributed or to be distributed to the holder of 100 shares, as adjusted from time to time, of common stock.

The Series A Junior Participating Preferred Stock is not redeemable.

Shares of Series A Junior Participating Preferred Stock may be issued by our board of directors without the approval of our stockholders. The issuance of Series A Junior Participating Preferred Stock would adversely affect the voting power, liquidation rights and other rights held by owners of common stock.

In addition to Series A Junior Participating Preferred Stock, our board of directors is authorized to issue shares of our authorized preferred stock in one or more other series and to fix the voting rights, liquidation preferences, dividend rights, conversion rights, redemption rights and terms, including sinking provisions, and other rights and preferences. Our board of directors determination to issue preferred stock could make it more difficult for a third party to acquire control of our company, or could discourage any such attempt. We have no present plan or intention to issue any preferred stock.

Shareholder Protection Rights Agreement

On April 16, 1997, our board of directors declared a distribution of one right for each outstanding share of our common stock, payable to shareholders of record at the close of business on May 15, 1997 and with respect to each share of common stock (including treasury shares) issued by us thereafter and prior to the separation time. Each right entitles the registered holder to purchase from us one ten-thousandth (1/10,000th) of a share of our Series A Junior Participating Preferred Stock, par value $0.01 per share, at a purchase price of $30 per share, subject to adjustment. The description and terms of the rights are set forth in a Shareholder Protection Rights Agreement, or Rights Agreement, between us and American Stock Transfer & Trust Company, as Rights Agent, dated April 16, 1997.

The separation time will occur on earlier of (i) ten business days (unless otherwise accelerated or delayed by our board) following public announcement that a person or group of affiliated or associated persons, referred to as an acquiring person, has acquired, obtained the right to acquire, or otherwise obtained beneficial ownership of 15% or more of the then outstanding shares of our common stock, or (ii) ten business days (unless otherwise delayed by our board) following the commencement of a tender offer or exchange offer that would result in the person or group beneficially owning 15% or more of our then outstanding shares of common stock.

Until the separation time, the rights will be evidenced by certificates representing outstanding shares of our common stock, and transfer of any certificates representing outstanding common stock will also constitute the transfer of the rights associated with the common stock represented by such certificate.

The rights are not exercisable until the separation time, and will expire at the close of business on the tenth anniversary of the Rights Agreement, unless earlier terminated by us as described below.

If the separation time occurs, separate rights certificates will be mailed to holders of record of common stock as of the close of business on the date the separation time occurs. Thereafter, the separate rights certificates alone will represent the rights.

If the flip-in date occurs, that is, the close of business ten business days following our announcement that a person has become an acquiring person, and if we have not terminated the rights as described below, then the rights will entitle the holders to acquire shares of common shares (rather than Series A Junior Participating Preferred Stock) having a value equal to twice the right s exercise price. Instead of issuing shares of common stock upon exercise of the rights following a flip-in-date, we may substitute a combination of cash, property, a reduction in the exercise price of the rights, common stock or other securities (or any combination

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of the above) with a value equal to the common stock which would otherwise be issuable. In addition, at the option of our board of directors prior to the time that any person becomes the beneficial owner of more than 50% of our outstanding common stock, and rather than payment of the cash purchase price, each right may be exchanged for one share of common stock if a flip-in-date occurs. Notwithstanding any of the foregoing, all rights that are, or (under certain circumstances set forth in the Rights Agreement) were, beneficially owned by any person on or after the date such person becomes an acquiring person will be null and void.

Following the flip-in-date, if we are acquired in a merger or consolidation where we do not survive or our common stock is changed or exchanged, or 50% or more of our assets or assets generating 50% or more of our operating income or cash flow is transferred, in one or more transactions to persons who at that time control us, then each right will entitle the holders to acquire for the exercise price shares of the acquiring party having a value equal to twice the right s exercise price.

The exercise price payable with respect to the rights, and the number of rights outstanding, are subject to adjustment from time to time to prevent dilution in the event of a stock dividend, stock split or reverse stock split, or other recapitalization which would change the number of shares of our common stock outstanding.

At any time until the close of business on the flip-in-date, our board of directors may terminate the rights without any payment to the holders thereof. Our board of directors may condition termination of the rights upon the occurrence of a specified future time or event.

Until a right is exercised, the holder, as such, will have no rights as a stockholder, including, without limitation, any right to vote or to receive dividends.

Any provisions of the Rights Agreement may be amended at any time prior to the close of business on the flip-in-date without the approval of holders of the rights. Thereafter, the Rights Agreement may be amended without approval of the rights holders in any way which does not materially adversely affect the interests of the rights holders.

We have reserved for issuance upon exercise of the rights 5,000 shares of our Series A Junior Participating Preferred Stock.

The rights may have certain anti-takeover effects. The rights will cause substantial dilution to a person or group that attempts to acquire us on terms not approved by our board of directors (with, where required by the Rights Agreement, the concurrence of a majority of the continuing directors), unless the offer is conditioned on a substantial number of rights being acquired. However, the rights should not interfere with any merger, statutory share exchange or other business combination approved by a majority of our directors, since the rights may be terminated by our board of directors at any time on or prior to the close of business ten business days after our announcement that a person has become an acquiring person. Thus, the rights are intended to encourage persons who may seek to acquire control of us to initiate such an acquisition through negotiations with our board of directors. The effect of the rights may nonetheless be to discourage a third party from making a partial tender offer for our common stock, or otherwise attempting to obtain a substantial ownership in our common stock, or seeking to obtain control of us. To the extent any potential acquirors are deterred by the rights, the rights may have the effect of preserving incumbent management in office.

A copy of the Rights Agreement has been filed with the Securities and Exchange Commission as an Exhibit to our Current Report on Form 8-K dated April 16, 1997. The above summary description of the rights does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement.

Options and Warrants

As of January 31, 2005, options to purchase 4,742,375 shares of common stock were outstanding under our stock option plans and 6,182,625 shares were available for future grants under our stock option plans. As of January 31, 2005, there also were outstanding warrants to purchase 19,427,390 shares of our common stock, including the warrants held by the selling securityholders as described below.

The shares of common stock being offered by the selling stockholders includes 9,909,117 shares issuable upon the exercise of warrants held by the selling securityholders as described in the Selling Securityholders

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table elsewhere in this prospectus. All of the warrants were issued in connection with the $21.3 million private equity financing that we completed in January 2005. Warrants to purchase 8,667,247 of these shares are held by approximately 31 institutional investors and two accredited individual investors identified in the Selling Securityholders table. The exercise price of the warrants held by these investors is $2.00 per share, and the warrants may be exercised on or before January 19, 2010. The exercise price of a warrant may be paid in cash or, alternatively in certain circumstances, by means of a so-called cashless exercise in which we would withhold from the shares otherwise issuable upon exercise a number of shares having a current market price equivalent to the exercise price for the shares as to which the warrant is being exercised.

The shares being offered by the selling securityholders also include approximately 1,241,870 shares issuable upon the exercise of warrants held by selling securityholders who acted as placement agents in connection with our January 2005 private equity financing. The terms of the warrants held by these selling securityholders are identical to those described above.

The exercise price and the number of shares issuable upon exercise of the warrants described above are subject to adjustment in the event of a stock dividend, stock split or reverse stock split, or similar event affecting our common stock. In the event of our consolidation or merger, a sale of all or substantially all of our assets or a compulsory share exchange, the holders of the warrants will be entitled to receive upon exercise of the warrants the same kind and amount of cash, securities or other property which would be receivable by the holder of a number of shares of our common stock for which the warrants are then exercisable.

Holders of warrants do not have any of the rights or privileges of our stockholders, including voting rights, prior to exercise of the warrants. We have reserved sufficient shares of authorized common stock to cover the issuance of common stock subject to our outstanding warrants.

Antitakeover Effects of Provisions of Delaware Law and Our Certificate of Incorporation and Bylaws

Provisions of Delaware law and our certificate of incorporation and bylaws could make the following more difficult:

The acquisition of our capital stock by means of a tender offer.

The acquisition of our capital stock by means of a proxy contest or otherwise.

The removal of our incumbent officers and directors.

These provisions, summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to negotiate first with our board. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of any proposals of this type could result in an improvement of their terms.

Election and Removal of Directors

Our board of directors is divided into three classes. The directors in each class will serve for a three year term, with our stockholders electing one class each year. This system of electing and removing directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Stockholder Meetings

Under our bylaws, only the board of directors, the chairman of the board or the president may call special meetings of stockholders.

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Requirements for Advance Notification of Stockholder Nominations and Proposals

Our bylaws establish advance notice procedures for stockholder proposals and for the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board.

Delaware Antitakeover Law

We are subject to Section 203 of the Delaware General Corporation Law, an antitakeover 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 the business combination or the transaction in which the person became an interested stockholder is approved in the manner specified in Section 203. Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. Generally, 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 voting stock. The existence of this provision may have an antitakeover effect by discouraging takeover attempts not approved in advance by the board of directors, that might result in a premium over the market price for the shares of common stock held by stockholders.

Transfer Agent and Registrar

The transfer agent for our common stock is American Stock Transfer & Trust Co., 40 Wall Street, New York, New York 10005.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly, and current reports, proxy statements, and other information with the Securities and Exchange Commission, or SEC. You may read any document that we have filed or will file with the SEC without charge at the public reference facilities maintained by the SEC at its main office located at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. Our website address is www.cytrx.com.

For a fee prescribed by the SEC, you may obtain copies of all or any portion of the documents that we file with the SEC from the main office of the Public Reference Section of the SEC at the above address, or by calling the SEC at 1-800-SEC-0330. Our filings are also available to the public from commercial document retrieval services and at the SEC s Website at http://www.sec.gov.

This prospectus constitutes part of a registration statement on Form S-1 filed by us with the SEC under the Securities Act of 1933. This prospectus does not contain all of the information contained in the registration statement, and reference is hereby made to the registration statement and related exhibits for information with respect to our company and the securities offered hereby. Any statements contained herein concerning the provisions of any document are not necessarily complete, and, in such instance, reference is made to the copy of such document filed as an exhibit to the registration statement or otherwise filed with the SEC. Each such statement is qualified in its entirety by such reference.

Our common stock is traded on the Nasdaq SmallCap Market under the symbol CYTR. Reports, proxy and information statements, and other information concerning us also may be inspected at the offices of the National Association of Securities Dealers, Inc. located at 1735 K Street, N.W., Washington, D.C. 20006.

LEGAL MATTERS

The validity of the shares offered hereby has been passed upon for us by Troy & Gould Professional Corporation, Los Angeles, California. Troy & Gould Professional Corporation owns 100,000 shares of our common stock and warrants to purchase an additional 6,977 shares of our common stock.

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EXPERTS

Our consolidated financial statements and schedule for the year ended December 31, 2003 and the financial statements of Blizzard Genomics, Inc. for the year ended December 31, 2003 included in this prospectus and elsewhere in the registration statement of which this prospectus is a part have been audited by BDO Seidman, LLP, independent registered public accounting firm, and have been so included in reliance upon BDO Seidman, LLP s reports included herein, given on their authority as experts in accounting and auditing. BDO Seidman, LLP s report with respect to the financial statements of Blizzard Genomics, Inc. contains an explanatory paragraph describing conditions that raise substantial doubt about Blizzard Genomics, Inc. s ability to continue as a going concern as described in Note 11 to the financial statements.

Our consolidated financial statements and schedule at December 31, 2002 and for each of the two years in the period ended December 31, 2002 included in this prospectus and elsewhere in this registration statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report. Such consolidated financial statements and schedule are included in reliance on Ernst & Young LLP s report, given on their authority as experts in accounting and auditing.

The financial statements of Blizzard Genomics, Inc. for the year ended December 31, 2001 included in this prospectus have been audited by Silverman Olson Thorvilson & Kaufmann, Ltd., independent auditors, and have been so included in reliance on Silverman Olson Thorvilson & Kaufmann, Ltd. s report included herein, given on their authority as experts in accounting and auditing.

The financial statements of Blizzard Genomics, Inc. as of and for the year ended December 31, 2002 and for the period December 1, 1999 (inception) through December 31, 2002 included in this prospectus and elsewhere in this registration statement have been audited by Ernst & Young LLP, independent auditors, as set forth in their report (which contains an explanatory paragraph describing conditions that raise substantial doubt about Blizzard Genomics, Inc. s ability to continue as a going concern as described in Note 1 to the financial statements) appearing elsewhere herein. Such financial statements are included in reliance upon Ernst & Young LLP s report, given on their authority as experts in accounting and auditing.

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AND FINANCIAL STATEMENT SCHEDULE

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CYTRX CORPORATION

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2003	2002
ASSETS		
Current assets:		
Cash and cash equivalents	$ 11,644,446	$ 387,314
Short-term investments		1,401,358
Current portion of note receivable		135,291
Prepaid and other current assets	236,349	222,027
Total current assets	11,880,795	2,145,990
Property and equipment, net	227,413	1,084
Other assets:		
Investment in minority-owned entity acquired developed technology		6,644,492
Note receivable, less current portion		229,958
Prepaid and other assets	216,076	262,060
Total other assets	216,076	7,136,510
Total assets	$ 12,324,284	$ 9,283,584
LIABILITIES AND STOCKHOLDERS EQUITY		
Current liabilities:		
Accounts payable	$ 738,135	$ 79,947
Accrued expenses and other current liabilities	381,977	428,490
Total current liabilities	1,120,112	508,437
Accrued loss on facility abandonment	312,433	419,038
Deferred gain on sale of building	93,836	121,762
Deferred revenue	275,000	275,000
Total liabilities	1,801,381	1,324,237
Minority interest	330,287	
Commitments and contingencies		
Stockholders equity:		
Preferred Stock, $.01 par value, 5,000,000 shares authorized, including 5,000 shares of Series A Junior Participating Preferred Stock; no shares issued and outstanding		
Common stock, $.001 par value, 100,000,000 shares authorized; 34,392,000 and 22,143,927 shares issued at December 31, 2003 and 2002, respectively	34,392	22,144
Additional paid-in capital	102,239,460	82,173,839
	(2,279,238)	(2,279,238)

Treasury stock, at cost (633,816 shares held at December 31, 2003 and 2002)		
Accumulated deficit	(89,801,998)	(71,957,398)
Total stockholders equity	10,192,616	7,959,347
Total liabilities and stockholders equity	$ 12,324,284	$ 9,283,584

The accompanying notes are an integral part of these consolidated balance sheets.

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CYTRX CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2003	**2002**	**2001**
Income:			
Service revenues	$	$ 22,453	$ 101,463
License fees	94,000	1,051,000	3,751,000
Grant revenue		46,144	156,729
	94,000	1,119,597	4,009,192
Expenses:			
Cost of service revenues		11,287	70,501
Research and development (includes non-cash stock compensation of $2,902,484 in 2003)	4,387,599	767,102	1,844,038
Common stock, stock options and warrants issued for selling, general and administrative	3,148,047	229,550	1,440,934
Selling, general and administrative	3,840,620	1,703,402	1,161,095
Depreciation and amortization	2,130	793,563	586,249
Severance and other contractual payments to officers		1,822,454	
Asset impairment charge		920,939	
Loss on facility abandonment		477,686	
	11,378,396	6,725,983	5,102,817
Loss before other income	(11,284,396)	(5,606,386)	(1,093,625)
Other income			
Interest income	82,064	95,508	162,284
	(11,202,332)	(5,510,878)	(931,341)
Equity in losses from minority-owned entity	(6,662,031)	(664,758)	
Minority interest in losses of subsidiary	19,763		
Net loss	$ (17,844,600)	$ (6,175,636)	$ (931,341)
Basic and diluted loss per common share	(0.65)	(0.39)	(0.09)
Basic and diluted weighted average shares outstanding	27,324,794	16,004,155	10,358,381

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

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CYTRX CORPORATION

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY

	Common Stock		Additional	Accumulated	Treasury	
	Shares Issued	Amount	Paid-in Capital	Deficit	Stock	Total
Balance at January 1, 2001	10,734,012	$10,734	$ 72,737,739	$(64,850,421)	$(2,279,238)	$ 5,618,814
Issuance of common stock	725,000	725	453,619			454,344
Issuance of stock options/warrants			1,440,934			1,440,934
Net loss				(931,341)		(931,341)
Balance at December 31, 2001	11,459,012	11,459	74,632,292	(65,781,762)	(2,279,238)	6,582,751
Issuance of common stock	324,999	326	109,408			109,734
Common stock issued for Acquisition of Global Genomics	8,948,204	8,948	5,785,014			5,793,962
Common stock and warrants issued in conjunction with acquisition of Global Genomics	548,330	548	899,693			900,241
Common stock issued in lieu of cash for officers severance and bonuses	863,382	863	517,882			518,745
Issuance of stock options/warrants			229,550			229,550
Net loss				(6,175,636)		(6,175,636)
Balance at December 31, 2002	22,143,927	22,144	82,173,839	(71,957,398)	(2,279,238)	7,959,347
Issuance of common stock for research and development	1,828,359	1,828	2,550,606			2,552,434
Common stock and warrants issued in connection with private placements	7,081,025	7,081	12,485,543			12,492,624
Issuance of common stock for services	700,000	700	1,534,050			1,534,750
Issuance of stock options/warrants			1,613,297			1,613,297
Options and warrants exercised	2,638,689	2,639	1,882,125			1,884,764
Net loss				(17,844,600)		(17,844,600)
Balance at December 31, 2003	34,392,000	$34,392	$102,239,460	$(89,801,998)	$(2,279,238)	$ 10,192,616

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

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CYTRX CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2003	2002	2001
Cash flows from operating activities:			
Net loss	$(17,844,600)	$(6,175,636)	$ (931,341)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:			
Depreciation and amortization	2,130	793,563	586,249
Equity in losses from minority-owned entity	6,662,031	664,758	
Minority interest in losses of subsidiary	(19,763)		
Stock option and warrant expense	1,613,297	229,550	1,440,934
Common stock issued for services	1,534,750		
Non-cash research and development	2,902,484		
Asset impairment charge		920,939	
Changes in assets and liabilities:			
Note receivable	365,249	122,467	110,860
Prepaid and other assets	14,123	(379,849)	45,071
Accounts payable	658,188	(98,830)	(119,459)
Other liabilities	(181,044)	395,222	(93,120)
Total adjustments	13,551,445	2,647,820	1,970,535
Net cash (used in) provided by operating activities	(4,293,155)	(3,527,816)	1,039,194
Cash flows from investing activities:			
Purchases of held-to-maturity securities		(1,401,358)	
Redemption of held-to-maturity securities	1,401,358		
Net cash paid related to acquisition		(615,064)	
Purchases of property and equipment	(228,459)		
Disposals of property and equipment, net		30,142	
Net cash provided by (used in) investing activities	1,172,899	(1,986,280)	
Cash flows from financing activities Net proceeds from issuance of common stock	14,377,388	628,496	454,344
Net increase (decrease) in cash and cash equivalents	11,257,132	(4,885,600)	1,493,538
Cash and cash equivalents at beginning of year	387,314	5,272,914	3,779,376
Cash and cash equivalents at end of year	$ 11,644,446	$ 387,314	$5,272,914

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

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CYTRX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Nature of Business

CytRx Corporation (CytRx or the Company) is a biopharmaceutical research and development company, based in Los Angeles, California, with a development-stage subsidiary, CytRx Laboratories, Inc. (the Subsidiary), based in Worcester, Massachusetts (see Note 10). The Company owns the rights to a portfolio of technologies, including ribonueleic acid interference (RNAi or gene silencing) technology in the treatment of specified diseases, including those within the areas of amyotrophic lateral sclerosis (ALS or Lou Gehrig s disease), obesity and type 2 diabetes and human cytomegalovirus (CMV), as well as a DNA-based HIV vaccine technology and a cancer therapeutic technology. In addition, the Company has entered into strategic alliances with third parties to develop several of the Company s other products.

On July 19, 2002, CytRx consummated a merger with Global Genomics Capital, Inc., a development-stage company which became a wholly-owned subsidiary of the Company (see Note 11). This subsidiary was renamed GGC Pharmaceuticals, Inc., but is referred to herein as Global Genomics. Global Genomics is a genomics holding company that has a 40% ownership interest in Blizzard Genomics, Inc. (Blizzard), a development-stage company based in Minneapolis, Minnesota, and a 5% ownership interest in Psynomics, Inc. (Psynomics), a development-stage company based in San Diego, California. The Company accounts for its investment in Blizzard using the equity method and in Psynomics using the cost method. The Company recorded a write off of its investments in Blizzard and Psynomics in 2003 (See Note 11).

To date, the Company had relied primarily upon selling equity securities and payments from our strategic partners and licensees to generate the funds needed to finance its operations. Management believes the Company s cash and cash equivalents balances will be sufficient to meet cash requirements through the next twelve months. The Company will be required to obtain additional funding in order to execute its long-term business plans. The Company cannot assure that additional funding will be available on favorable terms, or at all. If the Company fails to obtain significant additional funding when needed, it may not be able to execute its business plans and its business may suffer, which would have a material adverse effect on its financial position, results of operations and cash flows.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation The consolidated financial statements include the accounts of CytRx together with those of its majority-owned subsidiaries. The accounts of the Subsidiary are included since September 17, 2003 (see Note 10). The accounts of Global Genomics are included since July 19, 2002 (see Note 11).

Revenue Recognition Service revenues relate to recruiting services rendered and are recognized at the time services are rendered because all obligations necessary to earn such revenues have been completed by the Company at that time. Revenues from collaborative research arrangements and grants are generally recorded as the related costs are incurred. The costs incurred under such arrangements are recorded as research and development expense and approximate the revenues reported in the accompanying statements of operations. Non-refundable license fee revenue is recognized when collectibility is reasonably assured, which is generally upon receipt, when no continuing involvement of the Company is required and payment of the license fee represents the culmination of the earnings process. Non-refundable license fees received subject to future performance by the Company or that are credited against future payments due to the Company are deferred and recognized as services are performed and collectibility is reasonably assured, which is generally upon receipt, or recognized upon termination of the agreement and all related obligations thereunder.

Cash Equivalents The Company considers all highly liquid debt instruments with an original maturity of 90 days or less to be cash equivalents. Cash equivalents consist primarily of amounts invested in money market accounts.

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CYTRX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Investments Management determines the appropriate classification of debt securities at the time of purchase. Debt securities are classified as held-to-maturity when the Company has the positive intent and ability to hold the securities to maturity. Held-to-maturity securities are stated at amortized cost. Marketable equity securities and debt securities not classified as held-to-maturity are classified as available-for-sale. Available-for-sale securities are carried at fair value, with the unrealized gains and losses reported as a separate component of stockholders equity. Realized gains and losses are included in investment income and are determined on a first-in, first-out basis.

Fair Value of Financial Instruments The carrying amounts reported in the balance sheet for cash and cash equivalents, short-term investments, notes receivable and accounts payable approximate their fair values.

Property and Equipment Property and equipment are stated at cost and depreciated using the straight-line method based on the estimated useful lives (generally five years for equipment and furniture) of the related assets. Whenever there is a triggering event that might suggest an impairment, management evaluates the realizability of recorded long-lived assets to determine whether their carrying values have been impaired. The Company records impairment losses on long-lived assets used in operations when events and circumstances indicate that the assets might be impaired and the nondiscounted cash flows estimated to be generated by those assets are less than the carrying amount of those assets. Any impairment loss is measured by comparing the fair value of the asset to its carrying amount.

Patents and Patent Application Costs Although the Company believes that its patents and underlying technology have continuing value, the amount of future benefits to be derived therefrom is uncertain. Patent costs are therefore expensed rather than capitalized.

Basic and Diluted Loss per Common Share Basic and diluted loss per common share are computed based on the weighted average number of common shares outstanding. Common share equivalents (which consist of options, warrants and convertible Subsidiary common stock) are excluded from the computation of diluted loss per share since the effect would be antidilutive. Common share equivalents which could potentially dilute basic earnings per share in the future, and which were excluded from the computation of diluted loss per share, totaled approximately 10,430,000 shares, 6,627,000 and 5,532,000 shares at December 31, 2003, 2002 and 2001, respectively.

Shares Reserved for Future Issuance As of December 31, 2003, the Company has reserved approximately 6,383,000 of its authorized but unissued shares of common stock for future issuance pursuant to its employee stock option plans and warrants issued to consultants and investors.

Stock-based Compensation The Company grants stock options and warrants for a fixed number of shares to key employees and directors with an exercise price equal to the fair market value of the shares at the date of grant. The Company accounts for stock option grants and warrants in accordance with Accounting Principles Board (APB) Opinion No. 25, Accounting for Stock Issued to Employees (APB 25) and related interpretations, and, accordingly, recognizes no compensation expense for the stock option grants and warrants issued to employees for which the terms are fixed. For stock option grants and warrants which vest based on certain corporate performance criteria, compensation expense is recognized to the extent that the quoted market price per share exceeds the exercise price on the date such criteria are achieved or are probable. Statement of Financial Accounting Standards (SFAS) No. 123, Accounting for Stock-based Compensation (SFAS 123), provides an alternative to APB 25 in accounting for stock-based compensation issued to employees. However, the Company has continued to account for stock-based compensation for employees in accordance with APB 25 (See Note 13). The Company has also granted stock options and warrants to certain consultants and other third parties. Stock options and warrants granted to consultants and other third parties are accounted for in accordance with SFAS 123 and related interpretations and are valued at the fair market value of the options and warrants granted or the services received, whichever is more reliably measurable.

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CYTRX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Expense is recognized in the period in which a performance commitment exists or the period in which the services are received, whichever is earlier.

SFAS 123, as amended by SFAS No. 148, Accounting for Stock-Based Compensation Transition and Disclosure (SFAS 148), requires the presentation of pro forma information as if the Company had accounted for its employee stock options and performance awards under the fair value method of that statement. For purposes of pro forma disclosure, the estimated fair value of the options and performance awards at the date of the grant is amortized to expense over the vesting period. The following table illustrates the effect on net loss and loss per share if the Company had applied the fair value recognition provisions of SFAS 123 to stock-based employee compensation (amounts in thousands except per share data):

	2003	2002	2001
Net loss, as reported	$(17,845)	$(6,176)	$ (931)
Total stock-based employee compensation expense determined under fair value-based method for all awards	(928)	(1,229)	(663)
Pro forma net loss	$(18,773)	$(7,405)	$(1,594)
Loss per share, as reported (basic and diluted)	$ (0.65)	$ (0.39)	$ (0.09)
Loss per share, pro forma (basic and diluted)	$ (0.69)	$ (0.46)	$ (0.15)

The fair value for the Company s options and warrants was estimated at the date of grant using a Black-Scholes option pricing model with the following assumptions:

	2003	2002	2001
Weighted average risk free interest rate	2.82%	2.74%	5.29%
Dividend yields	0%	0%	0%
Volatility factors of the expected market price of the Company s common stock	0.99	0.99	0.98
Weighted average years outstanding	5.1	3.6	7.2

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions including the expected stock price volatility. Because the Company s employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management s opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its warrants and employee stock options.

Research and Development Expenses Research and development expenses consist of costs incurred for direct and overhead-related research expenses and are expensed as incurred. Costs to acquire technologies which are utilized in research and development and which have no alternative future use are expensed when incurred. Technology developed for use in our products is expensed as incurred until technological feasibility has been established. Expenditures to date have been classified as research and development expense.

Income Taxes Income taxes are accounted for using an asset and liability approach that requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company s financial statements or tax returns. A valuation allowance is established to reduce deferred tax assets if all, or some portion, of such assets will more than likely not be realized.

Concentrations of Credit Risk Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash and cash equivalents, short-term investments and note receivable. The Company maintains cash and cash equivalents in large

well-capitalized

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CYTRX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

financial institutions and the Company s investment policy disallows investment in any debt securities rated less than investment-grade by national ratings services. The Company has not experienced any losses on its deposits of cash and cash equivalents. The Company generally does not require collateral or other security from its customers for sales made on credit. The Company is at risk to the extent accounts receivable and note receivable amounts become uncollectible.

Use of Estimates The preparation of the 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 amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Segment Information Management uses consolidated financial information in determining how to allocate resources and assess financial performance. For this reason, the Company has determined that it is principally engaged in one industry segment.

Reclassifications Certain prior year balances have been reclassified to conform with the 2003 presentation.

Recently Issued Accounting Standards In May 2003, the Financial Accounting Standards Board (FASB) issued SFAS No. 150, Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity (SFAS 150). This statement changes the classification of certain financial instruments from equity to liabilities. The three types of financial instruments requiring the change in classification are: (1) mandatorily redeemable shares, which the issuing company is obligated to buy back in exchange for cash or other assets; (2) put options and forward purchase contracts; and (3) obligations that can be settled with shares, the monetary value of which is fixed, tied solely or predominantly to a variable such as a market index, or varies inversely with the value of the issuer s shares. This statement is effective for all financial instruments entered into or modified after May 31, 2003, and is otherwise effective at the beginning of the first interim period beginning after June 15, 2003. The Company adopted SFAS 150 as of July 1, 2003, which did not have a material impact on its consolidated financial statements.

In April 2003, the FASB issued SFAS Standards No. 149, Amendment of Statement 133 on Derivative Instruments and Hedging Activities (SFAS 149). This statement amends and clarifies financial accounting and reporting for derivative instruments, including certain derivative instruments embedded in other contracts (collectively referred to as derivatives) and for hedging activities under SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities. This Statement is generally effective for contracts entered into or modified after June 30, 2003 and hedging relationships designated after June 30, 2003. The Company will apply the provisions of SFAS 149 for any derivative instruments or hedging activities entered into after June 30, 2003. As the Company has not entered into derivative instruments or hedging activities, adoption of this statement does not have a material impact on the Company s consolidated financial statements.

In January 2003, the FASB issued Interpretation No. 46, Consolidation of Variable Interest Entities, (FIN No. 46) as superseded in December 2003 by FASB-issued Interpretation No. 46R, Consolidation of Variable Interest Entities an interpretation of ARB 51 (FIN 46R). FIN 46R requires the primary beneficiary of a variable interest entity (VIE) to consolidate the entity and also requires majority and significant variable interest investors to provide certain disclosures. A VIE is an entity in which the equity investors do not have a controlling interest, equity investors participate in losses or residual interests of the entity on a basis that differs from its ownership interest, or the equity investment at risk is insufficient to finance the entity s activities without receiving additional subordinated financial support from the other parties. FIN 46R is applicable starting January 1, 2004. The Company does not believe the effect of FIN 46R on the Company s consolidated financial statements will be material.

In November 2002, the FASB issued Interpretation No. 45, Guarantor s Accounting for Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others, an interpretation of

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CYTRX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FASB Statements No. 5, 57, and 107 and rescission of FASB Interpretation No. 34, Disclosure of Indirect Guarantees of Indebtedness of Others (FIN 45). FIN 45 clarifies the requirements for a guarantor s accounting for and disclosure of certain guarantees issued and outstanding. It also requires a guarantor to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. This Interpretation also incorporates without reconsideration the guidance in FASB Interpretation No. 34, which is being superseded. The Company adopted FIN 45 effective January 1, 2003. Adoption did not have a material impact on the Company s financial statements.

3. Investments

At December 31, 2003 and 2002, the Company held approximately $0 and $1,401,000, respectively, in investments, reported as short-term investments in the accompanying consolidated balance sheets. The contractual maturities of securities held at December 31, 2002 were one year or less. At December 31, 2002, the Company classified all of its investments (consisting entirely of U.S. Government obligations) as held-to-maturity. The fair market value approximated the carrying costs and gross unrealized and realized gains/losses were immaterial.

4. Restricted Assets

At December 31, 2003 and 2002, the Company held approximately $50,000 and $0, respectively, in investments (consisting entirely of Certificates of Deposit), reported in Prepaid and Other Current Assets in the accompanying consolidated balance sheets. The contractual maturities of securities held at December 31, 2003 were one year or less. At December 31, 2003, the investments were pledged as collateral for a letter of credit for the same amount issued in connection with one of the Company s lease agreements.

5. Property and Equipment

Property and equipment at December 31 consist of the following (in thousands):

	2003	2002
Equipment and furnishings	$229	$ 1
Less accumulated depreciation	(2)	
	$227	$ 1

Asset Impairment Loss In May 2002, Organichem, Corp., which was to provide CytRx with commercial supplies of Flocor™ purified drug substance, advised CytRx that it did not intend to renew the Company s agreement when it expired in December 2003. During the fourth quarter of 2002, the Company determined that, in light of the relatively short remaining term of the Organichem contract, the significant costs that would be associated with relocating the equipment owned by CytRx in connection with this contract and the Company s lack of success to date in its continuing search for a strategic partner for the development of Flocor™, an impairment loss of approximately $921,000 should be recorded, which equals the then net book value of this equipment and related leasehold improvements. This charge is reflected as a separate line item in the accompanying consolidated statement of operations for the year ended December 31, 2002 as an asset impairment charge.

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CYTRX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

6. Accrued Expenses

Accrued Expenses Accrued expenses and other current liabilities at December 31, 2003 and 2002 are summarized below (in thousands).

	2003	2002
Clinical research activities	$	$ 97
Deferred gain on sale of building (current portion)	28	28
Accrued loss on facility abandonment (current portion)	106	144
Professional fees	171	151
Other miscellaneous	77	8
Total	$382	$428

7. Facility Abandonment

In the fourth quarter of 2002, the Company recorded a loss of approximately $478,000 associated with the closure of its Atlanta headquarters and relocation to Los Angeles subsequent to its merger with Global Genomics (see Note 11). This loss represents the total remaining lease obligations and estimated operating costs through the remainder of the lease term, less estimated sublease income and is reflected in Note 8 Commitments and Contingencies. This accrued charge was combined with deferred rent of $85,000 already recorded, so that the total accrual related to the facility abandonment was $563,000 as of December 31, 2002, $144,000 of which was reflected as a current liability and $419,000 as a non-current liability. As of December 31, 2003, the accrued loss on facility abandonment was $418,000, $106,000 of which was reflected as a current liability and $312,000 as a non-current liability. During 2003, the Company incurred expenditures totaling $224,000 for the abandoned facility and utilized $145,000 of the accrual related to the facility abandonment.

8. Commitments and Contingencies

Minimum annual future obligations under operating leases, minimum annual future obligations under various license agreements and minimum annual future obligations under employment agreements consist of the following (in thousands):

	Operating Leases	License Agreements	Employment Agreements	Total
		(In thousands)		
2004	$ 560	$1,778	$1,075	$ 3,413
2005	478	1,810	670	2,958
2006	285	897	375	1,557
2007	229	310		539
2008	76	330		406
2009 and thereafter		1,320		1,320
Total	$1,628	$6,445	$2,120	$10,193

Under the various license agreements and sponsored research agreements with University of Massachusetts Medical School (UMMS) (see Note 19) and other institutions, CytRx will be required to make annual license maintenance payments as well as milestone payments, ranging

from $11,000,000 to $14,000,000 per approved product, to UMMS and/or other institutions based on the development of products utilizing the licensed technology and will be required to pay royalties, based on future sales of those products,

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CYTRX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

which will generally range from 3% to 7.5% of such sales, depending upon the product and the technology being utilized. In connection with the sponsored research agreements, CytRx agreed to fund certain pre-clinical research at UMMS and other institutions related to the use of CytRx s licensed technologies for the development of therapeutic products.

The Company has employment agreements with its executive officers, the terms of which expire at various times through July 2006. Certain agreements, which have been revised from time to time, provide for minimum salary levels, adjusted annually at the Compensation Committee s determination, as well as for minimum bonuses that are payable. The aggregate commitment for future salaries at December 31, 2003, including guaranteed bonuses and salary continuation, was approximately $2,120,000.

Rent expense under operating leases during 2003, 2002 and 2001 was approximately $258,000, $171,000 and $154,000, respectively.

9. Private Placement of Common Stock

In September 2003, the Company entered into a Stock Purchase Agreement with a group of institutional and other investors (the September 2003 Investors). The September 2003 Investors purchased, for an aggregate purchase price of $8,695,000, 4,140,486 shares of the Company s common stock and warrants to purchase an additional 1,035,125 shares of the Company s common stock, at $3.05 per share, expiring in 2008. After consideration of offering expenses, net proceeds to the Company were approximately $7,667,000. The shares and the shares underlying the warrants issued to the September 2003 Investors were subsequently registered.

In May 2003, the Company entered into a Stock Purchase Agreement with a group of institutional investors (the May 2003 Investors). The May 2003 Investors purchased, for an aggregate purchase price of $5,440,000, 2,940,539 shares of the Company s common stock and warrants to purchase an additional 735,136 shares of the Company s common stock, at $3.05 per share, expiring in 2008. After consideration of offering expenses, net proceeds to the Company were approximately $4,826,000. The shares and the shares underlying the warrants issued to the May 2003 Investors were subsequently registered.

10. Investment in Subsidiary

On September 17, 2003, CytRx purchased 2,000 shares of convertible preferred stock for $7 million, representing a 95% ownership interest in the Subsidiary. The Subsidiary is a newly formed entity that plans to develop orally active small molecule based drugs to prevent, treat and cure obesity and type 2 diabetes. This funding was provided out of the proceeds of CytRx s private placement financing that was completed in September 2003. Since September 17, 2003, CytRx has consolidated the Subsidiary, based on CytRx s ability to control the stockholders votes and the Board of Directors of the Subsidiary, and recorded a minority interest liability of $350,000, representing the 5% interest in the Subsidiary held by Dr. Michael Czech (see Note 19). Prior to September 17, 2003, the Subsidiary had no operations. Additionally, the Company has recorded the fair value of 300,000 shares of its common stock as additional paid-in capital for the Company s right to call and Dr. Czech s right to put his remaining 5% interest in the Subsidiary to CytRx in exchange for a guaranteed amount of 300,000 shares of CytRx common stock. The fair value of these shares on the purchase date was approximately $723,000. In addition, upon the occurrence of certain events, Dr. Czech may receive up to an additional 350,000 shares of CytRx common stock.

In connection with the investment in the Subsidiary, CytRx acquired the rights to certain in-process research and development related to obesity and type 2 diabetes, which was owned by Dr. Czech. Because the in-process research and development acquired was not yet technologically feasible, CytRx recorded research and development expense of $1,073,000.

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CYTRX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

11. Merger with Global Genomics

On February 11, 2002, CytRx entered into an agreement to acquire Global Genomics, a privately-held genomics holding company, through a merger of GGC Merger Corporation, a wholly-owned subsidiary of CytRx, into Global Genomics. Global Genomics is a genomics holding company that currently has a 40% ownership interest in Blizzard and a 5% ownership interest in Psynomics. CytRx s primary reasons for the acquisition were to (a) expand its business into the genomics field to diversify its product and technology base, and (b) gain the management and directors of Global Genomics, who could assist CytRx in developing corporate partnerships and acquisition, investment and financing opportunities not previously available to CytRx.

The transaction closed on July 19, 2002, after approval by the stockholders of each company and satisfaction of other customary closing conditions. Pursuant to the merger agreement, each outstanding share of common stock of Global Genomics was converted into .765967 shares of the Company s common stock. The merger resulted in the issuance of 8,948,204 shares of the Company s common stock and options and warrants to purchase 1,014,677 shares of the Company s common stock to the former security holders of Global Genomics, with 498,144 shares of the Company s common stock being held in escrow and subject to cancellation in whole or in part to satisfy any indemnification claims made by the Company under the merger agreement. These shares were released from escrow in 2003. CytRx issued an additional 548,330 shares of its Common Stock for investment banking and legal fees as part of the merger.

The merger was accounted for as a purchase by CytRx of a group of assets of Global Genomics in a transaction other than a business combination and was not considered to be a reverse acquisition. The Company considered the provisions of Statement of Financial Accounting Standards No. 141, Business Combinations (SFAS 141) and determined CytRx to be the acquiror for accounting purposes. Because the current activities of Global Genomics were focused on the development of a business rather than the operation of a business and planned principal operations of Global Genomics had not yet commenced, Global Genomics was considered a development-stage company. Therefore, in accordance with the guidance in Emerging Issues Task Force Issue No. 98-3 (EITF 98-3), Determining Whether a Nonmonetary Transaction Involves Receipt of Productive Assets or of a Business, Global Genomics did not constitute a business as defined in SFAS 141. Therefore, the Company allocated the purchase price in accordance with the provisions of Statement of Financial Accounting Standards No. 142, Goodwill and Other Intangible Assets (SFAS 142) related to the purchase of a group of assets. SFAS 142 provides that the cost of a group of assets acquired in a transaction other than a business combination shall be allocated to the individual assets acquired based on their relative fair values and shall not give rise to goodwill.

The purchase price was determined in accordance with SFAS 141 and SFAS 142. A summary of the determination of the purchase price is as follows:

Issuance of 8,948,204 shares of CytRx common stock at $0.6475 per share	$5,793,962
Fair value of 1,014,677 vested warrants issued to purchase CytRx common stock	598,659
Transaction costs	971,869
Total purchase price	$7,364,490

Since Global Genomics was a development-stage company and no goodwill can arise from the purchase of a development-stage company, in accordance with the provisions of SFAS 141 and SFAS 142, all identifiable assets acquired, including identifiable intangible assets, were assigned a portion of the purchase price on the basis of their relative fair values. To this end, an independent appraisal of Global Genomics assets was used as an aid in determining the fair value of the identifiable assets, including identified intangible assets, in allocating the purchase price among the acquired assets. Global Genomics primary assets were its investments in Blizzard and Psynomics and thus, the fair value of each of these entities was determined. The

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CYTRX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

discounted cash flow approach was used to determine the estimated fair value of the acquired intangible assets of Blizzard and Psynomics underlying Global Genomics investment in each company. Cash flows were projected for a period of 10 years and were discounted to net present value using discount factors of 46% to 60%. Material cash inflows from product sales were projected to begin in 2003 for Blizzard. A summary of the purchase price allocation is as follows:

Current assets	$ 33,129
Investment in minority-owned entity acquired developed technology	7,309,250
In-process research and development (recognized as an expense)	78,394
Less: Liabilities assumed	