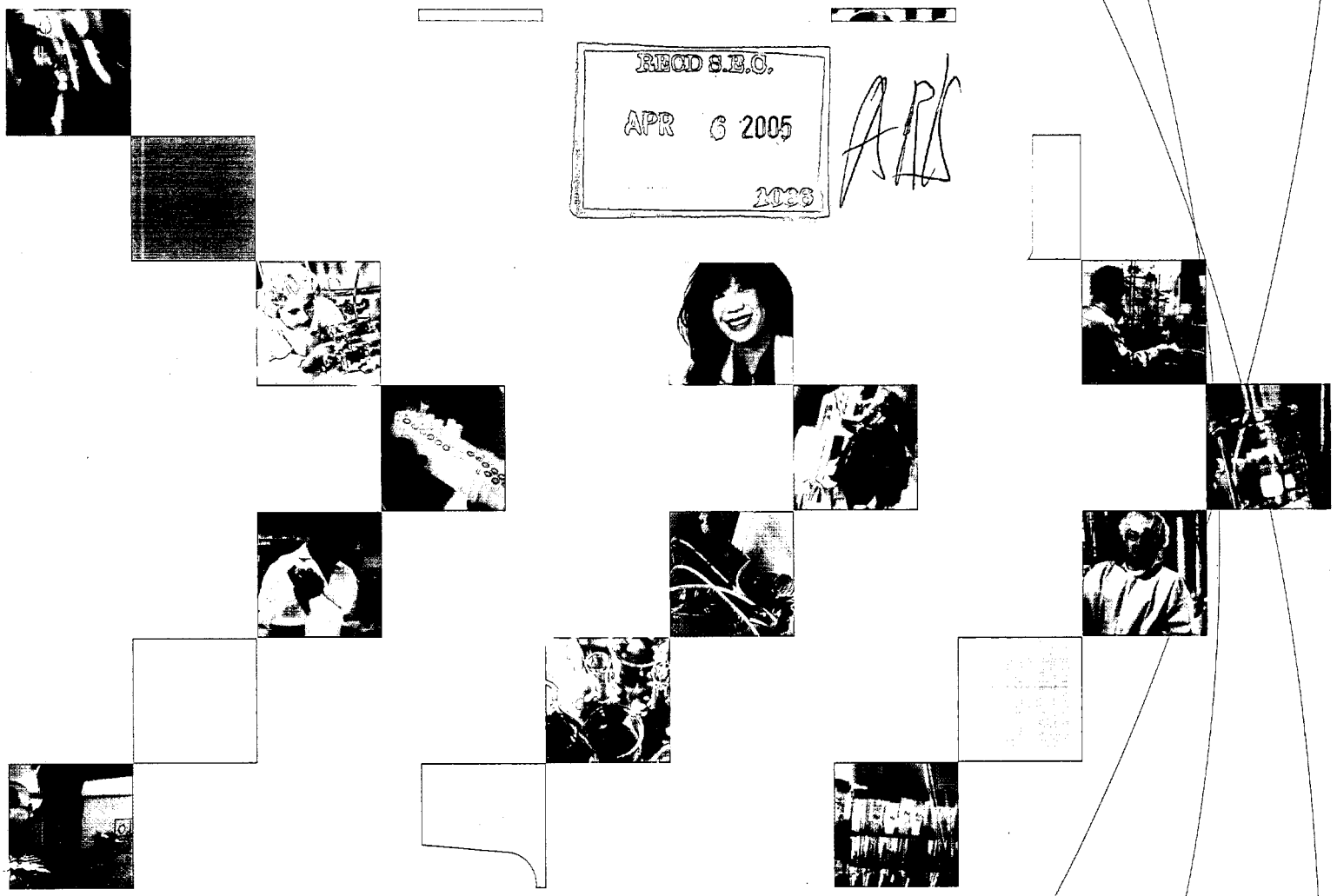
NEOSE

2004 Annual Report

Working Toward Tomorrow



NEOSE TECHNOLOGIES, INC.

At Neose, we have a team of talented and dedicated individuals working to develop products incorporating our innovative GlycoAdvance® and GlycoPEGylation™ technologies. Our management team, scientists, business development and operations staff are all engaged in a collaborative effort to develop long-acting therapeutic proteins.

In 2004 we made significant progress toward our near-term goal of submitting Investigational New Drug applications (INDs), or the European equivalent, for our first two long-acting proteins, and toward our ultimate goal of improving the lives of patients.

This annual report contains forward-looking statements that involve risks and uncertainties. For a discussion of these and other risks and uncertainties that could cause our actual results to differ from those contained in the forward-looking statements, see our filings with the U.S. Securities and Exchange Commission, particularly the section entitled "Factors Affecting Future Operating Results" in our Annual Report on Form 10-K for the year ended December 31, 2004.

Neose, GlycoAdvance and GlycoPEGylation are trademarks of Neose Technologies, Inc.

Corporate Highlights

Protein Development

NE-180 (GlycoPEG-EPO)

- Product candidate selected
- Manufacturing process defined and scaled up
- Acute toxicology initiated

GlycoPEG-GCSF

- Product candidate selected
- Manufacturing process defined and initially scaled up
- Technology transfer initiated to European manufacturer

Partnering

April 2004 – Signed Research, Co-Development and Marketing Agreement with BioGeneriX for GlycoPEG-GCSF.

April 2004 – Signed Research Collaboration and License Agreement with MacroGenics on multiple monoclonal antibodies.

January 2005 – Signed Supply and Option Agreement with BioGeneriX for undisclosed long-acting, next-generation protein.

Neose's Pipeline

Protein Development Program	*Development Status*	*Partnership Status*
NE-180	Pre-clinical; IND targeted Q2, '05	Partner after Phase II
GlycoPEG-GCSF	Pre-clinical; IND or European equivalent targeted Q4 '05	Co-development with BioGeneriX
Novo Nordisk 1 Undisclosed protein, currently-marketed by Novo	Research	License agreement with Novo Nordisk
Novo Nordisk 2 Undisclosed currently-marketed protein	Research	License agreement with Novo Nordisk
Novo Nordisk 3 Undisclosed currently-marketed protein	Research	License agreement with Novo Nordisk
Undisclosed currently-marketed protein	Research	Supply and option agreement with BioGeneriX
Undisclosed currently-marketed protein	Research	Neose proprietary program

C. BOYD CLARKE
PRESIDENT AND CHIEF EXECUTIVE OFFICER

Letter to Stockholders

The discovery of new drugs often takes researchers in the pharmaceutical and biotech industries to some odd sources. Soil samples, plants and even snake venom have yielded leads that have resulted in important new drugs. In the case of Neose, the lowly fall armyworm *(Spodoptera frugiperda)* – a common pest that consumes large amounts of field crops throughout the southeastern United States – has become pivotal to our strategy to generate value in developing next-generation proteins. Who could imagine value coming from such a pest?

Yet the cell line, called Sf9 cells, derived from this pest has been used for research and development of protein products for nearly three decades, and it is this cell line that is critical to the program of Neose to develop a long-acting erythropoietin, which we expect to enter the clinic in the third quarter of 2005.

The EPO Opportunity

For over fifteen years, erythropoietic drugs have been a mainstay of therapy for severe anemia associated with renal disease and certain types of chemotherapy. In 2004, sales of this group of products totaled over $10 billion. There are two important hallmarks of this market from the perspective of Neose. The most rapidly growing segment of the market is Amgen's long-acting Aranesp® (darbepoetin alfa). With little to distinguish it from earlier entrants except an extended dosing interval, Aranesp generated about $2.5 billion in sales in its third full year of launch. This has driven us to focus our efforts on developing a long-acting erythropoietin as our first drug. Developing an erythropoietic drug manufactured in Sf9 cells is particularly well-suited for the application of our technology. Over the last year, we were able to select a development candidate and demonstrate in animal models that our insect cell produced erythropoietin was at least therapeutically equivalent to Aranesp.

Potential for Earlier U.S. Market Entry

The second feature of this market is that all marketed formulations of erythropoietin are manufactured in mammalian or vertebrate expression systems. Intellectual property covering manufacture of these products in Europe and some other jurisdictions has expired or will expire by the end of this year, enabling commercialization of erythropoietic drugs developed by

2004 Accomplishments:

NE-180 (GlycoPEG-EPO)

- Product candidate selected
- Manufacturing process defined and scaled up
- Acute toxicology initiated

GlycoPEG-GCSF

- Product candidate selected
- Manufacturing process defined and initially scaled up
- Technology transfer initiated to European manufacturer

Partnerships

- BioGeneriX GlycoPEG-GCSF partnership initiated

Neose or others. Yet in the United States, significant patents exist that will make it very difficult for any erythropoietin manufactured in vertebrate or mammalian cells to enter the U.S. market before 2015. Hence, the patent situation in the United States provides another reason for our interest in the lowly armyworm. While our initial interest in Europe and other opportunities continues as our first priority, we do not believe manufacture of a long-acting erythropoietin in non-vertebrate Sf9 cells would infringe existing patents. Subject to further legal and product developments, we intend to explore earlier entry into the United States than would be possible using vertebrate or mammalian cell expression.

Preparing for an IND

During the last year, we completed the initial pharmacology and toxicology work that suggested that our new candidate, NE-180, was at least therapeutically equivalent to Aranesp. We have succeeded in mastering the scale-up from laboratory to pilot plant scale. Even without further improvements, we believe manufacture of material for what we anticipate to be the entire clinical program can now be accomplished in just two lots at pilot plant scale.

2005 is a critical year for our NE-180 program. We intend to file an IND in the second quarter and expect to have our first clinical data on the performance of NE-180 in human subjects by year end. We also expect to have begun the process of scaling up for commercial manufacture in Europe by year end.

This is why we believe that the lowly armyworm could lead to a clinical candidate intended to penetrate a market that is currently over $10 billion and growing, and could provide Neose or any future partner the important competitive advantage of earlier entry into the critically important American market.

GlycoPEG-GCSF

Our accomplishments in 2004 went beyond NE-180. We also made important progress in developing a long-acting candidate to compete in the granulocyte colony stimulating factor (G-CSF) market. G-CSF is

2005 Objectives:

NE-180 (GlycoPEG-EPO)

- Complete preclinical development
- Submit IND
- Commence/complete Phase I
- Commence scale-up to commercial levels

GlycoPEG-GCSF

- Complete preclinical development
- Submit IND or equivalent

Novo Nordisk Proteins

- Tangible progress

Partnerships

- New proteins available

Technology

- New application

used to stimulate the production of infection-fighting white blood cells in patients undergoing certain types of chemotherapy. In 2004, global sales in this segment comprised about $3.5 billion, with the dominant, fastest-growing segment being the long-acting Neulasta.® We identified a preclinical candidate with therapeutic performance in animal models comparable to Neulasta.

Moving Forward with a Strong, Committed Partner

In April of 2004 we entered into a co-development agreement with BioGeneriX, under which they are responsible for 50% of preclinical costs and all of the clinical costs. Territories are divided (Neose retains marketing rights in NAFTA countries and Japan, while BioGeneriX retains ownership in Europe and the rest of the world) and there are reciprocal royalties on product sales. As a wholly-owned subsidiary of the ratiopharm Group, one of the largest independent manufacturers of generic drugs in the world, BioGeneriX is focused on follow-on biologics, and their agreement with us was their first in the realm of improved, next-generation proteins. Since initiation of our partnership with them, we have made important progress in getting this candidate ready for the clinic. We have identified the compound, completed early pharmacokinetic evaluation, defined the protein modification processes and commenced technology transfer to our contract manufacturer in Europe. We are committed to submitting the equivalent of an IND in a European country by the end of 2005.

From Platform to Products

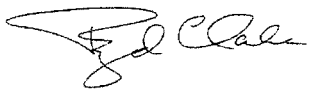
As we look forward, we expect that, by the time I write you next year, we will have two products in the clinic designed to enter markets that last year comprised $14 billion. This marks an important milestone in our transition from a platform to product development company.

A Word of Recognition

In talking about this transition, however, I must also note that our scientific founder and former CEO, Steve Roth, will leave as a regular board member, effective at our annual meeting this spring. We are gratified that he will continue to be a resource to the Company as director emeritus. This transition for Steve is an appropriate time for us to recognize how we have been enriched by regular exposure to his judgment, his intellectual acuity and his wit. He has been a boss, a colleague and a friend to many of us, and there is no aspect of our technology and strategy that does not bear his fingerprints. On behalf of all employees at Neose, I thank Steve for all he has done.

Looking forward to our discussion through this letter next year, I remain,

Very truly yours,



C. Boyd Clarke
President and
Chief Executive Officer

DAVID A. ZOPF, M.D.
EXECUTIVE VICE PRESIDENT
AND CHIEF SCIENTIFIC OFFICER

Technology Research and Development

Achieving Sustainable Growth through Technology Expansion

During 2004 our continued exploration of new glycosylating enzymes has broadened the reach of our GlycoPEGylation technology to include proteins produced in virtually any recombinant expression system. Our early successes in extending the circulating half-lives of glycoprotein drugs expressed in mammalian cell lines (e.g. CHO cells) simply required removing sialic acid residues from existing glycan chains, and then enzymatically adding back pegylated sialic acid. Some of our partnered development programs are based upon optimization of this approach for individual therapeutic entities.

Because GlycoPEGylation avoids chemical modification of the natural amino acids, and thereby preserves bioactivity, we sought to apply the same principle for proteins produced in more economical expression systems, including insect cells and *E. coli*. The glycosylation machinery of insect cells decorates expressed protein drugs with a truncated version of the N-linked sugar chains found on native human glycoproteins. We have identified enzymes capable of extending those truncated sugar chains to form the natural sequence of sugars terminated with sialic acid-PEG. This approach has been industrialized into a cGMP process to produce our NE-180 product candidate, scheduled to enter the clinic in the third quarter of 2005.

The success of a Neose research initiative to identify enzymes that add the first sugar residue to a non-glycosylated polypeptide has opened the door to GlycoPEGylation of proteins produced in *E. coli*. Proteins such as G-CSF, although naturally glycosylated with a single O-linked sugar chain, are produced in non-glycosylated form when expressed in *E. coli*. Our research team has successfully O-glycosylated and GlycoPEGylated G-CSF, leading to a joint development project with BioGeneriX. Discovery and development of a family of related O-glycosylating enzymes has expanded our capability to initiate and extend O-glycans, enabling GlycoPEGylation of a wide variety of proteins with established safety and efficacy profiles. During 2004 we have focused on two new product candidates and have established preclinical proof-of-concept data that may form the basis of additional commercial transactions.

We are excited about the future. The growing technical base for GlycoPEGylation of both N- and O-glycans developed over the past several years provides the flexibility required to GlycoPEGylate virtually any protein drug. The most important outcome of this expanded capability is freedom to focus on commercial opportunity as the major driver for our discovery efforts.

"We continue to believe our technology has broad applicability beyond attaching PEG to glycoproteins. Our technology may enable the attachment of other compounds, such as peptides, toxins, and targeting agents, to glycoproteins. In our earlier stage research programs, we are also exploring the use of our technology to enable manufacture and development of glycolipids, a novel class of therapeutics."

Shawn A. Defrees, Ph.D.
Vice President,
Technology Development

"The Neose research team has successfully identified and developed enzymes critical to Neose's GlycoPEGylation technology. These enzymes were key to making the N- and O-GlycoPEGylated product concept preclinical testing. We continue to make strides in expanding our GlycoPEGylation platform."

Anggie Becorest
Director,
Research Operations

JOSEPH J. VILLAFRANCA, PH.D.
EXECUTIVE VICE PRESIDENT,
PHARMACEUTICAL DEVELOPMENT
AND OPERATIONS

Pharmaceutical Development and Operations

Advancing Toward the Clinic

We have made significant progress in the last 12 months in developing the methods and processes needed to manufacture improved therapeutic proteins employing Neose's proprietary technologies. Most importantly, we can now scale our technology to manufacture proteins and reagents in sufficient quantities for clinical trials and their eventual launch into the marketplace. This work has proceeded in many areas:

1) fermentation development in insect cells to support NE-180 has advanced to a level where scale-up to large size bioreactors has been achieved;

2) large-scale purification of therapeutic proteins and their GlycoPEGylated counterparts has been accomplished;

3) industrialized processes to manufacture the majority of the glycosyltransferases necessary to produce GlycoPEGylated proteins for Neose's products as well as those of our partners exist;

4) the analytical methods needed to support characterization and release of our products are in place;

5) manufacturing under compliant conditions needed to meet regulatory requirements is underway; and

6) successful transfer of our technology to several partners is being conducted.

We are engaged in the production of clinical batches of NE-180 for Phase I and II clinical trials. Our process development work has expanded into fermentation scale-up of insect cells and downstream purification of large lots of drug substance sufficient to support Phase III and commercial demand. We plan to assemble the appropriate technology transfer packages so that transfer to a commercial facility is achievable. Scale-up is an important component of driving down the cost-of-goods for commercial attractiveness.

In addition, the year ahead should bring further innovations of our technology to improve the properties of additional therapeutic proteins. As these products are identified, we foresee the development of more processes to introduce these products into the clinic.

"A scalable insect cell expression system, as well as improved purification and GlycoPEGylation processes, were developed and transferred into the pilot plant to support NE-180 manufacture. An efficient and robust multi-step process to manufacture purified, GlycoPEGylated G-CSF was also developed."

Chester A. Meyers, Ph.D.
Vice President,
Pharmaceutical Development

"With the successful transfer of the NE-180 process into the pilot plant and the completion of the in-life component of all GLP toxicology studies, we are well-positioned to discuss this program with FDA at a pre-IND meeting in April, and to subsequently file an IND by the end of the second quarter. Activities are underway to support the initiation of a Phase I clinical trial in the third quarter, including protocol design and clinical site selection."

Marjorie M. Hurley, Pharm.D.
Vice President,
Regulatory Affairs

GEORGE J. VERGIS, PH.D.
EXECUTIVE VICE PRESIDENT,
COMMERCIAL AND CLINICAL DEVELOPMENT

Commercial and Clinical Development

Entering into Strategic Partnerships

Over the course of the past 12 months, we have continued to develop and execute strategic partnerships that are a blend of license and co-development agreements with a focus on obtaining significant development milestones and royalties, while in certain instances also retaining specific territories for Neose. By maintaining this strategy, we have been able to manage the costs of our development programs, while moving NE-180 into later-stage development before seeking a partner.

In April 2004, we entered into a co-development with BioGeneriX to develop a long-acting G-CSF. Under this agreement, we retained significant marketing rights in the U.S., Japan, Canada and Mexico, while shifting the burden of clinical development expenses to our partner. The success of this collaboration has led us to pursue an additional product opportunity together. In January 2005, we announced a supply and option agreement with BioGeneriX for an additional GlycoPEGylated protein. Under this agreement, BioGeneriX has the right, at any time during the initial 3-month research period, to enter into a pre-negotiated research, license and option agreement under which Neose could receive milestone payments totaling up to $61.5 million, as well as significant royalties on product sales.

In addition, our work on the three next-generation proteins that are the subject of the research, development and license agreement we entered into with Novo Nordisk A/S in late 2003 continues on schedule.

Under our collaboration and license agreement with MacroGenics commenced in April 2004, we are applying our GlycoAdvance and GlycoPEGylation technologies to multiple monoclonal antibodies being developed by MacroGenics with the goal of improving their therapeutic profiles. Should MacroGenics decide to take any of these remodeled compounds into development, Neose would be entitled to various option fees, milestones and royalties on commercialized products.

We continue to develop our NE-180 product candidate on our own, and expect to do so until at least Phase II. In this way, we drive the compound to a much higher value inflection point prior to partnering it and can retain significant value in a market that comprised more than $10 billion in sales in 2004.

Although our highest priority in 2005 is to submit two INDs (or the European equivalent) for NE-180 and GlycoPEG-GCSF, we will continue to pursue additional strategic alliances. Our scientific team has completed early research on at least two additional, next-generation proteins. These proteins compete in multi-billion dollar therapeutic categories and could serve as the basis for additional partnering activity in 2005.

"Neose has established high quality corporate partnerships with pioneering companies such as Novo Nordisk, BioGeneriX and MacroGenics. These alliances have provided significant validation of our core technologies, GlycoAdvance and GlycoPEGylation. We have instituted a rigorous and comprehensive program of alliance and project management which has allowed us to successfully and quickly move both our own and our partner's programs forward."

Kathryn Gregory
Senior Director,
Business Development

"We continue to execute our strategic plan to leverage our expertise in glycotechnology, expand our capabilities in drug development and build a portfolio of proprietary products that are intended to compete in significant markets."

Jeremy A. Middleton
Senior Director,
Commercial Development

Working Together to Help Others

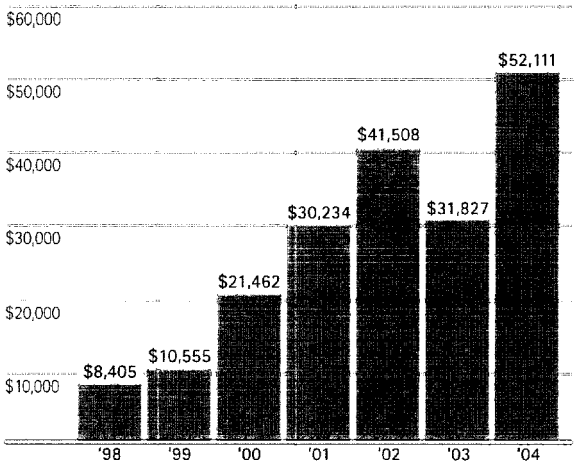
Supporting the National Multiple Sclerosis Society

With the same sense of dedication with which we pursue our corporate objectives, the team at Neose supports the National Multiple Sclerosis Society in its efforts to find the cause, cure and improved treatments for multiple sclerosis. 2004 marked the seventh year in which Neose sponsored a bike team in the MS-150 PA Dutch Tour, a 2-day ride that takes place each June in Lancaster County. Through the energetic efforts of team members and an outpouring of support from Neose employees, vendors and friends, nearly $200,000 has been raised for this worthwhile charity since 1998.

Team Neose Employee Riders

Jasmine Ayala ■ Benjamin Del Tito ■ Hoyt Emmons
Christine Grandzol ■ David Hakes ■ Karl Johnson
Elliot Morales ■ Kevin Pelin ■ David Smith ■
Thomas Stevenson ■ Ryan Stewart ■ Bradley
Thomas ■ Laura Thomas ■ George Vergis ■
Scott Willett ■ Annmarie Winkis ■

Team Neose Contribution



NATIONAL MULTIPLE SCLEROSIS SOCIETY

NEARLY $200,000 HAS BEEN RAISED FOR THIS WORTHWHILE CHARITY SINCE 1998

Financial Table of Contents

Note: NEOSE TECHNOLOGIES, INC. is a development-stage company.

Selected Financial Data

The following Statements of Operations and Balance Sheet Data for the years ended December 31, 2000, 2001, 2002, 2003, and 2004, and for the period from inception (January 17, 1989) through December 31, 2004, are derived from our audited financial statements. The financial data set forth below should be read in conjunction with the sections of this Annual Report entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations," and the financial statements and notes included elsewhere in this Annual Report.

	Year Ended December 31,					Period from inception (January 17, 1989)
(in thousands, except per share data)	2000	2001	2002	2003	2004	to December 31, 2004
Statements of Operations Data:						
Revenue from collaborative agreements	$ 4,600	$ 1,266	$ 4,813	$ 1,435	**$ 5,070**	**$ 23,951**
Operating expenses:						
Research and development	12,094	14,857	21,481	26,821	**34,672**	**161,171**
General and administrative	5,648	9,374	12,510	11,148	**11,711**	**71,931**
Total operating expenses	17,742	24,231	33,991	37,969	**46,383**	**233,102**
Operating loss	(13,942)	(22,965)	(29,178)	(36,534)	**(41,313)**	**(209,151)**
Other income	–	6,120	1,653	–	**–**	**7,773**
Impairment of equity securities	–	–	–	(1,250)	**–**	**(1,250)**
Interest income (expense), net	4,642	3,516	1,108	103	**(329)**	**15,247**
Net loss	$ (8,500)	$ (13,329)	$ (26,417)	$ (37,681)	**$ (41,642)**	**$ (187,381)**
Basic and diluted net loss per share	$ (0.63)	$ (0.95)	$ (1.85)	$ (2.14)	**$ (1.82)**	
Weighted-average shares outstanding used in computing basic and diluted net loss per share	13,428	14,032	14,259	17,611	**22,898**	
Balance Sheet Data:						
Cash, cash equivalents and marketable securities	$ 94,762	$ 76,245	$ 41,040	$ 53,060	**$ 45,048**	
Total assets	114,768	105,786	83,092	94,845	**90,731**	
Total debt and capital lease obligations	7,300	6,200	7,411	10,601	**18,345**	
Deficit accumulated during the development stage	(68,312)	(81,641)	(108,058)	(145,739)	**(187,381)**	
Total stockholders' equity	104,868	93,946	70,685	72,213	**60,854**	

Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with our financial statements and related notes included in this Annual Report.

Overview

We are a biopharmaceutical company using our enzymatic technologies to develop proprietary drugs, focusing primarily on therapeutic proteins. We believe that our core enzymatic technologies, GlycoAdvance® and GlycoPEGylation,™ improve the drug properties of therapeutic proteins by building out, and attaching polyethylene glycol (PEG) to, carbohydrate structures on the proteins. We are using our technologies to develop proprietary versions of protein drugs with proven safety and efficacy and to improve the therapeutic profiles of proteins being developed by our partners. We expect these modified proteins to offer significant advantages, including less frequent dosing and possibly improved efficacy, over the original versions of the drugs now on the market, as well as to meet or exceed the pharmacokinetic profile of next-generation versions of the drugs now on the market. We believe this strategy of targeting drugs with proven safety and efficacy allows us to lower the risk profile of our proprietary development portfolio as compared to *de novo* protein drug development.

We have incurred operating losses each year since our inception. As of December 31, 2004, we had an accumulated deficit of $187,381,000. We expect additional losses in 2005 and over the next several years as we expand product research and development efforts, increase manufacturing scale-up activities and expand our intellectual property portfolio. We have financed our operations through private and public offerings of equity securities, proceeds from debt financings, and revenues from our collaborative agreements.

We believe that our existing cash and cash equivalents (including the net proceeds from our February 2005 public offering of common stock), expected revenue from collaborations and license arrangements, and interest income should be sufficient to meet our operating and capital requirements at least through mid-2006, although changes in our collaborative relationships or our business, whether or not initiated by us, may cause us to deplete our cash and cash equivalents sooner than the above estimate. Under agreements we entered into with a bank during the first quarter of 2004, we have agreed to limit our total outstanding debt to $22,000,000. As of December 31, 2004, our total outstanding debt was $18,345,000. At any time after January 30, 2008, or if we fail to maintain a minimum required cash and short-term investments balance of at least $22,000,000, the bank has the option to require additional collateral from us in the form of a security interest in certain cash and short-term investments, or in the form of a letter of credit, which may have the effect of requiring us to repay the outstanding loan balance to the bank. See "Financing Activities – Debt Financing Activities – Term Loan from Bank and Industrial Development Authority Bonds" in the Liquidity and Capital Resources section of this Annual Report for a description of the material features of this borrowing.

Liquidity and Capital Resources

Overview

We had $53,060,000 in cash, cash equivalents, and marketable securities as of December 31, 2003, compared to approximately $45,048,000 in cash and cash equivalents as of December 31, 2004. The decrease for 2004 was primarily attributable to the use of cash to fund our operating activities, capital expenditures, and debt repayments, which were partly offset by proceeds of equity and debt financings.

In February 2005, we offered and sold 8,050,000 shares of our common stock at a public offering price of $4.00 per share, generating net proceeds of approximately $30,000,000. In March 2005, we implemented measures to reduce the rate of our cash utilization. Previously, we had estimated that our average quarterly net cash utilization for 2005 would be approximately $11 million, based on estimates of revenues from collaborations, and operating expenses. As a result of these actions, we now estimate that our average quarterly net cash utilization will be approximately $9 million, starting in the second quarter of 2005. The actions included modifying the bonus program for officers, reducing officers' base salaries for one year, reducing planned operating expenses and capital expenditures, and effectively limiting headcount during 2005.

The development of next-generation proprietary protein therapeutics, which we are pursuing both independently and in collaboration with selected partners, will require substantial expenditures by us and our collaborators. To finance those expenditures, we plan to continue financing our operations through private and public offerings of equity securities, proceeds from debt financings, and

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

revenues from existing and future collaborative agreements. Because our 2005 revenues could be substantially affected by entering into new collaborations and on the financial terms of any new collaborations, we cannot estimate our 2005 revenues. Other than revenues from our collaborations with Novo Nordisk and BioGeneriX, and any future collaborations with others, we do not expect to generate significant revenues until such time as products incorporating our technologies are commercialized, which is not expected during the next several years. We expect an additional several years to elapse before we can expect to generate sufficient cash flow from operations to fund our operating and investing requirements. We believe that our existing cash and cash equivalents (including the net proceeds from our February 2005 public offering of common stock), expected revenue from collaborations and license arrangements, and interest income should be sufficient to meet our operating and capital requirements at least through mid-2006. Accordingly, we will need to raise substantial additional funds to continue our business activities and fund our operations until we are generating sufficient cash flow from operations.

Operating Activities

During 2003, our operating activities consumed $27,398,000, compared to $36,744,000 in 2004. The increase in net cash used in 2004 in operating activities is substantially the result of our increased operating loss, offset by increased depreciation and amortization expense. The increase in depreciation and amortization expense over the prior year resulted primarily from the commencement of amortization of leasehold improvements that were placed in service in April 2004.

We used cash of $1,470,000 during 2004 to fund changes in operating assets and liabilities, primarily due to an increase in accounts receivable and other current assets and decreases in accrued compensation and accounts payable. During the year ended December 31, 2004, accounts receivable and other current assets increased by $1,108,000, primarily due to an increase in our receivables from collaborative partners.

Our uses of cash during 2004 were offset in part by an increase of $213,000 in deferred revenue. This increase was due, in part, to the receipt from BioGeneriX of an upfront fee under our collaborative agreement, partially offset by the amortization of up-front payments. Fluctuations in operating items vary period-to-period due to, among other factors, the timing of research and development activities, such as the preparation and initiation of preclinical trials.

Investing Activities

During 2003 and 2004, we purchased $3,455,000 and $9,844,000, respectively, of property, equipment, and building and leasehold improvements. In addition, during 2003 and 2004, we entered into capital lease obligations for assets with aggregate book values of $787,000 and $184,000, respectively. The facility improvement project described below contributed significantly to our capital expenditures during 2003 and 2004.

We entered into a lease agreement in 2002 for a 40,000-square-foot building, which we intended to convert into laboratory and office space. Later in 2002, we suspended plans to complete these renovations. In November 2003, we reinitiated renovation activities on approximately 25,000 square feet of the facility, leaving approximately 15,000 square feet available for future expansion. In April 2004, we occupied the facility and began amortizing the cost of the improvements. We expended approximately $10,175,000 for this project, of which $1,109,000 and $5,085,000 were expended in 2003 and 2004, respectively. During the first quarter of 2004, we entered into agreements with a bank for the purpose of funding these improvements. See "Financing Activities – Debt Financing Activities – Term Loan from Bank and Industrial Development Authority Bonds" in the Liquidity and Capital Resources section of this Annual Report for a description of the material features of this borrowing. In addition, pursuant to the lease, we received $250,000 from the landlord in September 2004 as a partial reimbursement for improvements we made to the facility. This landlord incentive, which is included in other liabilities on our balance sheet, is being amortized ratably as a reduction to rental expense over the lease term.

In 2005, we expect our investment in capital expenditures to be approximately $2.5 million. We may finance some or all of these capital expenditures through capital leases or the issuance of new debt or equity. We would prefer to finance capital expenditures through the issuance of new debt, to the extent that we are allowed to do so under our existing bank covenants. The terms of new debt could require us to maintain a minimum cash and investments balance, or to transfer cash into an escrow account to collateralize some portion of the debt, or both.

Financing Activities

Equity Financing Activities

In February 2005, we offered and sold 8,050,000 shares of our common stock at a public offering price of $4.00 per share, generating net proceeds of approximately $30,000,000.

In May 2004, we sold 4,733,476 shares of common stock in a registered direct offering to a number of institutional and individual investors, including 812,408 shares sold to officers and an investment fund affiliated with a director, at a price of $6.77 per share, generating net proceeds of $29,928,000.

During 2004, participating employees purchased 23,564 shares of common stock pursuant to our employee stock purchase plan, resulting in net proceeds of $175,000. In addition, we received proceeds of $74,000 upon the exercise of options to purchase 24,916 shares of common stock.

In September 2003, we sold 2,655,557 shares of common stock in a registered direct offering to a number of institutional and individual investors, generating net proceeds of $22,377,000. In February 2003, we sold 2,866,763 shares of common stock in a private placement to a number of institutional and individual investors, generating net proceeds of $16,320,000. In addition, employees purchased 25,836 shares of common stock during 2003 pursuant to our employee stock purchase plan, resulting in net proceeds of $196,000. During 2003, we received proceeds of $172,000 upon the exercise of options to purchase 62,780 shares of common stock.

Debt Financing Activities

Our total debt increased by $7,744,000 to $18,345,000 at December 31, 2004, compared to $10,601,000 at December 31, 2003. This increase primarily resulted from $14,112,000 in proceeds from the issuance of debt during 2004. Partially offsetting the debt proceeds were $6,552,000 of debt principal repayments during 2004. In addition, we entered into a capital lease obligation during 2004 for equipment with an aggregate book value of $184,000.

■ *Term Loan from Bank and Industrial Development Authority Bonds*

During the first quarter of 2004, we and a bank entered into agreements under which the bank acquired and reissued the $1,000,000 outstanding of our tax-exempt Industrial Development Authority bonds. In addition, we borrowed $8,000,000 from the bank, of which $1,800,000 was combined with $1,100,000 of our restricted cash for the purpose of paying in full the $2,900,000 outstanding of our taxable Industrial Development Authority bonds. The remaining $6,200,000 borrowed funded improvements to our leased facility, which we occupied in April 2004, in Horsham, PA.

During 2005, we will be required to make principal payments totaling $889,000 under these agreements. The interest rate on the bond and bank debt will vary quarterly, depending on 90-day LIBOR rates. At December 31, 2004, the 90-day LIBOR was 2.56%. We have the option each quarter to incur interest on the outstanding principal at the LIBOR-based variable interest rate or a fixed rate offered by our bank.

For the $8,000,000 term loan, interest will accrue at an interest rate equal to the 90-day LIBOR plus 3.0%. We will make quarterly, interest-only payments through March 31, 2005. Commencing on March 31, 2005, we will make quarterly principal payments of $222,000 plus interest over the remaining nine years of the ten-year loan period.

For the $1,000,000 Industrial Development Authority bond, we will make quarterly, interest-only payments for ten years at an interest rate equal to the 90-day LIBOR plus 1.5%, followed by a single repayment of principal at the end of the ten-year loan period. If the 90-day LIBOR at the beginning of any calendar quarter is between 4.0% and 6.0%, the bond will bear interest at the 90-day LIBOR plus 1.25%. If the 90-day LIBOR at the beginning of any calendar quarter exceeds 6.0%, the bond will bear interest at the 90-day LIBOR plus 1.0%.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

To provide security for these borrowings, we granted a first mortgage to our bank on the land and building where our present headquarters are located, as well as a security interest of first priority on certain improvements, certain equipment, and other tangible personal property. Under our agreements with the bank, if the bank determines a material adverse change has occurred in our business, financial condition, results of operations, or business prospects, the bank in its sole discretion may declare at any time an event of default, of which one potential outcome could be the accelerated repayment of the loan balance, which was $9,000,000 as of December 31, 2004. Under our agreements with the bank, we agreed to limit our total outstanding debt to $22,000,000. As of December 31, 2004, our total outstanding debt was $18,345,000. At any time after January 30, 2008, or if we fail to maintain a minimum required cash and short-term investments balance of at least $22,000,000, our bank has the option to require additional collateral from us in the form of a security interest in certain cash and short-term investments, or in the form of a letter of credit, which may have the effect of requiring us to repay the outstanding loan balance to the bank. The agreements with our bank also contain covenants which, among other things, require us to obtain consent from the bank prior to paying dividends, making certain investments, changing the nature of our business, assuming or guaranteeing the indebtedness of another entity or individual, selling or otherwise disposing of a substantial portion of our assets, and merging or consolidating with another entity.

□ *Term Loan from Landlord*
In May 2004, we borrowed $1,500,000 from the landlord of our leased facilities in Horsham, Pennsylvania. The terms of the financing require us to pay monthly principal and interest payments over 48 months at an interest rate of 13%. During 2005, we will be required to make principal and interest payments totaling $483,000 under this agreement.

□ *Equipment Loans*
We borrowed $2,261,000, $4,986,000, and $3,612,000 during 2002, 2003, and 2004, respectively, from an equipment lender to finance the purchase of equipment and facility improvements, which collateralize the amounts borrowed. The terms of the financings require us to make monthly principal and interest payments through January 2009 at interest rates ranging from 8.00% to 9.01%. During 2005, we will make principal and interest payments totaling $3,604,000 under these agreements.

□ *Capital Lease Obligations*
During 2002, 2003, and 2004, we entered into capital lease obligations for equipment with a value of $50,000, $787,000, and $184,000, respectively. The terms of the leases require us to make monthly payments through February 2009. Under these agreements, we will be required to make principal and interest payments totaling $312,000 during 2005.

Operating Leases

We lease laboratory, office, warehouse facilities, and equipment under operating lease agreements. In April 2001, we entered into a lease agreement for approximately 10,000 square feet of laboratory and office space in California. The initial term of the lease ends in March 2006, at which time we have an option to extend the lease for an additional five years under certain circumstances. We lease approximately 5,000 square feet of office and warehouse space in Pennsylvania under a lease agreement that expires April 2007. In February 2002, we entered into a lease agreement for approximately 40,000 square feet of laboratory and office space in Pennsylvania. The initial term of the lease ends in July 2022, at which time we have an option to extend the lease for an additional five years, followed by another option to extend the lease for an additional four and one-half years. Pursuant to the lease, we received $250,000 from the landlord in September 2004 as a partial reimbursement for improvements we made to the facility. This landlord incentive, which is included in other liabilities on our balance sheet, is being amortized ratably as a reduction to rental expense over the lease term. Our laboratory, office, and warehouse facility leases contain escalation clauses, under which the base rent increases annually by 2-4%. Our rental expense for the years ended December 31, 2002, 2003, and 2004 was $583,000, $923,000, and $981,000, respectively.

Summary of Contractual Obligations

The following table summarizes our obligations to make future payments under current contracts as of December 31, 2004:

		Payments due by period			
	Total	Less than 1 Year	1 - 3 Years	4 - 5 Years	After 5 Years
Long-term debt obligations[1]					
Debt maturities	$ 17,790,000	$ 4,311,000	$ 6,428,000	$ 2,496,000	$ 4,555,000
Contractual interest	5,271,000	1,111,000	1,445,000	920,000	1,795,000
Capital lease obligations[2]					
Debt maturities	555,000	275,000	218,000	62,000	–
Contractual interest	65,000	37,000	25,000	3,000	–
Operating leases[3]	9,755,000	948,000	1,206,000	917,000	6,684,000
Purchase obligations[4]	1,082,000	839,000	231,000	12,000	–
Other liabilities reflected on our balance sheet under GAAP[5]	495,000	388,000	107,000	–	–
Total contractual obligations	$ 35,013,000	$ 7,909,000	$ 9,660,000	$ 4,410,000	$ 13,034,000

1. *See "Financing Activities – Debt Financing Activities" in this Liquidity and Capital Resources section and Note 7 of the Notes to Financial Statements included in this Annual Report for a description of the material features of our long-term debt. Contractual interest is the interest we contracted to pay on the long-term debt obligations. We had $9,000,000 of long-term debt subject to variable interest rates at December 31, 2004. The rate assumed for the variable interest component of the contractual interest obligation was the applicable rate in effect at December 31, 2004.*
2. *See "Financing Activities – Capital Lease Obligations" in this Liquidity and Capital Resources section and Note 14 of the Notes to Financial Statements included in this Annual Report for a description of the material features of our capital lease obligations. At December 31, 2004, the present value of our capital lease obligations was $555,000 and the amount of imputed interest, calculated using an assumed incremental borrowing rate at the time we entered into the capital lease obligations, was $65,000.*
3. *See Note 14 of the Notes to Financial Statements included in this Annual Report for a description of our significant operating leases.*
4. *Includes our commitments as of December 31, 2004 to purchase goods and services.*
5. *Represents the present value as of December 31, 2004 of the remaining payments under agreements with former employees, three of whom were executive officers of the Company. These agreements with former executive officers are described in Notes 6 and 14 of the Notes to Financial Statements included in this Annual Report.*

Off-Balance Sheet Arrangements

We are not involved in any off-balance sheet arrangements that have or are reasonably likely to have a material future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources.

Critical Accounting Policies and Estimates

Our Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") focuses on our liquidity, capital resources, and financial statements. The financial statements have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of financial statements requires management to make estimates and assumptions that affect the carrying amounts of assets and liabilities, and the reported amounts of revenues and expenses during the reporting period. These estimates and assumptions are developed and adjusted periodically by management based on historical experience and on various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Our summary of significant accounting policies is described in Note 2 to our financial statements included in this Annual Report. Management considers the following policies and estimates to be the most critical in understanding the more complex judgments that are involved in preparing our financial statements and the uncertainties that could impact our results of operations, financial position, and cash flows. Management has discussed the development and selection of these critical accounting policies and estimates with the audit committee of our board of directors, and the audit committee has reviewed the company's disclosure relating to it in this MD&A.

Revenue Recognition

Our revenue from collaborative agreements consists of upfront fees, research and development funding, and milestone payments. We recognize revenues consistent with Staff Accounting Bulletin No. 104, "Revenue Recognition" (SAB 104). SAB 104 was issued by the Securities and Exchange Commission in December 2003, and updates the guidance from Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements." Non-refundable upfront fees are deferred and amortized to revenue over the related performance period. We estimate our performance period based on the specific terms of each collaborative agreement, but the actual performance period may vary. We adjust the performance periods based on available facts and circumstances. Our estimate of the performance period is a "critical accounting estimate" because:

- the accounting estimate is highly susceptible to change from period to period (because the estimate depends on preclinical and clinical progress); and
- a change in the expected performance period could have a material impact on the deferred revenue reported on our balance sheet as well as our net loss.

Periodic payments for research and development activities are recognized over the period that we perform those activities under the terms of each agreement. Revenue resulting from the achievement of milestone events stipulated in the agreements is recognized when the milestone is achieved. Milestones are based on the occurrence of a substantive element specified in the contract or as a measure of substantive progress towards completion under the contract.

In November 2003, we entered into two research, development and license agreements with Novo Nordisk A/S to use our GlycoAdvance and GlycoPEGylation technologies to develop three next-generation proteins within Novo Nordisk's therapeutic areas, one of which is currently marketed by them. Under the terms of the new agreements, we received a non-refundable, upfront fee of $4,300,000, which is being amortized to revenue over the expected performance period. In November 2004, we amended our agreements with Novo Nordisk to provide an amended work plan for one of the proteins, a method of applying some of the project-related funds to tasks that are mutually agreed upon by the parties, a change in the timing of one milestone payment, and the addition of a new milestone payment. We also received from Novo Nordisk a payment, which is being amortized to revenue over the expected remaining performance period. As a result of entering into the amendments in November 2004, we changed our estimate of the expected performance period from five years to six years. We will also receive up to $51,450,000 in milestone payments based on the progress of the programs. Novo Nordisk is responsible for funding our research and development activities under the agreements, and we will receive royalties on sales of any products commercialized under the agreements. In addition, we could receive additional milestones and royalties on new indications for the two proteins not currently marketed by Novo Nordisk.

In April 2004, we entered into an agreement with BioGeneriX to use our proprietary GlycoAdvance and GlycoPEGylation technologies to develop a long-acting, next-generation version of granulocyte colony stimulating factor (G-CSF). In connection with the agreement, we received from BioGeneriX a non-refundable, upfront fee, which is being amortized to revenue over the expected performance period of 18 years. Under the agreement, we and BioGeneriX will pursue development and commercialization of a long-acting version of G-CSF. The parties will share equally preclinical expenses. Because we do not know which party will incur greater preclinical expenses during any given quarter, we cannot estimate whether BioGeneriX will be reimbursing us or whether we will be reimbursing BioGeneriX during each quarter of the preclinical phase. BioGeneriX will fund the entire clinical development program. If we and BioGeneriX proceed to commercialization, we will have commercial rights in the U.S., Canada, Mexico and Japan. BioGeneriX will have commercial rights in Europe and the rest of the world. Each company will receive royalties on product sales in the other company's territory.

Stock-based Employee Compensation

We apply APB Opinion No. 25, "Accounting for Stock Issued to Employees" (APB 25), and related interpretations in accounting for all stock-based employee compensation. We record deferred compensation for option grants to employees for the amount, if any, by which the market price per share exceeds the exercise price per share. We amortize deferred compensation over the vesting periods of each option.

We have elected to adopt only the disclosure provisions of Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" (SFAS No. 123), as amended by Statement of Financial Accounting Standards No. 148, "Accounting for Stock-Based Compensation – Transition and Disclosure." The following table illustrates the effect on our net loss and basic and diluted net loss per share if we had recorded compensation expense for the estimated fair value of our stock-based employee compensation, consistent with SFAS No. 123 (in thousands, except per share data):

Year Ended December 31,	2002	2003	2004
Net loss – as reported	$ (26,417)	$ (37,681)	**$ (41,642)**
Add: Stock-based employee compensation expense included in reported net loss	171	100	**101**
Deduct: Total stock-based employee compensation expense determined under fair value-based method for all awards	(15,588)	(11,893)	**(9,869)**
Net loss – pro forma	$ (41,834)	$ (49,474)	**$ (51,410)**
Basic and diluted net loss per share – as reported	$ (1.85)	$ (2.14)	**$ (1.82)**
Basic and diluted net loss per share – pro forma	$ (2.94)	$ (2.81)	**$ (2.25)**

Valuation of Long-Lived Assets

We evaluate our long-lived assets for impairment at least annually and whenever indicators of impairment exist. Our history of negative operating cash flows is an indicator of impairment. Accounting standards require that if the sum of the future cash flows expected to result from a company's long-lived asset, undiscounted and without interest charges, is less than the reported value of the asset, an asset impairment must be recognized in the financial statements. The amount of the recognized impairment would be calculated by subtracting the fair value of the asset from the reported value of the asset.

Our property and equipment, which had a carrying value of $41.1 million as of December 31, 2004, have been recorded at cost and are being amortized on a straight-line basis over the estimated useful lives of those assets. Of this amount, approximately $22.0 million represents the carrying value of facility improvements placed in service during the years ended December 31, 2002, 2003, and 2004.

During the year ended December 31, 2004, we decided to sell idle equipment that had a carrying value of $153,000. We expect to sell the idle equipment during 2005. Because the carrying value exceeded the realizable value, net of selling costs, we recognized an impairment loss during 2004 of $104,000, which is included in research and development expenses on our statements of operations. The remaining carrying value of $49,000 has been reclassified as assets held for sale, and is included in accounts receivable and other current assets on our balance sheets. We believe the adjusted carrying value of the impaired property and equipment does not exceed its fair value as of December 31, 2004.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Results of Operations

Years Ended December 31, 2004 and 2003 and Outlook for 2005

Our net loss for the year ended December 31, 2004 was $41,642,000 compared to $37,681,000 for the corresponding period in 2003. The following section explains the trends within each component of net loss for 2004 compared to 2003 and provides our estimate of trends for 2005 for each component.

Revenue from Collaborative Agreements. Our revenues from collaborative agreements have historically been derived from a few major collaborators. Our collaborative agreements provide for some or all of the following elements: upfront fees, research and development funding, milestone revenues, and royalties on product sales.

Revenues from collaborative agreements increased to $5,070,000 in 2004 from $1,435,000 in 2003, primarily due to research and development funding under our collaborations with Novo Nordisk and BioGeneriX.

During the years ended December 31, 2003 and 2004, one customer accounted for 48% and 66%, respectively, of total revenues. Another customer accounted for 34% of our revenues during 2004. A third customer accounted for 29% of our revenues in 2003. A fourth customer accounted for 93% and 17% of total revenues during the years ended December 31, 2002 and 2003, respectively.

Because our 2005 revenues could be substantially affected by entering into new collaborations and on the financial terms of any new collaborations, we cannot estimate our 2005 revenues. Material cash inflows from proprietary drug development projects are highly uncertain, and we cannot reasonably estimate the period in which we will begin to receive material net cash inflows from our major research and development projects. Cash inflows from development-stage products are dependent on several factors, including entering into collaborative agreements, the achievement of certain milestones, and regulatory approvals. We may not receive milestone payments from any existing or future collaborations if a development-stage product fails to meet technical or performance targets or fails to obtain the required regulatory approvals. Further, our revenues from collaborations will be affected by the levels of effort committed and made by our collaborative partners. Even if we achieve technical success in developing drug candidates, our collaborative partners may discontinue development, may not devote the resources necessary to complete development and commence marketing of these products, or they may not successfully market potential products.

Research and Development Expense. Our proprietary drug development portfolio consists of two therapeutic protein candidates: NE-180 and GlycoPEG-GCSF. EPO is prescribed to stimulate production of red blood cells, and is approved for sale in major markets around the world for the treatment of chemotherapy-induced anemia and anemia associated with chronic renal failure. Based on early preclinical studies, we believe it is feasible to develop a long-acting EPO through GlycoPEGylation. We expect to complete various preclinical activities for NE-180, including having a pre-IND meeting with the FDA and submitting an IND to the FDA during the second quarter of 2005. Our goal is to initiate clinical trials during the third quarter of 2005. We expect that data from these trials will be included in data submitted to the appropriate government agencies for regulatory approval.

G-CSF is prescribed to stimulate production of neutrophils (a type of white blood cell), and is approved for sale in major markets around the world for treatment of neutropenia associated with myelosuppressive chemotherapy. Based on proof-of-concept data and preclinical development activities conducted during 2004, we believe it is feasible to develop a long-acting G-CSF through GlycoPEGylation. We and BioGeneriX plan to complete preclinical development activities for GlycoPEG-GCSF prior to the end of 2005, including requesting scientific advice from regulatory authorities in the EU and submitting the equivalent of an IND in an EU country.

We conduct exploratory research, both independently and with collaborators, on therapeutic candidates, primarily proteins, for development using our enzymatic technologies. Successful candidates may be advanced for development through our own proprietary drug program or through our partnering and licensing program, or a combination of the two. Although our primary focus is the development of long-acting proteins, we are also conducting research to assess opportunities to use our enzymatic technologies in other areas, such as glycopeptides and glycolipids. We expect to continue this research during 2005.

Our current research and development projects are divided between two categories: (i) GlycoAdvance and GlycoPEGylation and (ii) Other Glycotechnology Programs, which includes projects investigating other applications of our intellectual property. We are exploring the most cost-effective means of continuing some of the projects classified as Other Glycotechnology Programs. The following chart sets forth our projects in each of these categories and the stage to which each has been developed:

	Development Stage	Status
GlycoAdvance and GlycoPEGylation		
Improved erythropoietin	Preclinical	Active
Improved granulocyte colony stimulating factor	Preclinical	Active
Other protein projects	Research	Active
Other Glycotechnology Programs		
Non-protein therapeutic applications	Research	Active
Nutritional applications	N/A	Evaluating outlicensing opportunities

The process of bringing drugs from the preclinical research and development stage through Phase I, Phase II, and Phase III clinical trials to FDA approval is time consuming and expensive. Because our announced product candidates are currently in the preclinical stage and there are a variety of potential intermediate clinical and non-clinical outcomes that are inherent in drug development, we cannot reasonably estimate either the timing or costs we will incur to complete these research and development projects. In addition, the timing and costs to complete our research and development projects will be affected by the timing and nature of any collaboration agreements we may enter into with a third party, neither of which we can currently estimate.

For each of our research and development projects, we incur both direct and indirect expenses. Direct expenses include salaries and other costs of personnel, raw materials, and supplies for each project. We may also incur third-party costs related to these projects, such as contract research, consulting and preclinical development costs. Indirect expenses include depreciation expense and the costs of operating and maintaining our facilities, property, and equipment, to the extent used for our research and development projects, as well as the costs of general management of our research and development projects.

Our research and development expenses increased from $26,821,000 in 2003 to $34,672,000 in 2004. We expect our research and development expenses to be greater in 2005 than they were in 2004, as a result of the development, preclinical and clinical activities we plan to conduct during the year. The following table illustrates research and development expenses incurred during 2003 and 2004 in each period for our significant groups of research and development projects (in thousands).

Year Ended December 31,	2003	2004
GlycoAdvance and GlycoPEGylation	$ 10,012	**$ 16,650**
Other Glycotechnology Programs	486	**196**
Indirect expenses	16,323	**17,826**
	$ 26,821	**$ 34,672**

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

GlycoAdvance and GlycoPEGylation
Our GlycoAdvance and GlycoPEGylation research and development expenses increased during 2004, compared to 2003, primarily due to increased preclinical development costs associated with NE-180 and GlycoPEG-GCSF, purchases of laboratory services and research supplies, including proteins, and the reallocation of resources from our Other Glycotechnology Programs.

Other Glycotechnology Programs
Research and development expenses related to our Other Glycotechnology Programs decreased during 2004, compared to 2003, consistent with our focus on our GlycoAdvance and GlycoPEGylation programs.

Indirect Expenses
Our indirect research and development expenses increased during 2004, compared to 2003, primarily due to increases related to depreciation of the leasehold improvements at a facility that we occupied in April 2004, as well as the costs associated with operating this facility.

General and Administrative Expense. General and administrative expenses for the year ended December 31, 2003 were $11,148,000, compared to $11,711,000 for the corresponding period in 2004. The 2004 period contained higher patent legal expenses than the comparable 2003 period. During 2005, excluding the effect of the adoption of Statement of Financial Accounting Standards No. 123 (Revised 2004), *Share-Based Payment: an amendment of FASB Statements No. 123 and 95* (SFAS No. 123R), we expect our general and administrative expenses to increase by less than 10% over 2004.

Other Income and Expense. During the year ended December 31, 2003, we recorded a non-cash impairment charge of $1,250,000 relating to our investment in Series A convertible preferred stock of Neuronyx, Inc. We recorded the equity investment, which was made in 2000, at cost. In October 2003, Neuronyx informed us they were nearing completion of a Series C equity financing, under which Series C and Series B Neuronyx investors would have an aggregate liquidation preference that is senior to the Series A liquidation preference and exceeds the assumed post-money valuation of Neuronyx. As a result, we reduced the carrying value of our equity investment to zero as of September 30, 2003 by recording the non-cash impairment charge. We did not record any impairment charges during 2004.

Interest income for the year ended December 31, 2003 was $564,000, compared to $652,000 for the corresponding period in 2004. The increase was due to higher average cash and cash equivalents balances, as well as slightly higher interest rates, during 2004. Our interest income during 2005 is difficult to project, and will depend largely on prevailing interest rates and whether we enter into any new collaborative agreements and complete any additional equity or debt financings during the year.

Interest expense for the year ended December 31, 2003 was $461,000, compared to $981,000 for the corresponding period in 2004, primarily due to higher average debt outstanding during 2004. The increase was partly offset by the capitalization of more interest expense during 2004 than 2003. During 2003 and 2004, we capitalized $42,000 and $139,000, respectively, of interest expense associated with leasehold improvements which we placed in service in April 2004. Our interest expense during 2005 is difficult to project and will depend largely on prevailing interest rates and whether we enter into any new debt agreements. See "Financing Activities – Debt Financing Activities" in the Liquidity and Capital Resources section of this Annual Report for a description of the material features of our debt financings.

Years Ended December 31, 2003 and 2002

Our net loss for the year ended December 31, 2003 was $37,681,000 compared to $26,417,000 for the corresponding period in 2002. The following section explains the trends within each component of net loss for 2003 compared to 2002.

Revenue from Collaborative Agreements. Revenues from collaborative agreements decreased to $1,435,000 in 2003 from $4,813,000 in 2002, primarily due to the termination in September 2002 of our collaboration with Wyeth Pharmaceuticals. The decrease was partly offset by the revenues recorded in 2003 under our agreements with Novo Nordisk.

Research and Development Expense. Our research and development expenses increased to $26,821,000 in 2003 from $21,481,000 in 2002. The following table illustrates research and development expenses incurred during 2002 and 2003 in each period for our significant groups of research and development projects (in thousands).

Year Ended December 31,	2002	2003
GlycoAdvance and GlycoPEGylation	$ 7,082	$ 10,012
Other Glycotechnology Programs	1,779	486
Indirect expenses	12,620	16,323
	$ 21,481	$ 26,821

GlycoAdvance and GlycoPEGylation

Our GlycoAdvance and GlycoPEGylation research and development expenses increased during 2003, compared to 2002, primarily due to increased preclinical development costs associated with our proprietary NE-180, purchases of laboratory services and research supplies, including proteins, and the reallocation of resources from our Other Glycotechnology Programs.

Other Glycotechnology Programs

Research and development expenses related to our Other Glycotechnology Programs decreased during 2003, compared to 2002, consistent with our decision during 2002 to focus our resources on our GlycoAdvance and GlycoPEGylation programs.

Indirect Expenses

Our indirect research and development expenses increased during 2003, compared to 2002, primarily due to increases related to depreciation of pilot manufacturing facility improvements, which were placed in service in January 2003, additional personnel, and the purchase of more supplies and outside services than in 2002. Substantially offsetting these increases was a reduction in severance expense during 2003 of $2,294,000, of which $1,608,000 was a non-cash charge, related to an agreement entered into during the first quarter of 2002 with one of our former executive officers.

General and Administrative Expense. General and administrative expenses for the year ended December 31, 2003 were $11,148,000, compared to $12,510,000 for the corresponding period in 2002. The 2002 period contained higher consulting expenses and costs associated with executive recruitment and relocation than the comparable 2003 period. The decreases in those expenses during 2003 were partly offset by increases in payroll.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Other Income and Expense. During the year ended December 31, 2003, we recorded a non-cash impairment charge of $1,250,000 relating to our investment in Series A convertible preferred stock of Neuronyx, Inc. We recorded the equity investment, which was made in 2000, at cost. In October 2003, Neuronyx informed us they were nearing completion of a Series C equity financing, under which Series C and Series B Neuronyx investors would have an aggregate liquidation preference that is senior to the Series A liquidation preference and exceeds the assumed post-money valuation of Neuronyx. As a result, we reduced the carrying value of our equity investment to zero as of September 30, 2003 by recording the non-cash impairment charge.

During the year ended December 31, 2002, we recognized $1,653,000 of other income upon receipt from Genzyme General of a contract payment, which was due as a result of the restructuring of our agreement with Novazyme Pharmaceuticals, Inc. in March 2001. In September 2001, Genzyme acquired Novazyme, and assumed Novazyme's contractual obligation to us. We did not recognize any other income during 2003.

Interest income for the year ended December 31, 2003 was $564,000, compared to $1,108,000 for the corresponding period in 2002. The decrease was due to lower average cash and cash equivalents and marketable securities balances, as well as lower interest rates, during 2003.

Interest expense for the year ended December 31, 2003 was $461,000, compared to zero for the corresponding period in 2002. In 2002, we capitalized $150,000 of interest expense on two facility improvement projects. In accordance with GAAP, we recognized capitalized interest for these projects only to the extent of our actual interest expense, resulting in no reported interest expense for 2002.

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board (FASB) issued Statements of Financial Accounting Standards No. 123R, *Share-Based Payment* (SFAS No. 123R), which requires companies to expense the fair value of stock options and other equity-based compensation to employees. It also provides guidance for determining whether an award is a liability-classified award or an equity-classified award, and determining fair value. SFAS No. 123R will be effective for public companies for interim and annual periods beginning after June 15, 2005, and applies to all unvested stock-based payment awards outstanding as of the adoption date. We have not completed an assessment of the impact on our financial statements resulting from potential modifications to our equity-based compensation structure or the use of an alternative fair value model in anticipation of adopting SFAS No. 123R.

In December 2004, the FASB issued SFAS No. 153, *Exchanges of Nonmonetary Assets*, which amends APB Opinion No. 29, *Accounting for Nonmonetary Transactions* (SFAS No. 153), which requires a nonmonetary exchange of assets be accounted for at fair value, recognizing any gain or loss, if the exchange meets a commercial substance criterion and fair value is determinable. The commercial substance criterion is assessed by comparing the entity's expected cash flows immediately before and after the exchange. This eliminates the "similar productive assets exception," which accounts for the exchange of assets at book value with no recognition of gain or loss. SFAS No. 153 will be effective for nonmonetary asset exchanges occurring in fiscal periods beginning after June 15, 2005. We do not believe the adoption of SFAS No. 153 will have a material impact on our financial statements.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, our principal executive and principal financial and accounting officers and effected by our board of directors and management to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of our management and board of directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2004. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework.*

Based on our assessment, our management believes that, as of December 31, 2004, our internal control over financial reporting is effective.

The Company's independent registered public accounting firm has issued an audit report on our assessment of our internal control over financial reporting. This report follows.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Neose Technologies, Inc.:

We have audited management's assessment, included in the accompanying Management's Report on Internal Control Over Financial Reporting, that Neose Technologies, Inc. (a development-stage company) maintained effective internal control over financial reporting as of December 31, 2004, based on the criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Neose Technologies, Inc's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that Neose Technologies, Inc. maintained effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on criteria established in Internal Control—Integrated Framework issued by COSO. Also, in our opinion, Neose Technologies, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on the criteria established in Internal Control—Integrated Framework issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the balance sheets of Neose Technologies, Inc. as of December 31, 2004 and 2003, and the related statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the years in the three-year period ended December 31, 2004, and for the period from January 17, 1989 (inception) to December 31, 2004, and our report dated March 10, 2005 expressed an unqualified opinion on those financial statements. The financial statements of Neose Technologies, Inc. for the period from January 17, 1989 (inception) through December 31, 2004, to the extent related to the period from January 17, 1989 (inception) to December 31, 2001, were audited by other auditors who have ceased operations. Those auditors expressed an unqualified opinion on those financial statements in their report dated January 25, 2002. Our opinion on the statements of operations, stockholders' equity and comprehensive loss, and cash flows, insofar as it relates to the amounts included for the period from January 17, 1989 (inception) to December 31, 2001, is based solely on the report of the other auditors.

KPMG LLP

Philadelphia, Pennsylvania
March 10, 2005

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Neose Technologies, Inc.:

We have audited the accompanying balance sheets of Neose Technologies, Inc. (a development-stage company) as of December 31, 2004 and 2003, and the related statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the years in the three-year period ended December 31, 2004, and for the period from January 17, 1989 (inception) to December 31, 2004. These financial statements are the responsibility of the management of Neose Technologies, Inc. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

The financial statements of Neose Technologies, Inc. for the period from January 17, 1989 (inception) through December 31, 2004, to the extent related to the period from January 17, 1989 (inception) to December 31, 2001, were audited by other auditors who have ceased operations. Those auditors expressed an unqualified opinion on those financial statements in their report dated January 25, 2002. Our opinion on the statements of operations, stockholders' equity and comprehensive loss, and cash flows, insofar as it relates to the amounts included for the period from January 17, 1989 (inception) to December 31, 2001, is based solely on the report of the other auditors.

In our opinion, based on our audits and the report of other auditors, the financial statements referred to above present fairly, in all material respects, the financial position of Neose Technologies, Inc. (a development-stage company) as of December 31, 2004 and 2003, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2004, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of the internal control over financial reporting of Neose Technologies, Inc. as of December 31, 2004, based on the criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 10, 2005 expressed an unqualified opinion on management's assessment of, and the effective operation of, internal control over financial reporting.

KPMG LLP

Philadelphia, Pennsylvania
March 10, 2005

Balance Sheets

(in thousands, except per share amounts)	December 31, 2003	2004
Assets		
Current assets:		
Cash and cash equivalents	$ 48,101	**$ 45,048**
Marketable securities	4,959	**–**
Restricted funds	901	**–**
Accounts receivable and other current assets	909	**2,768**
Total current assets	54,870	**47,816**
Property and equipment, net	37,192	**41,133**
Intangible and other assets, net	2,783	**1,782**
Total assets	$ 94,845	**$ 90,731**
Liabilities and Stockholders' Equity		
Current liabilities:		
Current portion of long-term debt and capital lease obligations	$ 2,231	**$ 4,586**
Accounts payable	2,342	**1,783**
Accrued compensation	2,510	**1,916**
Accrued expenses	2,433	**2,052**
Deferred revenue	1,000	**1,560**
Total current liabilities	10,516	**11,897**
Long-term debt and capital lease obligations	8,370	**13,759**
Deferred revenue, net of current portion	3,333	**3,688**
Other liabilities	413	**533**
Total liabilities	22,632	**29,877**
Commitments and contingencies (See Note 14)		
Stockholders' equity:		
Preferred stock, par value $.01 per share, 5,000 shares authorized, none issued	–	**–**
Common stock, par value $.01 per share, 30,000 and 50,000 shares authorized; 19,935 and 24,717 shares issued and outstanding	199	**247**
Additional paid-in capital	217,849	**248,027**
Deferred compensation	(96)	**(39)**
Deficit accumulated during the development stage	(145,739)	**(187,381)**
Total stockholders' equity	72,213	**60,854**
Total liabilities and stockholders' equity	$ 94,845	**$ 90,731**

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

Statements of Operations

(in thousands, except per share amounts)	Year ended December 31, 2002	2003	2004	Period from inception (January 17, 1989) to December 31, 2004
Revenue from collaborative agreements	$ 4,813	$ 1,435	$ 5,070	$ 23,951
Operating expenses:				
Research and development	21,481	26,821	34,672	161,171
General and administrative	12,510	11,148	11,711	71,931
Total operating expenses	33,991	37,969	46,383	233,102
Operating loss	(29,178)	(36,534)	(41,313)	(209,151)
Other income	1,653	–	–	7,773
Impairment of equity securities	–	(1,250)	–	(1,250)
Interest income	1,108	564	652	19,994
Interest expense	–	(461)	(981)	(4,747)
Net loss	$ (26,417)	$ (37,681)	$ (41,642)	$ (187,381)
Basic and diluted net loss per share	$ (1.85)	$ (2.14)	$ (1.82)	
Weighted-average shares outstanding used in computing basic and diluted net loss per share	14,259	17,611	22,898	

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

Statements of Stockholders' Equity and Comprehensive Loss

(in thousands)	Convertible Preferred Stock Shares	Convertible Preferred Stock Amount	Common Stock Shares	Common Stock Amount	Additional paid-in capital	Treasury stock	Deferred compensation	Deficit accumulated during the development stage	Unrealized gains (losses) on marketable securities	Comprehensive loss accumulated during the development stage
Balance, January 17, 1989 (inception)	–	$ –	–	$ –	$ –	$ –	$ –	$ –	$ –	$ –
Initial issuance of common stock	–	–	1,302	13	(3)	–	–	–	–	–
Shares issued pursuant to consulting, licensing, and antidilutive agreements	–	–	329	3	(1)	–	–	–	–	–
Sale of common stock	–	–	133	1	1	–	–	–	–	–
Net loss	–	–	–	–	–	–	–	(460)	–	(460)
Balance, December 31, 1990	–	–	1,764	17	(3)	–	–	(460)	–	(460)
Sale of stock	1,517	15	420	4	4,499	–	(7)	–	–	–
Shares issued pursuant to consulting and antidilutive agreements	–	–	145	1	–	–	–	–	–	–
Capital contributions	–	–	–	–	10	–	–	–	–	–
Dividends on preferred stock	–	–	–	–	(18)	–	–	–	–	–
Net loss	–	–	–	–	–	–	–	(1,865)	–	(1,865)
Balance, December 31, 1991	1,517	15	2,329	22	4,488	–	(7)	(2,325)	–	(2,325)
Sale of stock	260	2	17	–	2,344	–	–	–	–	–
Shares issued pursuant to redemption of notes payable	–	–	107	1	682	–	–	–	–	–
Exercise of stock options and warrants	–	–	21	–	51	–	–	–	–	–
Amortization of deferred compensation	–	–	–	–	–	–	5	–	–	–
Dividends on preferred stock	–	–	–	–	(36)	–	–	–	–	–
Net loss	–	–	–	–	–	–	–	(3,355)	–	(3,355)
Balance, December 31, 1992	1,777	17	2,474	23	7,529	–	(2)	(5,680)	–	(5,680)
Sale of preferred stock	250	3	–	–	1,997	–	–	–	–	–
Shares issued to licensor	–	–	3	–	–	–	–	–	–	–
Shares issued to preferred stockholder in lieu of cash dividends	–	–	1	–	18	–	–	–	–	–
Amortization of deferred compensation	–	–	–	–	–	–	2	–	–	–
Dividends on preferred stock	–	–	–	–	(36)	–	–	–	–	–
Net loss	–	–	–	–	–	–	–	(2,423)	–	(2,423)
Balance, December 31, 1993	2,027	20	2,478	23	9,508	–	–	(8,103)	–	(8,103)
Sale of preferred stock	2,449	25	–	–	11,040	–	–	–	–	–
Exercise of stock options	–	–	35	1	14	–	–	–	–	–
Shares issued to preferred stockholder in lieu of cash dividends	–	–	10	1	53	–	–	–	–	–
Dividends on preferred stock	–	–	–	–	(18)	–	–	–	–	–
Net loss	–	–	–	–	–	–	–	(6,212)	–	(6,212)
Balance, December 31, 1994	4,476	$ 45	2,523	$ 25	$ 20,597	$ –	$ –	$ (14,315)	$ –	$ (14,315)

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

(continued)

(in thousands)	Convertible Preferred Stock Shares	Convertible Preferred Stock Amount	Common Stock Shares	Common Stock Amount	Additional paid-in capital	Treasury stock	Deferred compensation	Deficit accumulated during the development stage	Unrealized gains (losses) on marketable securities	Comprehensive loss accumulated during the development stage
Sale of preferred stock	2,721	$ 27	–	$ –	$ 10,065	$ –	$ –	$ –	$ –	$ –
Exercise of stock options and warrants	–	–	116	1	329	–	–	–	–	–
Shares issued to employees in lieu of cash compensation	–	–	8	–	44	–	–	–	–	–
Deferred compensation related to grants of stock options	–	–	–	–	360	–	(360)	–	–	–
Shares issued to stockholder related to initial public offering	–	–	23	–	–	–	–	–	–	–
Shares issued to preferred stockholder in lieu of cash dividends	–	–	3	–	18	–	–	–	–	–
Dividends on preferred stock	–	–	–	–	(36)	–	–	–	–	–
Conversion of preferred stock into common stock	(1,417)	(14)	472	5	9	–	–	–	–	–
Net loss	–	–	–	–	–	–	–	(5,067)	–	(5,067)
Balance, December 31, 1995	5,780	58	3,145	31	31,386	–	(360)	(19,382)	–	(19,382)
Dividends on preferred stock	–	–	–	–	(18)	–	–	–	–	–
Sale of common stock in initial public offering	–	–	2,588	26	29,101	–	–	–	–	–
Conversion of preferred stock into common stock	(5,780)	(58)	2,411	24	34	–	–	–	–	–
Exercise of stock options and warrants	–	–	65	1	162	–	–	–	–	–
Shares issued pursuant to employee stock purchase plan	–	–	6	–	60	–	–	–	–	–
Stock-based compensation related to modification of options	–	–	–	–	106	–	–	–	–	–
Amortization of deferred compensation	–	–	–	–	–	–	90	–	–	–
Net loss	–	–	–	–	–	–	–	(6,141)	–	(6,141)
Balance, December 31, 1996	–	–	8,215	82	60,831	–	(270)	(25,523)	–	(25,523)
Sale of common stock in initial public offering	–	–	1,250	13	20,326	–	–	–	–	–
Exercise of stock options and warrants	–	–	42	–	139	–	–	–	–	–
Shares issued pursuant to employee stock purchase plan	–	–	18	–	189	–	–	–	–	–
Deferred compensation related to grants of stock options	–	–	–	–	322	–	(322)	–	–	–
Amortization of deferred compensation	–	–	–	–	–	–	231	–	–	–
Net loss	–	–	–	–	–	–	–	(9,064)	–	(9,064)
Balance, December 31, 1997	–	$ –	9,525	$ 95	$ 81,807	$ –	$ (361)	$ (34,587)	$ –	$ (34,587)

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

(continued)

Statements of Stockholders' Equity and Comprehensive Loss (continued)

(in thousands)	Convertible Preferred Stock Shares	Convertible Preferred Stock Amount	Common Stock Shares	Common Stock Amount	Additional paid-in capital	Treasury stock	Deferred compensation	Deficit accumulated during the development stage	Unrealized gains (losses) on marketable securities	Comprehensive loss accumulated during the development stage
Exercise of stock options	–	$ –	49	$ 1	$ 261	$ –	$ –	$ –	$ –	$ –
Shares issued pursuant to employee stock purchase plan	–	–	15	–	171	–	–	–	–	–
Deferred compensation related to grants of stock options	–	–	–	–	161	–	(161)	–	–	–
Amortization of deferred compensation	–	–	–	–	–	–	311	–	–	–
Unrealized gains on marketable securities	–	–	–	–	–	–	–	–	222	222
Net loss	–	–	–	–	–	–	–	(11,907)	–	(11,907)
Balance, December 31, 1998	–	–	9,589	96	82,400	–	(211)	(46,494)	222	(46,272)
Sale of common stock in private placements	–	–	1,786	18	17,398	–	–	–	–	–
Exercise of stock options and warrants	–	–	43	–	263	–	–	–	–	–
Shares issued pursuant to employee stock purchase plan	–	–	16	–	156	–	–	–	–	–
Deferred compensation related to grants of stock options	–	–	–	–	796	–	(796)	–	–	–
Amortization of deferred compensation	–	–	–	–	–	–	477	–	–	–
Unrealized losses on marketable securities	–	–	–	–	–	–	–	–	(222)	(222)
Net loss	–	–	–	–	–	–	–	(13,318)	–	(13,318)
Balance, December 31, 1999	–	–	11,434	114	101,013	–	(530)	(59,812)	–	(59,812)
Sale of common stock in public offering	–	–	2,300	23	68,582	–	–	–	–	–
Exercise of stock options and warrants	–	–	247	3	2,735	–	–	–	–	–
Shares issued pursuant to employee stock purchase plan	–	–	11	–	157	–	–	–	–	–
Deferred compensation related to grants of employee stock options	–	–	–	–	70	–	(70)	–	–	–
Deferred compensation related to non-employee stock options	–	–	–	–	1,200	–	(1,200)	–	–	–
Amortization of deferred compensation related to:										
Employee options	–	–	–	–	–	–	70	–	–	–
Non-employee options	–	–	–	–	–	–	1,013	–	–	–
Net loss	–	–	–	–	–	–	–	(8,500)	–	(8,500)
Balance, December 31, 2000	–	$ –	13,992	$ 140	$ 173,757	$ –	$ (717)	$ (68,312)	$ –	$ (68,312)

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

(continued)

(in thousands)	Convertible Preferred Stock Shares	Convertible Preferred Stock Amount	Common Stock Shares	Common Stock Amount	Additional paid-in capital	Treasury stock	Deferred compensation	Deficit accumulated during the development stage	Unrealized gains (losses) on marketable securities	Comprehensive loss accumulated during the development stage
Exercise of stock options and warrants	–	$ –	79	$ 1	$ 867	$ –	$ –	$ –	$ –	$ –
Shares issued pursuant to employee stock purchase plan	–	–	18	–	335	–	–	–	–	–
Acquisition of treasury stock, 6 shares at cost	–	–	(6)	–	–	(175)	–	–	–	–
Deferred compensation related to grants of employee stock options	–	–	–	–	299	–	(299)	–	–	–
Deferred compensation related to non-employee stock options	–	–	–	–	75	–	(75)	–	–	–
Stock-based compensation related to modification of options	–	–	–	–	791	–	–	–	–	–
Amortization of deferred compensation related to:										
Employee options	–	–	–	–	–	–	125	–	–	–
Non-employee options	–	–	–	–	–	–	463	–	–	–
Net loss	–	–	–	–	–	–	–	(13,329)	–	(13,329)
Balance, December 31, 2001	–	–	14,083	141	176,124	(175)	(503)	(81,641)	–	(81,641)
Exercise of stock options	–	–	209	2	1,575	–	–	–	–	–
Shares issued pursuant to employee stock purchase plan	–	–	32	–	384	–	–	–	–	–
Deferred compensation related to grants of employee stock options	–	–	–	–	118	–	(118)	–	–	–
Deferred compensation related to non-employee stock options	–	–	–	–	(878)	–	878	–	–	–
Stock-based compensation related to modification of options	–	–	–	–	1,622	–	–	–	–	–
Amortization of deferred compensation related to:										
Employee options	–	–	–	–	–	–	171	–	–	–
Non-employee options	–	–	–	–	–	–	(598)	–	–	–
Net loss	–	–	–	–	–	–	–	(26,417)	–	(26,417)
Balance, December 31, 2002	–	$ –	14,324	$ 143	$ 178,945	$ (175)	$ (170)	$ (108,058)	$ –	$ (108,058)

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

(continued)

Statements of Stockholders' Equity and Comprehensive Loss (continued)

(in thousands)	Convertible Preferred Stock Shares	Convertible Preferred Stock Amount	Common Stock Shares	Common Stock Amount	Additional paid-in capital	Treasury stock	Deferred compensation	Deficit accumulated during the development stage	Unrealized gains (losses) on marketable securities	Comprehensive loss accumulated during the development stage
Sale of common stock in a registered offering	–	$ –	2,655	$ 26	$ 22,351	$ –	$ –	$ –	$ –	$ –
Sale of common stock in a private placement	–	–	2,867	29	16,291	–	–	–	–	–
Exercise of stock options	–	–	63	1	171	–	–	–	–	–
Shares issued pursuant to employee stock purchase plan	–	–	26	–	21	175	–	–	–	–
Deferred compensation related to grants of employee stock options	–	–	–	–	56	–	(56)	–	–	–
Deferred compensation related to non-employee stock options	–	–	–	–	14	–	(14)	–	–	–
Amortization of deferred compensation related to:										
Employee options	–	–	–	–	–	–	100	–	–	–
Non-employee options	–	–	–	–	–	–	44	–	–	–
Net loss	–	–	–	–	–	–	–	(37,681)	–	(37,681)
Balance, December 31, 2003	–	–	19,935	199	217,849	–	(96)	(145,739)	–	(145,739)
Sale of common stock in a registered offering	–	–	4,733	47	29,881	–	–	–	–	–
Exercise of stock options	–	–	25	1	73	–	–	–	–	–
Shares issued pursuant to employee stock purchase plan	–	–	24	–	175	–	–	–	–	–
Deferred compensation related to grants of employee stock options	–	–	–	–	56	–	(56)	–	–	–
Deferred compensation related to non-employee stock options	–	–	–	–	(8)	–	8	–	–	–
Stock-based compensation related to modification of options	–	–	–	–	1	–	–	–	–	–
Amortization of deferred compensation related to:										
Employee options	–	–	–	–	–	–	101	–	–	–
Non-employee options	–	–	–	–	–	–	4	–	–	–
Net loss	–	–	–	–	–	–	–	(41,642)	–	(41,642)
Balance, December 31, 2004	–	$ –	24,717	$247	$248,027	$ –	$ (39)	$(187,381)	$ –	$(187,381)

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

Statements of Cash Flows

(in thousands)	Year ended December 31, 2002	2003	2004	Period from inception (January 17, 1989) to December 31, 2004
Cash flows from operating activities:				
Net loss	$ (26,417)	$ (37,681)	**$ (41,642)**	**$ (187,381)**
Adjustments to reconcile net loss to cash used in operating activities:				
Depreciation and amortization	2,369	4,818	**6,063**	**23,695**
Non-cash compensation	1,195	144	**106**	**5,121**
Impairment and loss on disposition of equipment	7	264	**199**	**470**
Common stock issued for non-cash and other charges	–	–	**–**	**38**
Changes in operating assets and liabilities:				
Accounts receivable and other current assets	1,077	(359)	**(1,108)**	**(2,017)**
Intangible and other assets	(252)	16	**47**	**(197)**
Accounts payable	408	1,215	**(559)**	**1,783**
Accrued compensation	484	708	**(594)**	**1,497**
Accrued expenses	734	(200)	**411**	**1,989**
Deferred revenue	(902)	4,013	**213**	**4,546**
Other liabilities	330	(336)	**120**	**114**
Net cash used in operating activities	(20,967)	(27,398)	**(36,744)**	**(150,342)**
Cash flows from investing activities:				
Purchases of property and equipment	(17,826)	(3,455)	**(9,844)**	**(60,410)**
Proceeds from sale-leaseback of equipment	–	–	**–**	**1,382**
Purchases of marketable securities	(60,411)	(38,569)	**–**	**(423,307)**
Proceeds from sales of marketable securities	–	18,219	**–**	**29,686**
Proceeds from maturities of and other changes in marketable securities	51,000	25,500	**5,000**	**394,360**
Purchase of acquired intellectual property	–	–	**–**	**(4,550)**
Investment in equity securities	–	–	**–**	**(1,250)**
Impairment of equity securities	–	1,250	**–**	**1,250**
Net cash provided by (used in) investing activities	(27,237)	2,945	**(4,844)**	**(62,839)**
Cash flows from financing activities:				
Proceeds from issuance of debt	2,261	4,987	**14,112**	**33,386**
Repayments of debt	(1,100)	(2,584)	**(6,552)**	**(17,288)**
Debt issuance costs	–	(78)	**(103)**	**(181)**
Restricted funds related to debt	(75)	76	**901**	**–**
Proceeds from issuance of preferred stock, net	–	–	**–**	**29,687**
Proceeds from issuance of common stock, net	384	38,893	**30,103**	**206,220**
Proceeds from exercise of stock options and warrants	1,577	172	**74**	**6,652**
Acquisition of treasury stock	–	–	**–**	**(175)**
Dividends paid	–	–	**–**	**(72)**
Net cash provided by financing activities	3,047	41,466	**38,535**	**258,229**
Net increase (decrease) in cash and cash equivalents	(45,157)	17,013	**(3,053)**	**45,048**
Cash and cash equivalents, beginning of period	76,245	31,088	**48,101**	**–**
Cash and cash equivalents, end of period	$ 31,088	$ 48,101	**$ 45,048**	**$ 45,048**

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

Notes to Financial Statements

(in thousands, except per share amounts)

Note 1. Background

We are a biopharmaceutical company using our enzymatic technologies to develop proprietary drugs, focusing primarily on therapeutic proteins. We believe that our core enzymatic technologies, GlycoAdvance® and GlycoPEGylation,™ improve the drug properties of therapeutic proteins by building out, and attaching polyethylene glycol (PEG) to, carbohydrate structures on the proteins. We are using our technologies to develop proprietary versions of protein drugs with proven safety and efficacy and to improve the therapeutic profiles of proteins being developed by our partners. We expect these modified proteins to offer significant advantages, including less frequent dosing and possibly improved efficacy, over the original versions of the drugs now on the market, as well as to meet or exceed the pharmacokinetic profile of next-generation versions of the drugs now on the market. We believe this strategy of targeting drugs with proven safety and efficacy allows us to lower the risk profile of our proprietary development portfolio as compared to *de novo* protein drug development. We were initially incorporated in New York in January 1989, began operations in October 1990, and were reincorporated in Delaware in May 1991.

We have incurred losses each year since inception. As of December 31, 2004, we had an accumulated deficit during the development stage of $187,381. We expect to spend significant amounts to expand our research and development on our proprietary drug candidates and technologies, maintain and expand our intellectual property position, expand our manufacturing scale-up activities, and expand our business development and commercialization efforts. Given our planned level of operating expenses, we expect to continue incurring losses for some time. In February 2005, we offered and sold 8,050 shares of our common stock at a public offering price of $4.00 per share, generating net proceeds of approximately $30,000. We will require significant amounts of additional capital in the future to fund our operations, and we do not have any assurance that funding will be available when we need it on terms that we find favorable, if at all.

We have not yet developed any products or commercialized any products or technologies, and we may never be able to do so. Even if we are successful in developing products that are approved for marketing, we will not be successful unless our products, and products incorporating our technologies, gain market acceptance. Our operations are subject to risks and uncertainties other than mentioned above including, among others, the uncertainty of product development, including our limited product development and manufacturing experience; our dependence upon collaborative partners to develop and commercialize products incorporating our technologies and the success of collaborative relationships; the uncertainty of intellectual property rights; technological uncertainty and the risk of technological obsolescence; the risk of development and commercialization of competitive products by others that are more effective, less costly, or otherwise gain greater market acceptance; and the uncertainty of achieving regulatory approvals for our products, or products incorporating our technologies.

Note 2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements, in conformity with U.S. generally accepted accounting principles, requires us to make estimates and assumptions. Those estimates and assumptions affect the reported amounts of assets and liabilities as of the date of the financial statements, the disclosure of contingent assets and liabilities as of the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

We consider all highly liquid investments with a maturity of three months or less on the date of purchase to be cash equivalents. As of December 31, 2003 and 2004, cash equivalents consisted of securities and obligations of either the U.S. Treasury or U.S. government agencies and money market investments. Our cash balances have been kept on deposit primarily at one bank and in amounts greater than $100, which is the limit of insurance provided by the Federal Deposit Insurance Corporation.

Marketable Securities

Marketable securities consist of investments that have a maturity of more than three months on the date of purchase. To help maintain the safety and liquidity of our marketable securities, we have established guidelines for the concentration, maturities, and credit ratings of our investments. We determine the appropriate classification of our debt securities at the time of purchase and re-evaluate such designation as of each balance sheet date. Marketable securities that we have the positive intent and ability to hold to maturity are classified as held-to-maturity securities and recorded at amortized cost.

As of December 31, 2004, we held no marketable securities. As of December 31, 2003, we held a marketable security that was an obligation of a U.S. government agency. The security, which was classified as held-to-maturity, had an original maturity of 11 months. As of December 31, 2003, the amortized cost of the security was $4,959, which included $15 of accrued interest, and the fair value was $4,961. Securities maturing during the years ended December 31, 2002, 2003 and 2004 earned interest of $354, $310, and $55, respectively.

During 2003, securities that were classified as held-to maturity were sold due to an error by the then-custodian of our investment account. We received proceeds of $18,219 from the sales of the securities, which had an aggregate amortized cost of $18,213, and realized a gain of $6.

Property and Equipment

Property and equipment are stated at cost. Property and equipment capitalized under capital leases are recorded at the present value of the minimum lease payments due over the lease term. Expenditures for additions and improvements are capitalized, while maintenance and repairs are charged to expense as incurred. Depreciation and amortization are calculated using the straight-line method over the estimated useful lives of the assets. Buildings are depreciated over 20 years, while laboratory, manufacturing, and office equipment are depreciated over three to seven years. For assets acquired under capital leases and for leasehold improvements, depreciation and amortization are calculated on the straight-line method over the estimated useful lives of the assets or the lease term, whichever is shorter. Upon the disposition of assets, the cost and related accumulated depreciation are removed from the accounts and any resulting gain or loss is included on our statements of operations.

Impairment of Long-Lived Assets

Long-lived assets and certain identifiable intangibles are reviewed for impairment at least annually and whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets held and used is measured by a comparison of the carrying amount of an asset to future net undiscounted cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell. Although our current and historical negative cash flows are indicators of impairment, we believe the future undiscounted cash flows to be received from our long-lived assets will exceed the assets' carrying value. Accordingly, other than in connection with assets held for sale (see Note 5), we did not recognize any impairment losses during the year ended December 31, 2004.

Financing Costs Related to Long-term Debt

Costs associated with obtaining long-term debt are deferred and amortized over the term of the related debt.

Revenue Recognition

Revenue from collaborative agreements consists of upfront fees, research and development funding, and milestone payments. Non-refundable upfront fees are deferred and amortized to revenue over the related estimated performance period. Periodic payments for research and development activities are recognized over the period in which we perform those activities under the terms of each agreement. Revenue resulting from the achievement of milestone events stipulated in the agreements is recognized when the milestone is achieved.

Research and Development

Research and development costs are charged to expense as incurred. For each of our research and development projects, we incur both direct and indirect expenses. Direct expenses include salaries and other costs of personnel, raw materials, and supplies for each project. We may also incur third-party costs related to these projects, such as contract research and manufacturing, consulting, and preclinical development costs. Indirect expenses include depreciation expense and the costs of operating and maintaining our facilities, property, and equipment, to the extent used for our research and development projects, as well as the costs of general management of our research and development projects.

Notes to Financial Statements (continued)

(in thousands, except per share amounts)

Interest Expense

During each of the three years ended December 31, 2004, we incurred significant capital expenditures related to improving our owned and leased facilities. See Note 5 for a description of our property and equipment. Accordingly, we capitalized a portion of interest incurred during each reporting period in accordance with Statement of Financial Accounting Standards No. 34, "Capitalization of Interest Cost," as amended. Our interest expense for each reporting period is calculated by subtracting the amount of interest capitalized from the amount of interest incurred.

Income Taxes

We account for income taxes under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. We provide an allowance for our net deferred tax assets because there is no assurance they will be realized.

Stock-based Employee Compensation

We apply the intrinsic value method of accounting for all stock-based employee compensation in accordance with APB Opinion No. 25, "Accounting for Stock Issued to Employees" (APB 25), and related interpretations. We record deferred compensation for option grants to employees for the amount, if any, by which the market price per share exceeds the exercise price per share. In addition, we apply fair value accounting for option grants to non-employees in accordance with Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" (SFAS No. 123), and Emerging Issues Task Force Issue 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services" (EITF 96-18).

We have elected to adopt only the disclosure provisions of Statement of Financial Accounting Standards No. 148, "Accounting for Stock-Based Compensation – Transition and Disclosure, an amendment of FASB Statement No. 123." The following table illustrates the effect on our net loss and basic and diluted net loss per share if we had recorded compensation expense for the estimated fair value of our stock-based employee compensation, consistent with SFAS No. 123:

Year Ended December 31,	2002	2003	2004
Net loss – as reported	$ (26,417)	$ (37,681)	**$ (41,642)**
Add: Stock-based employee compensation expense included in reported net loss	171	100	**101**
Deduct: Total stock-based employee compensation expense determined under fair value-based method for all awards	(15,588)	(11,893)	**(9,869)**
Net loss – pro forma	$ (41,834)	$ (49,474)	**$ (51,410)**
Basic and diluted net loss per share – as reported	$ (1.85)	$ (2.14)	**$ (1.82)**
Basic and diluted net loss per share – pro forma	$ (2.94)	$ (2.81)	**$ (2.25)**

Net Loss Per Share

Basic loss per share is computed by dividing net loss by the weighted-average number of common shares outstanding for the period. Diluted loss per share reflects the potential dilution from the exercise or conversion of securities into common stock. For the years ended December 31, 2002, 2003, and 2004, the effects of the exercise of outstanding stock options were antidilutive; accordingly, they were excluded from the calculation of diluted earnings per share. See Note 10 for a summary of outstanding options.

Comprehensive Loss

Statement of Financial Accounting Standards No. 130, "Reporting Comprehensive Income," requires disclosure of comprehensive income (loss) in the financial statements. Comprehensive income (loss) is comprised of net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) includes changes to equity that are not included in net income (loss). Our comprehensive loss for the years ended December 31, 2002, 2003, and 2004, and for the period from inception (January 17, 1989) through December 31, 2004, was comprised only of our net loss and is reported on our Statements of Stockholders' Equity and Comprehensive Loss.

Fair Value of Financial Instruments

The fair value of our financial instruments is the amount for which the instrument could be exchanged in a current transaction between willing parties. As of December 31, 2004, the carrying values of cash and cash equivalents, accounts receivable, prepaid expenses and other current assets, accounts payable, accrued expenses, and accrued compensation equaled or approximated their respective fair values because of the short duration of these instruments. The fair value of our long-term debt was estimated by discounting the future cash flows of each instrument at rates recently offered to us for similar debt instruments offered by our lenders. As of December 31, 2004, the fair and carrying values of our long-term debt and capital lease obligations were $16,970 and $18,345, respectively.

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 123R, *Share-Based Payment* (SFAS No. 123R), which requires companies to expense the fair value of stock options and other equity-based compensation to employees. It also provides guidance for determining whether an award is a liability-classified award or an equity-classified award, and determining fair value. SFAS No. 123R will be effective for public companies for interim and annual periods beginning after June 15, 2005, and applies to all unvested stock-based payment awards outstanding as of the adoption date. We have not completed an assessment of the impact on our financial statements resulting from potential modifications to our equity-based compensation structure or the use of an alternative fair value model in anticipation of adopting SFAS No. 123R.

In December 2004, the FASB issued SFAS No. 153, *Exchanges of Productive Assets*, which amends APB Opinion No. 29, *Accounting for Nonmonetary Transactions*, which requires a nonmonetary exchange of assets be accounted for at fair value, recognizing any gain or loss, if the exchange meets a commercial substance criterion and fair value is determinable. The commercial substance criterion is assessed by comparing the entity's expected cash flows immediately before and after the exchange. This eliminates the "similar productive assets exception," which accounts for the exchange of assets at book value with no recognition of gain or loss. SFAS No. 153 will be effective for nonmonetary transactions occurring in fiscal periods beginning after June 15, 2005. We do not believe the adoption of SFAS No. 153 will have a material impact on our financial statements.

Reclassification

Certain prior year amounts have been reclassified to conform to our current year presentation.

Notes to Financial Statements (continued)

(in thousands, except per share amounts)

Note 3. Supplemental Disclosure of Cash Flow Information

The following table contains additional cash flow information for the periods reported.

	Year ended December 31,			Period from inception (January 17, 1989) to December 31, 2004
	2002	2003	2004	
Supplemental disclosure of cash flow information:				
Gross cash paid for interest	$ 152	$ 473	$ 1,097	$ 5,027
Less capitalized interest	(150)	(42)	(139)	(401)
Cash paid for interest, net of amounts capitalized	$ 2	$ 431	$ 958	$ 4,626
Non-compete agreement	$ –	$ 882	$ –	$ 882
Non-cash investing activities:				
Increase (decrease) in accrued property and equipment	$ (1,698)	$ 753	$ (792)	$ 63
Assets acquired under capital leases and tenant improvement loan	$ 50	$ 787	$ 184	$ 1,525
Non-cash financing activities:				
Conversion of debt into common stock	$ –	$ –	$ –	$ 660
Issuance of common stock for dividends and interest	$ –	$ –	$ –	$ 150
Issuance of common stock to employees in lieu of cash compensation	$ –	$ –	$ –	$ 44

Note 4. Accounts Receivable and Other Current Assets

Accounts receivable and other current assets consisted of the following:

December 31,	2003	2004
Accounts receivable	$ 10	$ 2,150
Prepaid insurance	122	102
Deposits	410	30
Assets held for sale (see Note 5)	–	49
Receivable from related party (see Note 6)	32	31
Other prepaid expenses	335	406
	$ 909	$ 2,768

Note 5. Property and Equipment

Property and equipment consisted of the following:

December 31,	2003	2004
Building and facility improvements	$ 27,989	$ 38,270
Laboratory, manufacturing, and office equipment	16,024	19,364
Land	700	700
Construction-in-progress	5,217	157
	49,930	58,491
Less accumulated depreciation and amortization	(12,738)	(17,358)
	$ 37,192	$ 41,133

To provide credit support for the term loan from our bank and for the industrial development authority bonds, we granted a mortgage to our bank on the land and building where our present headquarters are located, as well as on improvements, certain equipment, and other tangible personal property (see Note 7). Laboratory, manufacturing, and office equipment as of December 31, 2003 and 2004 included $837 and $1,021 respectively, of assets acquired under capital leases. Accumulated depreciation and amortization as of December 31, 2003 and 2004 includes $126 and $429, respectively, related to assets acquired under capital leases. Construction-in-progress as of December 31, 2003 consisted primarily of improvements to our leased facility in Horsham, PA. In April 2004, we occupied the facility and began amortizing the total project cost of $10,175. Construction-in-progress as of December 31, 2004 consisted primarily of improvements to the facility we own in Horsham, PA. During the years ended December 31, 2002, 2003, and 2004, we capitalized $150, $42, and $139, respectively, of interest expense in connection with our facility improvement projects.

Depreciation expense, which includes amortization of assets acquired under capital leases, was $2,311, $4,047, and $5,047 for the years ended December 31, 2002, 2003, and 2004, respectively. During the years ended December 31, 2002, 2003, and 2004, we recorded losses on disposition of property and equipment of $7, $264, and $95, respectively. During the years ended December 31, 2002, 2003 and 2004, we disposed of $1,734, $93, and $0, respectively, of fully depreciated assets.

During the year ended December 31, 2004, we decided to sell idle equipment that had a carrying value of $153. We expect to sell the idle equipment during 2005. Because the carrying value exceeded the realizable value, net of selling costs, we recognized an impairment loss during 2004 of $104, which is included in research and development expenses on our statements of operations. The remaining carrying value of $49 has been reclassified as assets held for sale, and is included in accounts receivable and other current assets on our balance sheets (see Note 4).

Notes to Financial Statements (continued)

(in thousands, except per share amounts)

Note 6. Intangible and Other Assets

Intangible and other assets consisted of the following:

December 31,	2003	2004
Acquired intellectual property, net of accumulated amortization of $2,640 and $3,238 as of December 31, 2003 and 2004, respectively	$ 1,910	$ 1,312
Non-competition agreement, net of accumulated amortization of $331 and $772 as of December 31, 2003 and 2004, respectively	551	110
Deferred financing costs, net of accumulated amortization of zero and $18 as of December 31, 2003 and 2004, respectively	78	163
Receivable from related party	86	57
Deposits	158	140
	$ 2,783	$ 1,782

Acquired Intellectual Property, net

In 1999, we acquired the carbohydrate-manufacturing patents, licenses, and other intellectual property of Cytel Corporation for aggregate consideration of $4,750, of which $200 was charged to research and development expense on our statements of operations in 1998. The acquired intellectual property consists of core technology with alternative future uses. The acquired intellectual property balance is being amortized using the straight-line method to research and development expense on our statements of operations over eight years, which is the estimated useful life of the technology. Amortization expense relating to the acquired intellectual property was $598, $597, and $598 for each of the years ended December 31, 2002, 2003, and 2004, respectively. We estimate amortization expense related to acquired intellectual property will be $598, $597, and $117 during the years ended December 31, 2005, 2006, and 2007, respectively.

Non-competition Agreement

In March 2003, our former Chief Executive Officer, Stephen A. Roth, exercised the right under his separation and consulting agreement to enter into a non-competition agreement with us. Upon entering into the separation and consulting agreement with Dr. Roth in 2002, we recorded severance expense of $309, which represented the present value of his future benefit payments under the separation and consulting agreement. Under the non-competition agreement, we are required to pay him $40 per month for 24 months and, should he leave our board of directors during such two-year period, continue his stock option vesting and exercisability. Upon entering into the non-competition agreement, we recorded a liability of $882, which represented the present value of the future payments, and a corresponding asset for the value of the non-competition commitment. The asset is being amortized using the straight-line method to general and administrative expense on our statements of operations over the two-year term of the agreement. Amortization expense relating to the non-competition agreement was $331 and $441 for each of the years ended December 31, 2003 and 2004, respectively. We estimate amortization expense related to the non-competition agreement will be $110 during the year ended December 31, 2005.

Deferred Financing Costs

During the first quarter of 2004, we entered into agreements with a bank (see Note 7 for a description of these agreements). In connection with entering into these agreements, we incurred $181 of legal and other costs, of which $78 had been incurred as of December 31, 2003. We recorded this amount as an asset, and began amortizing the asset to interest expense on our statements of operations over the ten-year repayment term to the bank. Amortization expense relating to the deferred financing costs was $18 for the year ended December 31, 2004. We estimate amortization expense related to deferred financing costs will be $18 during each of the years ended December 31, 2005, 2006, 2007, 2008, and 2009.

Receivable from Related Party

In 2001, we entered into a tuition reimbursement agreement with an employee who subsequently became an executive officer. Under the agreement, we agreed to lend the amounts necessary to pay for the employee's tuition payments and related costs and fees. Interest accrues on the loan at 4.71% per year, and has been payable annually since May 2002. We agreed to forgive repayment of the principal amount outstanding, in four equal, annual installments, commencing in May 2004, if the employee remains employed by us on each forgiveness date. We also agreed to forgive the accrued interest on each annual due date and, if the employee is terminated without cause, we also agreed to forgive all outstanding principal and interest. During 2004, we forgave principal and accrued interest of $34. As of December 31, 2003 and 2004, the amounts outstanding under the agreement, including accrued interest, were $118 and $88, respectively. Of these amounts, $32 and $31 are included in accounts receivable and other current assets on our balance sheets as of December 31, 2003 and 2004, respectively.

Note 7. Long-Term Debt and Capital Lease Obligations

Long-term debt and capital lease obligations consisted of the following:

December 31,	2003	2004
Term loan from bank	$ –	$ 8,000
Industrial development authority bonds	3,900	1,000
Term loan from landlord (unsecured), annual interest at 13.00%, due June 2008	–	1,327
Notes payable to equipment lender, secured by equipment and facility improvements that had a carrying value of $9,282 as of December 31, 2004, interest rates from 8.00% to 9.01%, due 2006 to 2009	6,082	7,463
Subtotal	9,982	17,790
Capital lease obligations (see Note 14)	619	555
Total debt	10,601	18,345
Less current portion	(2,231)	(4,586)
Total debt, net of current portion	$ 8,370	$ 13,759

Minimum principal repayments of long-term debt and capital lease obligations as of December 31, 2004 were as follows: 2005–$4,586; 2006–$3,837; 2007–$2,809; 2008–$1,643; 2009–$915; and thereafter–$4,555. Interest expense during the years ended December 31, 2003 and 2004 was $461 and $981, respectively. All interest incurred during the year ended December 31, 2002 was capitalized in connection with our facility improvement projects. See Note 5 for the amounts of interest capitalized during each of the three years ending December 31, 2004.

Term Loan from Bank and Industrial Development Authority Bonds

During the first quarter of 2004, we and a bank entered into agreements under which the bank acquired and reissued the $1,000 outstanding of our tax-exempt Industrial Development Authority bonds. In addition, we borrowed $8,000 from the bank, of which $1,800 was combined with $1,100 of our restricted cash for the purpose of paying in full the $2,900 outstanding of our taxable Industrial Development Authority bonds. The remaining $6,200 borrowed funded improvements to our leased facility, which we occupied in April 2004, in Horsham, PA.

The interest rate on the bond and bank debt will vary quarterly, depending on 90-day LIBOR rates. At December 31, 2004, the 90-day LIBOR was 2.56%. We have the option each quarter to incur interest on the outstanding principal at the LIBOR-based variable interest rate or a fixed rate offered by our bank.

For the $8,000 term loan, interest will accrue at an interest rate equal to the 90-day LIBOR plus 3.0%. We will make quarterly, interest-only payments through March 31, 2005. Commencing on March 31, 2005, we will make quarterly principal payments of $222 plus interest over the remaining nine years of the ten-year loan period.

Notes to Financial Statements (continued)

(in thousands, except per share amounts)

For the $1,000 Industrial Development Authority bond, we will make quarterly, interest-only payments for ten years at an interest rate equal to the 90-day LIBOR plus 1.5%, followed by a single repayment of principal at the end of the ten-year loan period. If the 90-day LIBOR at the beginning of any calendar quarter is between 4.0% and 6.0%, the bond will bear interest at the 90-day LIBOR plus 1.25%. If the 90-day LIBOR at the beginning of any calendar quarter exceeds 6.0%, the bond will bear interest at the 90-day LIBOR plus 1.0%.

To provide security for these borrowings, we granted a first mortgage to our bank on the land and building where our present headquarters are located, as well as a security interest of first priority on certain improvements, certain equipment, and other tangible personal property. Under our agreements with the bank, if the bank determines a material adverse change has occurred in our business, financial condition, results of operations, or business prospects, the bank in its sole discretion may declare at any time an event of default, of which one potential outcome could be the accelerated repayment of the loan balance, which was $9,000 as of December 31, 2004. Under our agreements with the bank, we agreed to limit our total outstanding debt to $22,000. As of December 31, 2004, our total outstanding debt was $18,345. At any time after January 30, 2008, or if we fail to maintain a minimum required cash and short-term investments balance of at least $22,000, our bank has the option to require additional collateral from us in the form of a security interest in certain cash and short-term investments, or in the form of a letter of credit, which may have the effect of requiring us to repay the outstanding loan balance to the bank. The agreements with our bank also contain covenants that, among other things, require us to obtain consent from the bank prior to paying dividends, making certain investments, changing the nature of our business, assuming or guaranteeing the indebtedness of another entity or individual, selling or otherwise disposing of a substantial portion of our assets, and merging or consolidating with another entity.

Note 8. Accrued Expenses

Accrued expenses consisted of the following:

December 31,	2003	2004
Property and equipment	$ 855	$ 63
Professional fees	444	610
Employee relocation	349	186
Outside research expenses	142	174
Other expenses	643	1,019
	$ 2,433	$ 2,052

Note 9. Stockholders' Equity

Common Stock

In February 2005, we offered and sold 8,050 shares of our common stock at a public offering price of $4.00 per share, generating net proceeds of approximately $30,000.

In May 2004, we sold 4,733 shares of common stock in a registered offering to a number of institutional and individual investors, including 812 shares sold to officers and an investment fund affiliated with a director, at a price of $6.77 per share, generating net proceeds of $29,928.

In September 2003, we sold 2,655 shares of common stock in a registered offering to a number of institutional and individual investors at a price of $9.00 per share, generating net proceeds of $22,377. In February 2003, we sold 2,867 shares of common stock in a private placement to a number of institutional and individual investors at a price of $6.00 per share, generating net proceeds of $16,320.

In March 2000, we offered and sold 2,300 shares of our common stock at a public offering price of $32.00 per share, generating net proceeds of $68,605.

In June 1999, we sold 1,500 shares of common stock in a private placement to a number of institutional and individual investors at a price of $9.50 per share, generating net proceeds of $13,416. In January 1999, we sold 286 shares of common stock to Johnson & Johnson Development Corporation at a price of $13.98 per share, generating net proceeds of $4,000.

In January 1997, we sold 1,250 shares of common stock in a public offering at a price of $17.50 per share, generating net proceeds of $20,339.

Our initial public offering closed in February 1996. We sold 2,588 shares of common stock, which included the exercise of the underwriters' over-allotment option in March 1996, at a price of $12.50 per share. Our net proceeds from this offering after the underwriting discount and payment of offering expenses were $29,127. In connection with this offering, all outstanding shares of Series A, C, D, E, and F Convertible Preferred Stock converted into 2,411 shares of common stock.

Shareholder Rights Plan

In September 1997, we adopted a Shareholder Rights Plan. Under this plan, which was amended in December 1998, holders of common stock are entitled to receive one right for each share of common stock held. Separate rights certificates would be issued and become exercisable if any acquiring party either accumulates or announces an offer to acquire at least 15% of our common stock. Each right will entitle any holder who owns less than 15% of our common stock to buy one one-hundredth share of the Series A Junior Participating Preferred Stock at an exercise price of $150. Each one one-hundredth share of the Series A Junior Participating Preferred Stock is essentially equivalent to one share of our common stock. If an acquiring party accumulates at least 15% of our common stock, each right entitles any holder who owns less than 15% of our common stock to purchase for $150 either $300 worth of our common stock or $300 worth of the 15% acquirer's common stock. In November 2000, the Plan was amended to increase the threshold from 15% to 20% for Kopp Investment Advisors, Inc. and related parties. In June 2002 and October 2002, the Plan was amended to increase the threshold to 20% and 25%, respectively, for Eastbourne Capital Management, LLC and related parties. The rights expire in September 2007 and may be redeemed by us at a price of $.01 per right at any time up to ten days after they become exercisable.

Note 10. Compensation Plans

Equity Incentive Plans

We have two equity incentive plans, under which a total of 6,874 shares of common stock have been authorized. In addition, we granted nonqualified stock options outside of these plans in 1995 to two consultants to purchase an aggregate of 70 shares and in 2002 to our Chief Executive Officer and President to purchase 488 shares.

The 2004 Equity Incentive Plan incorporates a predecessor plan. The following types of awards are available under the plan: incentive stock options, non-qualified stock options, stock appreciation rights, restricted shares and restricted share units. All employees, non-employee directors, and consultants are eligible to receive awards under the plan. The plan allows us to grant restricted shares and restricted share units with complete discretion as to: when grants are made; the consideration, if any, to be paid for restricted shares; and when the restrictions applicable to each restricted share and restricted share unit will lapse. The plan also allows us to grant options and stock appreciation rights to eligible individuals, with complete discretion as to: when grants are made; the number of shares subject to, and the vesting schedule for, each option grant and stock appreciation right; the designation of each stock option as either an incentive or a non-qualified stock option; the maximum term for which each option grant and stock appreciation right is to remain outstanding, which term, for an incentive stock option, may not exceed ten years (and for an incentive stock option granted to a person who owns more than 10% of the voting power of the Company may not exceed five years); and the exercise price for each option and stock appreciation right, which for a non-qualified stock option may not be less than 85% of the fair market value of the stock on the date of grant and for a qualified stock option must be at least 100% of the fair market value on the date of grant (unless the recipient owns more than 10% of the voting power of the Company, in which case the exercise price must be at least 110% of the fair market value on the date of grant).

Notes to Financial Statements (continued)

(in thousands, except per share amounts)

The following table summarizes the status of stock options as of December 31, 2002, 2003, 2004, and changes during each of the years then ended.

	2002		2003		2004	
	Shares	Weighted-Average Exercise Price Per Share	Shares	Weighted-Average Exercise Price Per Share	Shares	Weighted-Average Exercise Price Per Share
Outstanding at beginning of year	3,112	$ 20.39	4,327	$ 19.66	4,339	$ 18.20
Granted	1,589	16.92	668	8.44	1,011	10.91
Exercised	(209)	7.42	(63)	2.74	(25)	2.96
Canceled	(165)	22.49	(593)	19.51	(211)	16.55
Outstanding at end of year	4,327	$ 19.66	4,339	$ 18.20	5,114	$ 16.90
Exercisable at end of year	2,042	$ 17.86	2,421	$ 19.03	3,064	$ 18.84

The following table summarizes information about stock options outstanding as of December 31, 2004:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted-Average Remaining Life (Years)	Weighted-Average Exercise Price	Number Exercisable	Weighted-Average Exercise Price
$ 3.04 – $ 7.92	970	7.9	$ 7.32	414	$ 7.09
$ 7.96 – $ 10.00	653	7.5	$ 9.10	435	$ 9.25
$ 10.05 – $ 11.91	1,105	8.6	$ 11.41	206	$ 10.74
$ 12.05 – $ 18.00	819	3.1	$ 14.36	819	$ 14.36
$ 18.25 – $ 27.00	132	5.3	$ 22.04	104	$ 22.39
$ 27.40 – $ 41.13	1,435	6.7	$ 32.12	1,086	$ 31.72
	5,114	6.8	$ 16.90	3,064	$ 18.84

Fair Value Disclosures

We have elected to adopt only the disclosure provisions of SFAS No. 123. Accordingly, we apply APB 25 and related interpretations in accounting for our stock-based employee compensation. We record deferred compensation for option grants to employees for the amount, if any, by which the market price per share exceeds the exercise price per share. We amortize deferred compensation over the vesting periods of each option. We recognized $171, $100, and $101 of compensation expense related to employee stock options for the years ended December 31, 2002, 2003, and 2004, respectively. In addition, we recorded $1,608 of expense during the year ended December 31, 2002 related to the modification of certain stock options to a retired employee. See Note 14 for a description of the retirement agreement.

The weighted-average fair value of options granted in 2002, 2003, and 2004 was $12.81, $5.76, and $7.91, respectively. The weighted-average fair value of employee purchase rights granted under our employee stock purchase plan (see below) in 2002, 2003, and 2004 was $15.37, $19.79, and $7.52, respectively. These weighted-average fair values were determined as of the date of grant using the Black-Scholes option-pricing model with the following assumptions:

Year Ended December 31,	2002	2003	2004
Expected life (years):			
Stock options	6.7	5.5	6.6
Employee stock purchase plan	1.4	1.8	1.3
Risk-free interest rate:			
Stock options	4.2%	3.0%	3.5%
Employee stock purchase plan	2.9%	2.9%	1.6%
Volatility	80%	80%	80%
Dividend yield	0%	0%	0%

During the years ended December 31, 2002, 2003, and 2004, we granted no options at an exercise price in excess of the market price on the date of grant. A summary of options granted at exercise prices equal to and less than the market price on the date of grant is presented below:

Year Ended December 31,	2002	2003	2004
Exercise Price = Market Value			
Options granted	1,579	660	1,002
Weighted-average exercise price	$ 16.98	$ 8.51	$ 10.98
Weighted-average fair value	$ 12.79	$ 5.73	$ 7.92
Exercise Price < Market Value			
Options granted	10	8	9
Weighted-average exercise price	$ 6.00	$ 3.26	$ 3.04
Weighted-average fair value	$ 15.46	$ 8.18	$ 7.86

Non-employee Stock Options

During the years ended December 31, 2003 and 2004, we recognized $44 and $4, respectively, of compensation expense in connection with the vesting of stock options granted to non-employees. During the year ended December 31, 2002, we recognized a gain of $598 in connection with the vesting of stock options granted to non-employees. The compensation expense or gain was based on each option's estimated fair value, which was calculated using the Black-Scholes option-pricing model. Because we re-value each option over the related vesting term in accordance with EITF 96-18, increases in our stock price result in increased expense while decreases in our stock price result in a gain. At December 31, 2002, our closing stock price was significantly lower than at December 31, 2001 and, therefore, we recognized a gain during 2002.

Employee Stock Purchase Plan

We maintain an employee stock purchase plan, or ESPP, for which 183 shares are reserved for issuance. The ESPP allows any eligible employee the opportunity to purchase shares of our common stock through payroll deductions. The ESPP provides for successive, two-year offering periods, each of which contains four semiannual purchase periods. The purchase price at the end of each purchase period is 85% of the lower of the market price per share on the employee's entry date into the offering period or the market price per share on the purchase date.

Notes to Financial Statements (continued)

(in thousands, except per share amounts)

Any employee who owns less than 5% of our common stock may purchase up to the lesser of:

- 10% of his or her eligible compensation;
- 10 share per purchase; or
- the number of shares per year that does not exceed the quotient of $25 divided by the market price per share on the employee's entry date into the offering period.

A total of 19 shares of common stock remained available for issuance under the ESPP as of December 31, 2004. The total purchases of common stock under the ESPP during the years ended December 31, 2002, 2003, and 2004, were 32 shares at a total purchase price of $384, 26 shares at a total purchase price of $196, and 24 shares at a total purchase price of $175, respectively. We have not recorded any compensation expense for the ESPP. In connection with the employee stock purchases occurring in 2003, we reissued 6 shares of treasury stock, which were originally acquired in 2001 for $175. Effective January 31, 2005, we terminated the ESPP.

Restricted Stock Units

In March 2005, we concluded that the 2004 bonus award to our Chief Executive Officer would be paid solely in restricted stock units (RSUs) instead of cash, and that 2004 bonus awards to other officers would be payable 50% in cash and 50% in RSUs. The liability associated with the cash portion of the bonus was $441 and was included in accrued compensation at December 31, 2004 on our balance sheet. The number of RSUs granted was determined by dividing the dollar amount of the bonus to be paid in the form of RSUs by the fair market value of our common stock on the date of grant. Except for two officers that retired, the RSUs will not vest until the first anniversary of the grant, and will not be distributed until 18 months from grant, subject to the occurrence of certain events. The amount of the RSU portion of the bonus for the retired officers was $67, which we charged to general and administrative expenses on our statement of operations in 2004 because the RSUs were immediately vested. The amount of the RSU portion of the bonus for other officers was $588, which we are charging to operating expenses on our statements of operations on a straight-line basis over the 26-month period from January 2004 to the vesting date of the RSUs (March 2006). As a result, at December 31, 2004 our accrued compensation included $339 related to the RSUs. The liability classification of the award continued until the grant date, at which time the liability for the award as of that date became equity classified.

401(k) Savings Plan

We maintain a 401(k) Savings Plan for our employees. Employee contributions are voluntary, determined on an individual basis, and limited to the maximum amount allowable under federal income tax regulations. We match employee contributions up to specified limits. We contributed $176, $216, and $181 to the 401(k) Savings Plan for the years ended December 31, 2002, 2003, and 2004, respectively. In addition, during 2004, we allocated $79 of prior year plan forfeitures to match employee contributions to the 401(k) Savings Plan.

Note 11. Collaborative Agreements and Significant Customer Concentration

Our revenues from collaborative agreements have historically been derived from a few major collaborators. Our collaborative agreements have had some or all of the following elements: upfront fees, research and development funding, milestone revenues, and royalties on product sales.

In November 2003, we entered into two research, development and license agreements with Novo Nordisk A/S to use our GlycoPEGylation technology to develop three next-generation proteins within Novo Nordisk's therapeutic areas, one of which is currently marketed by them. Under the terms of the agreements, we received a non-refundable, upfront fee of $4,300, which is being amortized to revenue over the expected performance period. In November 2004, we amended our agreements with Novo Nordisk to provide an amended work plan for one of the proteins, a method of applying some of the project-related funds to tasks that are mutually agreed upon by the parties, a change in the timing of one milestone payment, and the addition of a new milestone payment. We also received from Novo Nordisk a payment, which is being amortized to revenue over the expected remaining performance period. As a result of entering into the amendments in November 2004, we changed our estimate of the expected performance period from five years to six years. During the years ended December 31, 2003 and 2004, we amortized

$108 and $842, respectively, of payments from Novo Nordisk to revenue. We may also receive up to $51,450 in milestone payments based on the progress of the programs. Novo Nordisk is responsible for funding our research and development activities under the agreements, and we will receive royalties on sales of any products commercialized under the agreements. In addition, we could receive additional milestones and royalties on new indications for the two proteins not currently marketed by Novo Nordisk.

The agreements provide for us to invoice Novo Nordisk before the beginning of each calendar quarter for the budgeted amount of our anticipated research and development activities during the quarter. Following the end of each quarter, we provide a statement to Novo Nordisk of the actual costs of our research and development activities for the quarter, and we arrange with Novo Nordisk to have any difference either paid by one party to the other or reflected as an adjustment on the next scheduled invoice. As of December 31, 2004, our accounts receivable and current portion of deferred revenue each included $702 of budgeted costs relating to research and development activities we expect to complete during the first quarter of 2005.

In April 2004, we entered into an agreement with BioGeneriX AG, a company of the ratiopharm Group, to use our proprietary GlycoPEGylation technology to develop a long-acting, next-generation version of granulocyte colony stimulating factor (G-CSF). In connection with the agreement, we received from BioGeneriX a non-refundable, upfront fee, which is being amortized to revenue over the expected performance period of 18 years. Under the agreement, we and BioGeneriX will pursue development and commercialization of a next-generation G-CSF. The parties will share equally preclinical expenses. Because we do not know which party will incur greater preclinical expenses during any given quarter, we cannot estimate whether BioGeneriX will be reimbursing us or whether we will be reimbursing BioGeneriX during each quarter of the preclinical phase. BioGeneriX will fund the entire clinical development program. If we and BioGeneriX proceed to commercialization, we will have commercial rights in the U.S., Canada, Mexico and Japan. BioGeneriX will have commercial rights in Europe and the rest of the world. Each company will receive royalties on product sales in the other company's territory.

During the years ended December 31, 2003 and 2004, one customer accounted for 48% and 66%, respectively, of total revenues. Another customer accounted for 34% of our revenues during 2004. A third customer accounted for 29% of our revenues in 2003. A fourth customer accounted for 93% and 17% of total revenues during the years ended December 31, 2002 and 2003, respectively.

Note 12. Other Income

In 2000, we invested $563 in an 8% convertible subordinated debenture, which included a warrant to purchase shares of common stock, issued by Novazyme Pharmaceuticals, Inc. The investment was charged to research and development expense on our statement of operations for 2000 due to uncertainty regarding realizability. In 2001, Novazyme committed to pay us $1,653 in 2002 in exchange for restructuring our agreement. In accordance with Statement of Financial Accounting Standards No. 115, "Accounting for Certain Investments in Debt and Equity Securities," we did not record the $1,653 due to uncertainty regarding the fair value of the note, thereby reducing our cost basis to zero. Later in 2001, Genzyme General acquired Novazyme and assumed Novazyme's obligation to pay us $1,653. We exercised our warrant to purchase shares of Novazyme, converted our debenture into shares of Novazyme, and exchanged our shares of Novazyme for shares of Genzyme. In 2001, we realized a gain on the sale of Genzyme shares of $6,120, which was reflected as other income on our statement of operations. In 2002, Genzyme paid us $1,653, which resulted in the recognition of a gain that was reflected as other income on our statements of operations.

Note 13. Impairment of Equity Securities

In 2000, we made an investment of $1,250 in Series A convertible preferred stock of Neuronyx, Inc. We recorded the equity investment at cost. In 2003, Neuronyx informed us that they were nearing completion of an equity financing, under which new and other existing Neuronyx investors would have an aggregate liquidation preference senior to the Series A liquidation preference and in excess of the assumed post-money valuation of Neuronyx. As a result, we reduced the carrying value of our equity investment to zero in 2003 by recording a non-cash charge, which is reflected as an impairment of equity securities on our statements of operations.

Notes to Financial Statements (continued)

(in thousands, except per share amounts)

Note 14. Commitments and Contingencies

Leases

Our future minimum lease payments as of December 31, 2004 under capital leases and under non-cancelable operating leases, with initial or remaining lease terms in excess of one year, were as follows:

	Capital Leases	Operating Leases
2005	$ 312	$ 948
2006	182	698
2007	61	508
2008	57	454
2009	8	463
Thereafter	–	6,684
Total minimum lease payments	620	$ 9,755
Less amounts representing imputed interest	(65)	
Present value of minimum lease payments	555	
Less current portion of capital lease obligations	(275)	
Capital lease obligations, excluding current portion	$ 280	

Capital Lease Obligations

In February 2004, we entered into a capital lease obligation for equipment with a book value of $184, which was calculated using an assumed incremental annual borrowing rate of 8.66%. The terms of the lease require us to make monthly payments through February 2009. This equipment had an aggregate net book value of $154 as of December 31, 2004.

In September 2003, we entered into a capital lease obligation for equipment with a book value of $354, which was calculated using an assumed incremental annual borrowing rate of 7.96%. The terms of the lease required us to make an initial payment of $90 followed by monthly payments through September 2006. This equipment had an aggregate net book value of $207 as of December 31, 2004. We also entered into a capital lease obligation during September 2003 for software with a fair value of $60. The terms of the lease require us to make monthly payments through September 2008. As of December 31, 2004, this software had a net book value of $45.

During the quarter ended June 30, 2003, we entered into various capital lease obligations for equipment and software with an aggregate book value of $373, which was calculated using an assumed incremental annual borrowing rate of 8.35%. We are required to make monthly payments on each lease. The leases have expiration dates ranging from April 2006 to June 2006. As of December 31, 2004, the aggregate net book value of the assets under these leases was $172.

In November 2002, we entered into a capital lease obligation for computer equipment that had a book value of $50. The lease has an imputed interest rate of 6.2%. We are required to make monthly payments over a three-year period ending November 2005. As of December 31, 2004, this equipment had an aggregate net book value of $16.

Operating Leases

We lease laboratory, office, warehouse facilities, and equipment under operating lease agreements. In April 2001, we entered into a lease agreement for approximately 10,000 square feet of laboratory and office space in California. The initial term of the lease ends in March 2006, at which time we have an option to extend the lease for an additional five years. We lease approximately 5,000 square feet of office and warehouse space in Pennsylvania under a lease agreement that expires April 2007. In February 2002, we entered into a lease agreement for approximately 40,000 square feet of laboratory and office space in Pennsylvania. The initial term of the lease ends in July 2022, at which time we have an option to extend the lease for an additional five years,

followed by another option to extend the lease for an additional four and one-half years. Pursuant to the lease, we received $250 from the landlord in September 2004 as a partial reimbursement for improvements we made to the facility (see Note 5 for a description of these improvements). This landlord incentive, which is included in other liabilities on our balance sheet, is being amortized ratably as a reduction to rental expense over the lease term. Our laboratory, office, and warehouse facility leases contain escalation clauses, under which the base rent increases annually by 2-4%. Our rental expense for the years ended December 31, 2002, 2003, and 2004 was $583, $923, and $981, respectively.

Purchase Obligations

As of December 31, 2004, we had non-cancelable purchase obligations for 2005 in the amount of $839, which all relate to goods or services. Our non-cancelable purchase obligations for 2006, 2007, 2008 and 2009 are $191, $40, $8, and $4, respectively.

Agreements with Employees

We have employment agreements with our chief executive officer, C. Boyd Clarke, and our executive vice president, pharmaceutical development and operations, Joseph J. Villafranca. Under the terms of the agreements, we are required to pay Mr. Clarke an annual base salary of at least $405, and Dr. Villafranca an annual base salary of at least $273, for continuing their employment with Neose.

Separation and Retirement Agreements

In September 2004, we entered into a separation agreement with our Chief Financial Officer in connection with his retirement in January 2005. Under the agreement, we are required to pay him $11 per month (or one-half of his monthly base salary) and provide medical benefits over a 12-month period commencing on his retirement date. We also committed to pay any bonus earned by him for 2004, as determined using the same criteria as if he were employed as of the time of payment. We estimate the present value of these benefits as of the anticipated retirement date will be approximately $244, of which $226 was accrued as of December 31, 2004. In addition, we extended for twelve months the period during which he may exercise his stock options that were vested and outstanding as of his retirement date. Because the stock options had no intrinsic value as of the modification date, there was no charge associated with the option modification.

In 2002, we entered into a retirement agreement with our Vice President, Research. Under the agreement, we committed to pay a retirement benefit over a five-year period and to provide health insurance benefits through December 31, 2003. We are committed to pay $100 during each of 2005 and 2006 under this agreement. During 2002, we recorded severance expense related to this agreement of $516, which represented the present value of his future retirement benefit and is included in research and development expense on our statements of operations. In addition, we extended the period during which he may exercise his stock options and recorded a non-cash severance charge associated with this option modification of $1,608, which is also included in research and development expense in 2002 on our statements of operations.

Note 15. Income Taxes

We had no income taxes payable as of December 31, 2003 and 2004. As of December 31, 2004, we had $61,488 of federal and $58,949 of state net operating loss (NOL) carryforwards potentially available to offset future taxable income. As of December 31, 2004, our federal NOL carryforward includes $8,993 related to equity-based compensation, which will be recorded as additional paid-in capital upon recognition of the tax benefit associated with these deductions. As of December 31, 2004, we had federal and state research and development tax credit carryforwards of $5,493 and $323, respectively, potentially available to offset future taxable income.

The Tax Reform Act of 1986 (the Act) provided for a limitation on the annual use of NOL and research and development tax credit carryforwards following certain ownership changes. Because we may have experienced various ownership changes, as defined by the Act, as a result of past equity financings, our ability to utilize federal NOL carryforwards in any given year may be limited. In addition, federal tax law limits the time during which carryforwards may be applied against future taxes, and Pennsylvania tax law limits the utilization of state NOL carryforwards to $2,000 annually. Therefore, we may not be able to take full advantage of these carryforwards to offset future taxable income.

Notes to Financial Statements (continued)

(in thousands, except per share amounts)

The federal and state NOL and tax credit carryforwards will expire as follows:

	Net Operating Loss Carryforwards		Research and Development Tax Credit Carryforwards	
	Federal	State	Federal	State
2005	$ 360	$ 110	$ 15	$ –
2006	1,086	150	46	–
2007	2,147	777	41	–
2008	638	–	146	–
2009	385	–	207	–
Thereafter	56,872	57,912	5,038	323
	$ 61,488	$ 58,949	$ 5,493	$ 323

We have incurred a loss in each period since our inception. Due to the uncertainty surrounding the realization of the tax benefit associated with our federal and state carryforwards, we have provided a full valuation allowance against these tax benefits. The approximate income tax effect of each type of carryforward and temporary difference is as follows:

	Current	Noncurrent	Total
December 31, 2004			
Net operating loss carryforwards	$ –	$ 24,773	$ 24,773
Research and development tax credit carryforwards	–	5,816	5,816
Capitalized research and development expenses	–	33,863	33,863
Capitalized start-up costs	–	10,213	10,213
Depreciation and amortization	–	3,932	3,932
Deferred revenue	349	1,462	1,811
Deferred compensation	–	1,406	1,406
Impairment of equity securities	–	647	647
Accrued expenses not currently deductible	225	–	225
Total deferred tax assets	574	82,112	82,686
Less valuation allowance	(574)	(82,112)	(82,686)
Net deferred tax assets	$ –	$ –	$ –
December 31, 2003			
Net operating loss carryforwards	$ –	$ 12,230	$ 12,230
Research and development tax credit carryforwards	–	4,236	4,236
Capitalized research and development expenses	–	22,063	22,063
Capitalized start-up costs	–	13,617	13,617
Depreciation and amortization	–	5,789	5,789
Deferred revenue	349	1,353	1,702
Impairment of equity securities	–	507	507
Accrued expenses not currently deductible	357	–	357
Total deferred tax assets	706	59,795	60,501
Less valuation allowance	(706)	(59,795)	(60,501)
Net deferred tax assets	$ –	$ –	$ –

Note 16. Related-party Transaction

We have a joint venture with McNeil Nutritionals to develop bulking agents for use in the food industry. We account for our investment in the joint venture under the equity method, under which we recognize our share of the income and losses of the joint venture. For the year ended December 31, 2004, the joint venture had a net loss and a loss from continuing operations of $26. Because we previously reduced the carrying value of our initial investment of $345 in the joint venture to zero, we will record our share of the losses of the joint venture only to the extent of our future actual or committed investment in the joint venture. We do not intend to commit the joint venture to make any further investments.

As of December 31, 2004, the joint venture had no assets, $150 of current liabilities, and $8,606 of noncurrent liabilities, which consisted of amounts owed to McNeil Nutritionals. The joint venture had no revenues during 2004. During the years ended December 31, 2002, 2003, and 2004, we incurred expenses related to the joint venture of $252, $21, and $22, respectively, which were reimbursed to us by the joint venture. These amounts have been reflected as a reduction of research and development expense on our statements of operations. As of December 31, 2004, the joint venture owed us $6.

If the joint venture becomes profitable, we will recognize our share of the joint venture's profits only after the amount of our capital contributions to the joint venture is equivalent to our share of the joint venture's accumulated losses. As of December 31, 2004, the joint venture had an accumulated loss since inception of $10,251. Until the joint venture is profitable, McNeil Nutritionals is required to fund, as a non-recourse, no-interest loan to the joint venture, all of the joint venture's aggregate capital expenditures in excess of an agreed-upon amount, and all of the joint venture's operating losses. The loan balance would be repayable by the joint venture to McNeil Nutritionals over a seven-year period commencing on the earlier of September 30, 2006 or the date on which Neose attains a 50% ownership interest in the joint venture after having had a lesser ownership interest. In the event of any dissolution of the joint venture, the loan balance would be payable to McNeil Nutritionals by the joint venture before any distribution of assets to us.

Notes to Financial Statements (continued)

(in thousands, except per share amounts)

Note 17. Quarterly Data (unaudited)

The following tables summarize our quarterly results of operations for each of the quarters in 2004 and 2003. These quarterly results are unaudited, but in the opinion of management have been prepared on the same basis as our audited financial information and include all adjustments (consisting only of normal recurring adjustments) necessary for a fair presentation of our results of operations.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full Year
2004 Results					
Revenue from collaborative agreements	$ 1,250	$ 891	$ 1,451	$ 1,478	$ 5,070
Operating expenses	10,740	11,112	12,166	12,365	46,383
Operating loss	(9,490)	(10,221)	(10,715)	(10,887)	(41,313)
Interest expense, net	(13)	(105)	(109)	(102)	(329)
Net loss	$ (9,503)	$ (10,326)	$ (10,824)	$ (10,989)	$ (41,642)
Basic and diluted net loss per share	$ (0.48)	$ (0.47)	$ (0.44)	$ (0.44)	$ (1.82)*
Weighted-average shares outstanding used in computing basic and diluted net loss per share	19,943	22,146	24,712	24,717	22,898
2003 Results					
Revenue from collaborative agreements	$ 70	$ 651	$ 150	$ 564	$ 1,435
Operating expenses	8,624	9,861	9,203	10,281	37,969
Operating loss	(8,554)	(9,210)	(9,053)	(9,717)	(36,534)
Impairment of equity securities	–	–	(1,250)	–	(1,250)
Interest income (expense), net	133	(16)	(35)	21	103
Net loss	$ (8,421)	$ (9,226)	$ (10,338)	$ (9,696)	$ (37,681)
Basic and diluted net loss per share	$ (0.53)	$ (0.54)	$ (0.59)	$ (0.49)	$ (2.14)*
Weighted-average shares outstanding used in computing basic and diluted net loss per share	15,801	17,229	17,437	19,935	17,611

** The loss per share in each quarter is computed using the weighted-average number of shares outstanding during the quarter. The loss per share for the full year, however, is computed using the weighted-average number of shares outstanding during the year. Thus, the sum of the quarterly loss per share amounts does not equal the full-year loss per share.*

Corporate Information

Market for Common Stock

Our common stock is listed on the Nasdaq National Market System under the symbol NTEC. We commenced trading on the Nasdaq National Market on February 15, 1996.

As of March 14, 2004, there were approximately 200 holders of record and 3,900 beneficial holders of our common stock. We have never declared or paid any cash dividends on our common stock. We intend to retain any future earnings to fund the development and growth of our business. Therefore, we do not anticipate paying any cash dividends in the foreseeable future. The following table sets forth the high and low closing sale prices of our common stock for the periods indicated.

Common Stock Price

Year Ended December 31, 2003	High	Low
First Quarter	$ 9.31	$ 6.03
Second Quarter	12.64	6.88
Third Quarter	11.06	8.50
Fourth Quarter	9.83	7.20

Year Ended December 31, 2004	High	Low
First Quarter	$ 13.80	$ 8.73
Second Quarter	10.62	6.50
Third Quarter	8.78	6.45
Fourth Quarter	8.19	6.10

Corporate Information (continued)

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Corporate Web Site
www.neose.com

Annual Meeting
The annual meeting of shareholders will be held at 9:00 a.m. on Tuesday, May 3, 2005 at our corporate headquarters.

External Legal Counsel
Pepper Hamilton LLP
Philadelphia, PA

Independent Registered Public Accounting Firm
KPMG LLP
Philadelphia, PA

SEC Form 10-K and Investor Relations Information
You may obtain general information about us, including our Annual Report on Form 10-K, by contacting:

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info@neose.com

Transfer Agent and Registrar
American Stock Transfer
and Trust Company
40 Wall Street
New York, NY 10005
212-936-5100 Phone

The transfer agent is responsible for handling shareholder questions regarding lost stock certificates, address changes and changes of ownership or name in which shares are held.

Corporate Information

Senior Management

C. Boyd Clarke
President, Chief Executive Officer and Chairman

George J. Vergis, Ph.D.
Executive Vice President, Commercial and Clinical Development

Joseph J. Villafranca, Ph.D.
Executive Vice President, Pharmaceutical Development and Operations

David A. Zopf, M.D.
Executive Vice President and Chief Scientific Officer

A. Brian Davis
Senior Vice President and Chief Financial Officer

Debra J. Poul
Senior Vice President, General Counsel and Secretary

Board of Directors

C. Boyd Clarke
Chairman of the Board, President and Chief Executive Officer, Neose Technologies, Inc.

Brian H. Dovey
Managing Member, Domain Associates, L.L.C.

L. Patrick Gage, Ph.D.
Former President, Wyeth Research

William F. Hamilton, Ph.D.
The Wharton School, University of Pennsylvania

Douglas J. MacMaster, Jr.
Former Senior Vice President, Merck & Co., Inc.

Mark H. Rachesky, M.D.
President, MHR Fund Management LLC

Stephen A. Roth, Ph.D.
President and CEO, Immune Control, Inc.

Lowell E. Sears
Chairman and CEO, Sears Capital Management

Elizabeth H.S. Wyatt
Former Vice President, Corporate Licensing, Merck & Co., Inc.

Scientific Advisors

Henrik Clausen, D.D.S., D.Sc.
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David James, Ph.D.
Associate Professor of Bioengineering, Department of Chemical Engineering University of Queensland

James C. Paulson, Ph.D.
Professor of Molecular Biology, Scripps Research Institute

Harry Schachter, M.D., Ph.D., FRSC
Emeritus Scientist, Hospital for Sick Children, University of Toronto

Pamela Stanley, Ph.D.
Professor of Cell Biology, Albert Einstein College of Medicine

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