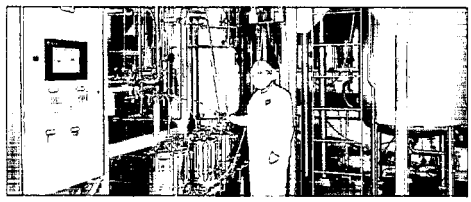
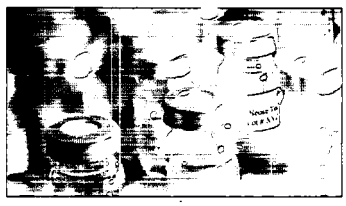
NEOSE





: A NEW GENERATION OF PROTEINS

NEOSE TECHNOLOGIES, INC.
ANNUAL REPORT 2002

IN 2002 WE BEGAN THE TRANSITION FROM A PLATFORM TECHNOLOGY COMPANY TO A PRODUCT DEVELOPMENT COMPANY. USING OUR GLYCOADVANCE™ AND GLYCOPEGYLATION™ TECHNOLOGIES, WE ARE DEVELOPING IMPROVED VERSIONS OF CURRENTLY MARKETED DRUGS. WE EXPECT THESE NEXT GENERATION THERAPEUTIC PROTEINS TO OFFER ADVANTAGES OVER CURRENTLY AVAILABLE DRUGS. ADVANTAGES OBTAINED MAY INCLUDE LESS FREQUENT DOSING AND INCREASED SAFETY AND EFFICACY. BY FOCUSING ON THE DEVELOPMENT OR CO-DEVELOPMENT OF PROPRIETARY THERAPEUTIC PROTEINS, WE ARE TAKING GREATER CONTROL OVER THE PATH AND TIMING OF OUR DRUG DEVELOPMENT EFFORTS.

WE MADE SIGNIFICANT PROGRESS IN 2002, AND WE EXPECT TO BUILD ON THAT MOMENTUM IN 2003.

CERTAIN STATEMENTS IN THIS ANNUAL REPORT CONSIST OF FORWARD-LOOKING STATEMENTS THAT INVOLVE RISKS AND UNCERTAINTIES. FOR A DISCUSSION OF THESE RISKS AND UNCERTAINTIES, ANY OF WHICH 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 THE COMPANY'S PROSPECTS" IN OUR ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2002.

2002 COMPANY HIGHLIGHTS

PEOPLE

- C. BOYD CLARKE APPOINTED PRESIDENT AND CHIEF EXECUTIVE OFFICER IN MARCH 2002
- ROBERT I. KRIEBEL, FORMER EXECUTIVE VICE PRESIDENT, CHIEF FINANCIAL OFFICER AND DIRECTOR AT U.S. BIOSCIENCE, INC., JOINED AS SENIOR VICE PRESIDENT AND CHIEF FINANCIAL OFFICER
- JOSEPH J. VILLAFRANCA, PH.D., FORMER VICE PRESIDENT OF BIOLOGICS STRATEGY AND BIOPHARMACEUTICALS OPERATIONS AT BRISTOL-MYERS, JOINED AS SENIOR VICE PRESIDENT OF PHARMACEUTICAL DEVELOPMENT AND OPERATIONS
- CHESTER A. MEYERS, PH.D., FORMER DIRECTOR, MOLECULAR REDESIGN, MACROMOLECULAR STRUCTURE AT BRISTOL-MYERS, JOINED AS VICE PRESIDENT OF PHARMACEUTICAL DEVELOPMENT
- ELIZABETH H.S. WYATT, FORMER VICE PRESIDENT OF BUSINESS LICENSING AT MERCK & CO., JOINED BOARD OF DIRECTORS
- L. PATRICK GAGE, PH.D., FORMER PRESIDENT OF WYETH RESEARCH, JOINED BOARD OF DIRECTORS

PROPRIETARY PRODUCTS

- INITIATED PROPRIETARY DRUG DEVELOPMENT PROGRAM FOCUSING ON NEXT GENERATION VERSIONS OF CURRENTLY MARKETED PROTEINS WITH PROVEN SAFETY AND EFFICACY
- IDENTIFIED AN IMPROVED ERYTHROPOIETIN (EPO) AS OUR FIRST PROPRIETARY DEVELOPMENT CANDIDATE IN JANUARY 2003

COLLABORATIONS

- INITIATED RESEARCH AND DEVELOPMENT COLLABORATION WITH NOVO NORDISK, A/S FOR USE OF GLYCOADVANCE TECHNOLOGY
- INITIATED SECOND RESEARCH AND DEVELOPMENT COLLABORATION WITH NOVO NORDISK, A/S FOR USE OF GLYCOPEGYLATION TECHNOLOGY
- INITIATED RESEARCH AND DEVELOPMENT AGREEMENT WITH MONSANTO PROTEIN TECHNOLOGIES TO IMPROVE GLYCOSYLATION OF MONOCLONAL ANTIBODIES PRODUCED IN TRANSGENIC PLANTS

FACILITIES

- COMPLETED $17.4 MILLION PILOT MANUFACTURING FACILITY FOR PRODUCTION OF PROCESS REAGENTS TO SUPPORT GLYCOADVANCE AND GLYCOPEGYLATION TECHNOLOGIES, AS WELL AS TO SUPPORT THE MANUFACTURE OF MODIFIED FORMS OF GLYCOPROTEIN DRUGS FOR USE IN CLINICAL TRIALS

FOCUS TO THE DEVELOPME

PROPRIETARY PRODUCTS

PORTFO

PROPRIETARY NEXT GENERATION PROTEINS

LETTER TO STOCKHOLDERS

THE LAST YEAR HAS BEEN A YEAR OF EXTRAORDINARY CHANGE AT NEOSE, EVEN WHILE WE CONTINUE ON THE COURSE OF USING OUR PROPRIETARY TECHNOLOGIES, GLYCOADVANCE, GLYCOPEGYLATION, AND GLYCOCONJUGATION, TO BUILD SHAREHOLDER VALUE. WE DEVELOPED A COMPREHENSIVE STRATEGIC PLAN, SHIFTED FOCUS TO THE DEVELOPMENT OF PROPRIETARY PRODUCTS, ENHANCED OUR FACILITIES, AND REDIRECTED OUR BUSINESS DEVELOPMENT STRATEGY. WE ALSO REEXAMINED AND IMPROVED OUR GOVERNANCE. LET ME REVIEW EACH IN TURN.

When I came to Neose in April of 2002, I believed that the core technology of the Company had enormous potential value, if only it could be released by focusing on the best opportunities. In the first few months after I arrived, we completed a full strategic review of our programs and the opportunities for our technologies. We saw the most value for our shareholders in assembling a portfolio of proprietary next generation proteins that would incorporate our GlycoAdvance, GlycoPEGylation, and GlycoConjugation technologies. We identified potential candidates for development, and generated encouraging, though preliminary, data.

In January of 2003, we announced that the first target of our development initiative would be an improved erythropoietin, a broadly-used drug for anemia associated with chemotherapy and renal disorders. The emerging pre-clinical profile of our next generation erythropoietin suggests it could represent a substantial improvement over existing marketed formulations of this and competitive drugs. We continue to explore other next generation protein candidates, to develop alone or in partnership with others, as we seek to build a portfolio of product candidates.

In addition, 2002 was an important year in terms of the development of a manufacturing platform to sustain both our proprietary drug strategy and our partnership activities. We completed construction of our $17 million pilot plant for cGMP production of enzymes and reagents necessary for application of our technology to proteins. This plant is also designed to support the manufacture of modified forms of glycoprotein drugs for use in clinical trials.

As we entered the year, we had one significant corporate partnership with Wyeth, involving the application of our GlycoAdvance technology to one of their proteins. Unfortunately, our agreement with Wyeth was terminated in 2002, when they decided not to pursue development of the protein after disappointing Phase II results (this decision was unrelated to the use of GlycoAdvance, which had not yet been incorporated into their clinical material). As our business development strategy evolved, we focused on establishing new research collaborations designed, in the first instance, to demonstrate the value of our technology. We signed three agreements in the fourth quarter (two with Novo Nordisk A/S, involving GlycoAdvance in one and GlycoPEGylation in the other for one of their marketed proteins, and one with Monsanto Protein Technologies to explore the utility of GlycoAdvance in producing more desirable glycosylation patterns for corn-expressed monoclonal antibodies). Our objective is to establish the value of our technology in a research phase, and then negotiate a more comprehensive collaboration that recognizes this value.

For many of us, 2002 will always be remembered in the context of the dispiriting corporate scandals that bedeviled our capital markets. Good corporate governance has always been important, but never more than now. In the last year, we adopted Corporate Governance Principles (they are reprinted on page 42) and a new Code of Business Conduct and Ethics. We have continued to recruit both board members and officers who can sustain our intention both to do the right things and to do things right. In the last year, we welcomed Dr. L. Patrick Gage and Elizabeth H.S. Wyatt to the board of directors. In addition, we have recommended to the shareholders the election of Brian Dovey at our upcoming annual meeting. Each of these individuals has extensive experience in the pharmaceutical-biotechnology industry. New officers include Robert Kriebel, senior vice president and chief financial officer, Joseph Villafranca, senior vice president of pharmaceutical development and operations, and Chester Meyers, vice president of pharmaceutical development, all of whom also bring to us extensive experience in our industry. We have also promoted others, such as Debra Poul, senior vice president and general counsel, George Vergis, senior vice president of business and commercial development, Marjorie Hurley, vice president of regulatory affairs and project management, Brian Davis, vice president of finance, and Wendy Nagy, vice president and associate general counsel. The strength of our management team has been substantially improved, which will better enable us to focus on the development of our own proprietary molecules.

On a personal note, I want to extend my gratitude and that of the Company to Sherrill Neff, who is leaving our board of directors. Sherrill has served the Company in a variety of capacities – president, chief operating officer, chief financial officer and director. His many valuable contributions to Neose include the acquisition of much of the technology that forms the foundation of GlycoAdvance. We wish Sherrill well in his endeavors.

In sum, 2002 was a time of extraordinary change at Neose, but I want to stress to you that such change and the results I expect from it have only just begun. Through this next year, we expect to make continued progress on our proprietary drug program. Our second development candidate will be disclosed in the third quarter, and by the middle of 2004 all of our activities in pursuit of a next generation erythropoietin should culminate in an investigational new drug application (IND) and the beginning of clinical trials. The pace of our business development activities should expand, both in terms of improving other companies' proteins and partnering our own proprietary proteins. In addition, our organization should be stronger and more focused than ever. In this industry, clear objectives, delivered results and a strong organization working with an important proprietary technology normally lead to enhanced shareholder value. At the end of the day, we will not lose sight of the fact that we are implementing these changes to introduce new and improved drugs that will benefit patient well being and, in the process, generate the kind of investment returns you expect.

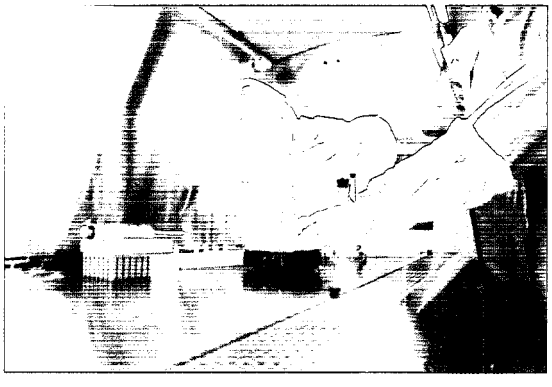
I look forward to reporting back to you on our ongoing progress.

Sincerely,

C. BOYD CLARKE
PRESIDENT AND CHIEF EXECUTIVE OFFICER

A BROAD AND RENEWABLE TECHNOLOGY

Our technologies evolve from the same core – the use of enzymes to complete and modify carbohydrate structures on glycoproteins. We have developed a unique expertise and a strong intellectual property position in this area. The technology core is broadly applicable and renewable, providing an opportunity for sustainable growth as new applications are developed.



GLYCOADVANCE

Our GlycoAdvance technology uses enzymes to complete the sugar chains on glycoproteins, and due to its flexibility, can be broadly applied to a variety of protein expression systems. In feasibility studies, our technology has repeatedly resulted in extended half-life, increased yields and improved drug consistency. GlycoAdvance technology can remodel proteins expressed in mammalian cells, fungi, bacteria, insect cells or plants.

POTENTIAL GLYCOADVANCE BENEFITS

- Improved pharmacokinetic or pharmacodynamic profile
- Improved product life cycle management
- Improved batch-to-batch consistency
- Reduced glycoprotein manufacturing costs
- Overcome glycosylation limitations of alternative expression systems

GLYCOPEGYLATION

Our GlycoPEGylation technology enables the selective addition of polyethylene glycol (PEG) to sugar chains using GlycoAdvance enzymes. GlycoPEGylation can extend and customize protein half-life by selectively linking various size PEG polymers to glycans that are remote from the protein's active site, thereby preserving efficacy. Proteins that have not benefited from traditional chemical pegylation may benefit from GlycoPEGylation.

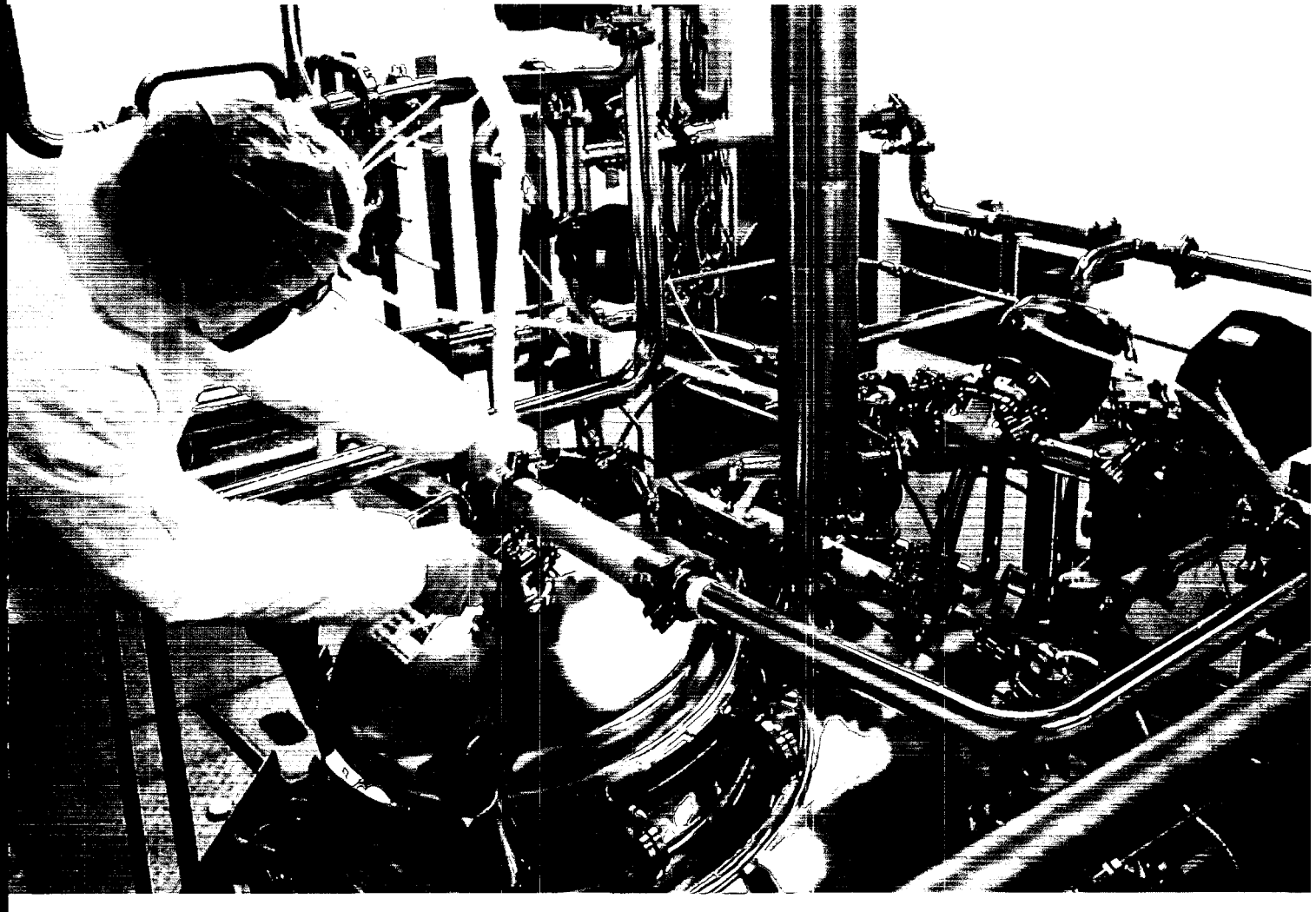
POTENTIAL GLYCOPEGYLATION BENEFITS

- Attaches PEG at a site remote from the active site, preserving activity while extending half-life
- Amount and molecular weight of PEG, as well as the number of attachment sites, can be controlled to achieve specific results
- May be successful where traditional chemical pegylation has failed
- May improve product homogeneity
- May reduce immunogenicity, antigenicity and toxicity

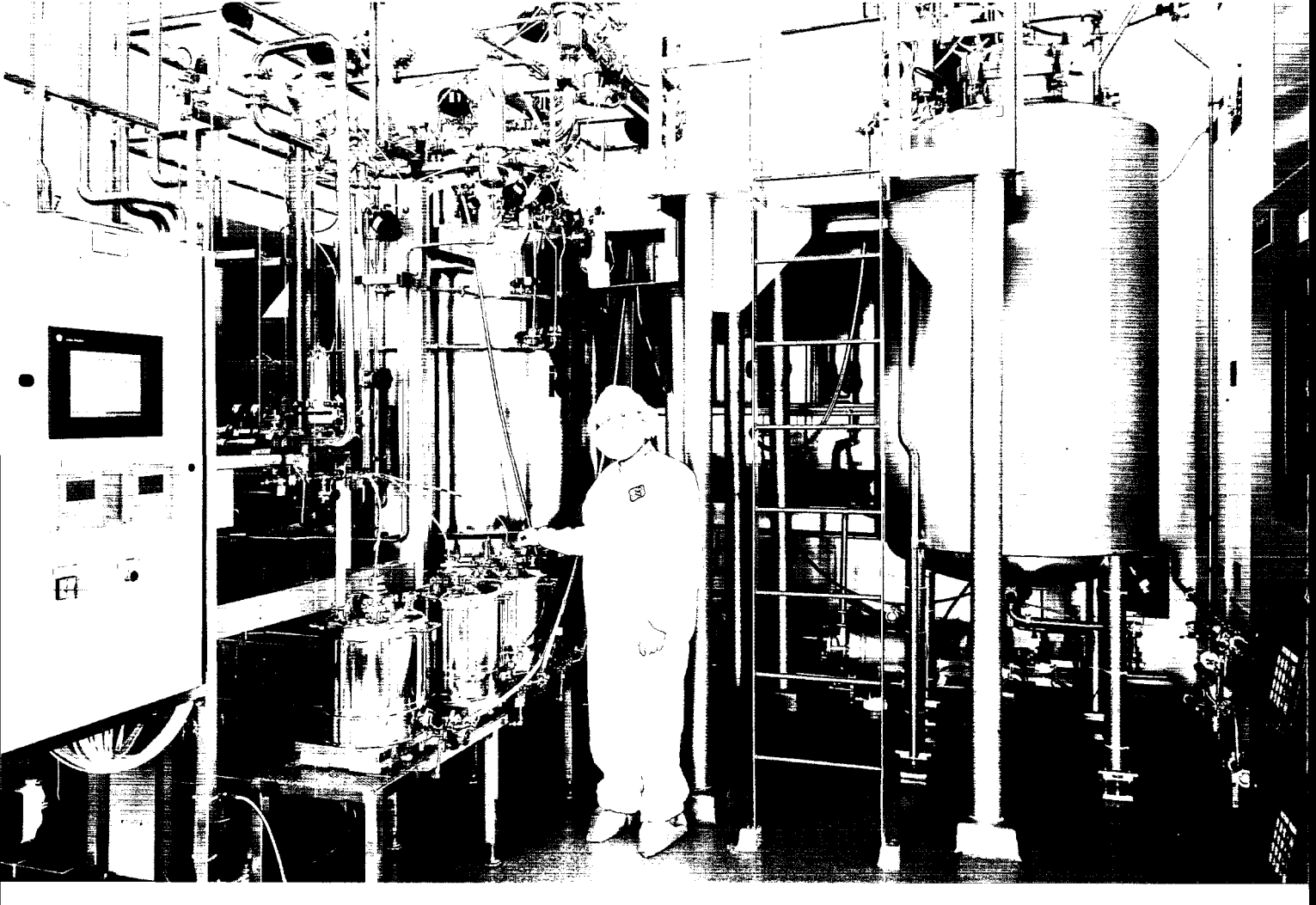
GLYCOCONJUGATION

As we look to the future, we are excited about the potential of our emerging GlycoConjugation technology. GlycoConjugation, a broader application of the approach used for GlycoPEGylation, has the potential to produce novel therapeutic antibodies and glycoproteins by attaching new bioactive or functional moieties via the glycans. For example, tissue or target specificity of antibodies and other glycoproteins may be used for site-directed delivery of glycoconjugated therapeutic agents such as cytotoxins or radionuclides in treating patients with cancer. These and other opportunities for the technology will be explored over the next year.

OUR TECHNOLOGY CAN BE USED IN MULTIPLE WAYS TO IMPROVE PROTEIN DRUGS



PROTEIN DRUGS ARE THE FASTEST GROWING SECTOR OF THE PHARMACEUTICAL INDUSTRY



PARTICIPATING IN THE PROTEIN OPPORTUNITY

The market for protein drugs is large and expanding rapidly. Worldwide sales of glycoprotein drugs were over $20 billion in 2001, and by some estimates will reach $80 billion by 2010. The majority of these drugs treat life-threatening or seriously debilitating conditions, such as cancer, kidney disease, multiple sclerosis and rheumatoid arthritis, each of which represents a large market. There are multiple ways in which our technologies will allow us to participate in this market opportunity.

Because we believe it offers a high-reward, lower-risk opportunity, our primary focus will be on developing improved versions of currently marketed proteins with proven safety and efficacy. As patents expire for marketed proteins, we will apply our GlycoAdvance and GlycoPEGylation technologies to develop product candidates that are intended to have longer half-life and improved safety and efficacy. In the increasingly competitive therapeutic protein market, these improvements could be important to shifting market share. We have begun the process of selecting product candidates from a group of currently marketed glycoproteins that are expected to lose patent exclusivity in certain territories over the course of the next decade and where preliminary data show that our technologies may offer a competitive advantage.

We will continue to partner with other biotechnology and pharmaceutical companies to incorporate our GlycoAdvance and GlycoPEGylation technologies into their product development and manufacturing programs. Our technologies can be incorporated at various stages of development. In early development, our technologies may offer product candidates a better chance for success. In late-stage development, we may improve manufacturing consistency and cost issues. In marketed products, our technology may provide the opportunity for life cycle management.

Finally, we are excited by the potential of our technology to enable alternative expression systems. As more and more proteins and antibodies move through clinical development, it is becoming apparent that alternative expression systems may be better suited to support the large volume demands of future products than traditional mammalian cell culture systems. Various companies are working to produce proteins and antibodies in transgenic plants and animals, insect cells, fungi, and bacteria. However, glycosylation is a challenge in these non-mammalian systems, and we believe that GlycoAdvance may play an important role in enabling these systems.

BUILDING A PIPELINE

Joe Villafranca (right), senior vice president of pharmaceutical development and operations, leads our proprietary product development program.

During the second half of 2002, we worked to identify proprietary product candidates to begin building a product pipeline. We started with a group of about 20 currently marketed proteins that will lose patent protection over the course of the next 10-15 years. We focused on products with nearer-term patent expirations where market research showed that an improved product profile could shift market share.

OUR FIRST PROPRIETARY PROTEIN – EPO

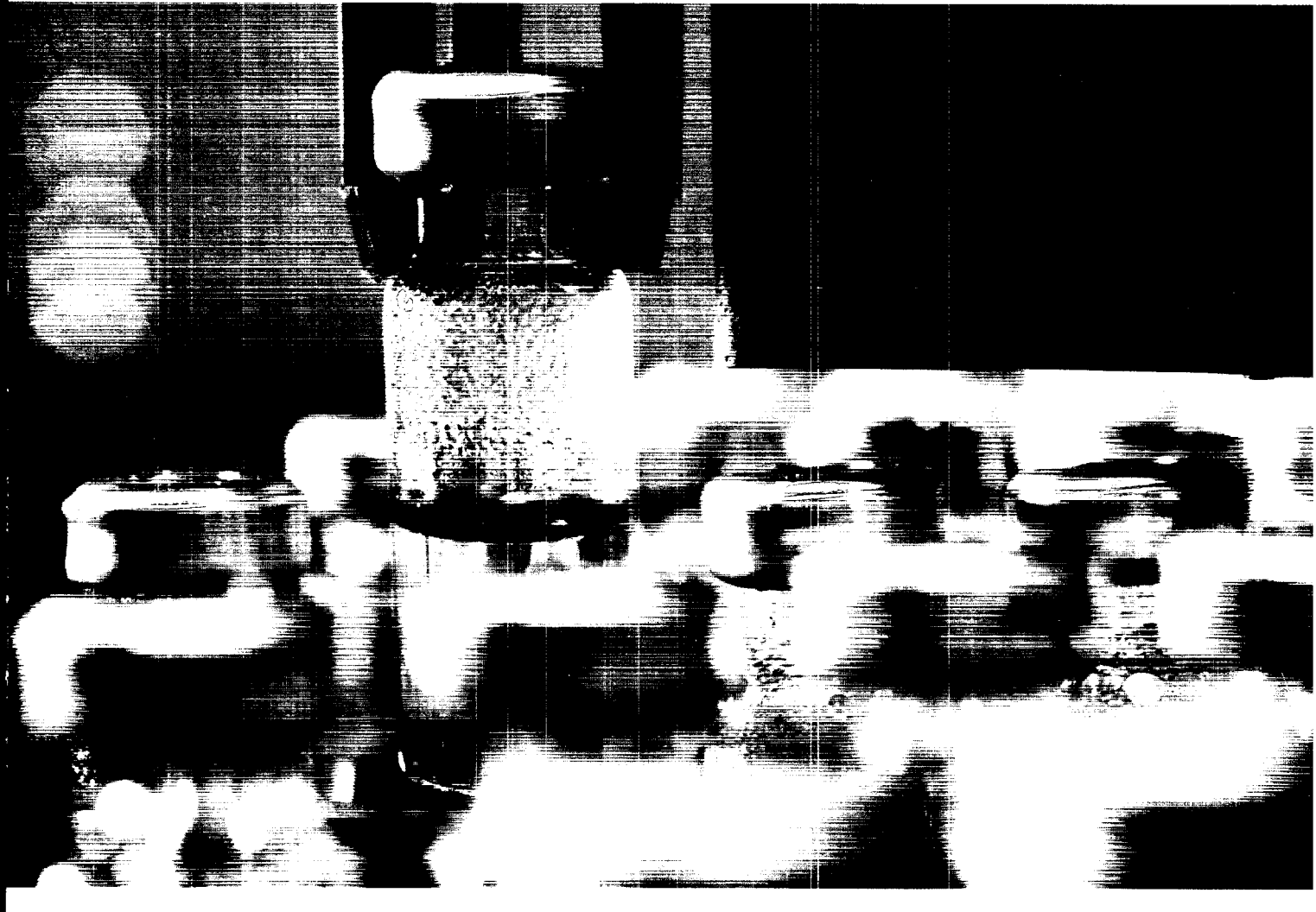
We have selected an improved erythropoietin (EPO) as our first proprietary candidate. EPO is an attractive candidate for several reasons: market size, patent expiration and need for improvement. EPO had $6.2 billion in worldwide sales in 2001, $1.7 billion of which were outside the United States, for treatment of anemia associated with cancer chemotherapy, end-stage renal disease and chronic renal insufficiency. We believe that the expiration of key patents covering EPO could provide commercial opportunities in a time frame consistent with the development timeline of a new product, and we expect to seek regulatory approval both in and outside the U.S. Key patents in Europe are expected to expire in mid-decade. The timeframe in the U.S. is less predictable, due to the complexity of the patent situation and ongoing litigation.

In 2002, we conducted various studies on GlycoPEGylated EPO, and we are excited by the results. Based on preliminary *in vitro* and *in vivo* data, we believe we can develop a GlycoPEGylated EPO that is longer-acting than currently marketed compounds. Our studies have indicated that the pharmacokinetic profile can be customized by manipulating the number of GlycoPEGylation sites and the molecular weight of PEG added. In the *in vitro* and *in vivo* studies completed to date, activity of the compound has been retained. We are planning to conduct various preclinical activities during 2003 and the first half of 2004, with the goal of initiating clinical trials in the second half of 2004. We plan to submit data from these trials to the appropriate government agencies for regulatory and marketing approval.

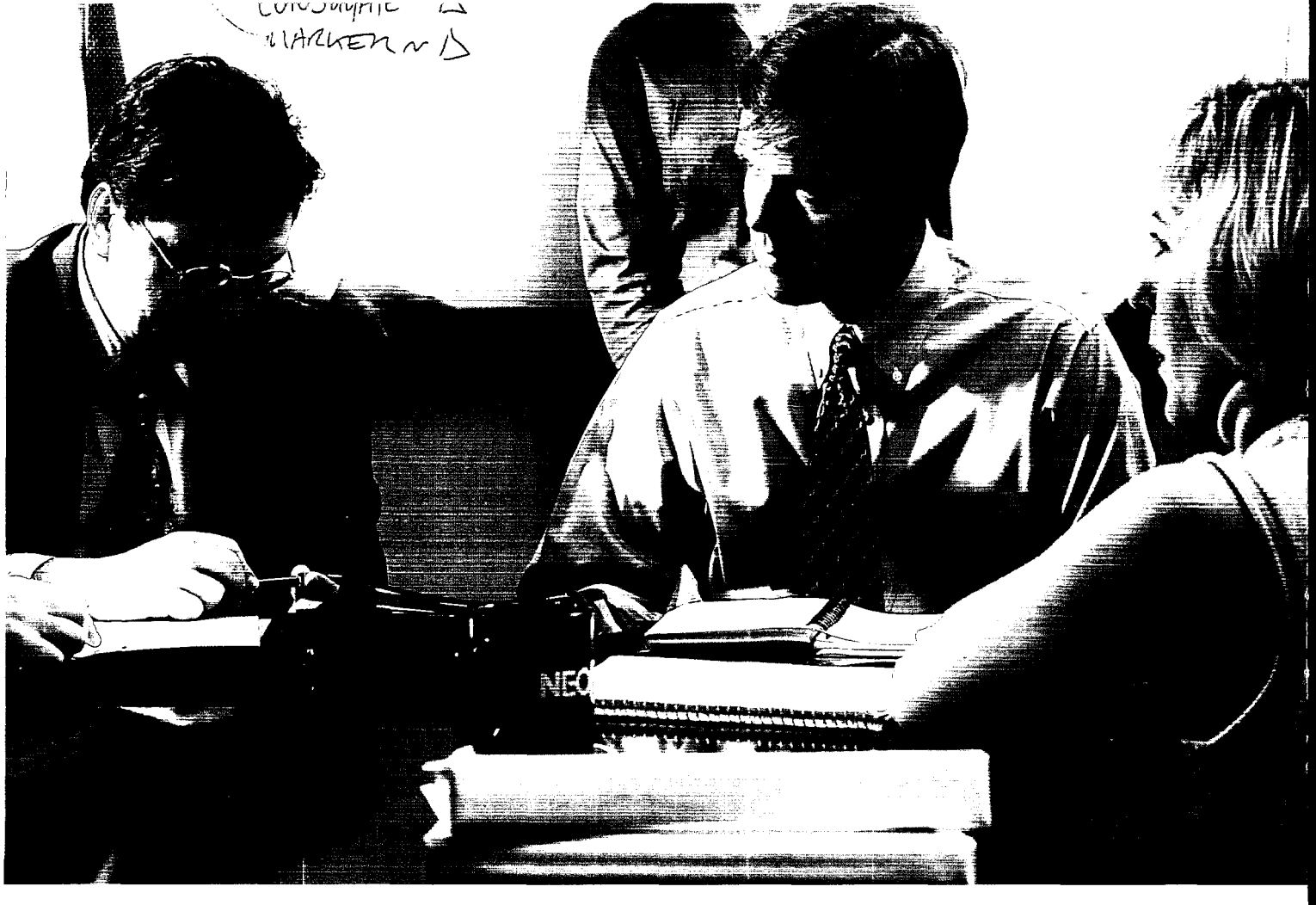
OTHER POTENTIAL CANDIDATES

In addition to EPO, we have applied our GlycoPEGylation technology to several other currently marketed compounds, including follicle stimulating hormone (FSH), Factor IX and Interferon beta. We have successfully GlycoPEGylated and retained activity *in vitro* for each of these compounds. For FSH, we have preliminary *in vitro* and *in vivo* data demonstrating improved product profile and retained activity. We will gather additional data on these and other compounds, with the goal of identifying our second proprietary candidate in the second half of 2003.

WE HAVE GENERATED PROMISING DATA ON AN IMPROVED EPO



PARTNERSHIPS ARE AN IMPORTANT PART OF OUR STRATEGY



FORMING STRATEGIC PARTNERSHIPS

We are forging strategic alliances with leading pharmaceutical and biotechnology companies that have products in development or on the market that could benefit from our technologies. Partnerships can take the form of research and development collaborations, co-development agreements or licensing agreements.

In 2002, we entered into several agreements for the use of our technologies:

NOVO NORDISK A/S

We entered into two separate research and development collaborations with Novo Nordisk A/S. The first agreement is for the use of our GlycoAdvance technology to make clinically significant improvements to a Novo Nordisk marketed therapeutic protein. The second collaboration involves the use of our GlycoPEGylation technology to make clinically significant improvements to the same marketed protein.

MONSANTO PROTEIN TECHNOLOGIES

We entered into a research and development agreement with Monsanto Protein Technologies, a unit of Monsanto Company, to evaluate the ability of Neose's GlycoAdvance technology to alter the glycosylation of therapeutic monoclonal antibodies produced in plants. Currently, the majority of therapeutic monoclonal antibodies are produced by mammalian cell culture, but such expression systems are costly and inefficient. The glycosylation patterns of plant-produced monoclonal antibodies differ from those produced by mammalian cell culture. Monoclonal antibodies produced in plants have incomplete glycosylation patterns, resulting in their inability to activate the complement system. Our research under this agreement will combine Monsanto Protein Technologies' expertise in transgenic plant production of monoclonal antibodies with Neose's expertise in glycosylation. This is expected to enhance the ability of Monsanto's plant-produced monoclonal antibodies to initiate complement activation.

STRENGTHENING OUR CAPABILITIES

FACILITIES

Neose has headquarters, research and manufacturing facilities in Horsham, Pennsylvania, and a research and development facility in San Diego, California. In 2002, we completed construction of a pilot manufacturing facility at our Horsham location. This facility will allow us to produce, in accordance with the U.S. Food and Drug Administration's current Good Manufacturing Practices, the enzymes (glycosyltransferases) and donor sugars (sugar nucleotides) that will be used in the application of our technologies. The facility will also support the manufacture of modified forms of glycoprotein drugs as active pharmaceutical ingredients for use in clinical trials utilizing GlycoAdvance, GlycoPEGylation and GlycoConjugation technologies. The facility has bacterial and fungal fermentation capabilities and houses two 1,500 liter working volume fermenters.

PEOPLE

In 2002, we invested in intellectual capital, with a focus on gaining the expertise we needed to drive process development, scale-up and manufacturing activities that will be critical to the success of our proprietary drug program. Joe Villafranca and Chet Meyers joined our management team from Bristol-Myers Squibb to lead our proprietary product development activities. In addition, Bob Kriebel joined our company as chief financial officer, having held the same position at U.S. Bioscience. At the board level, we added Pat Gage, former president of Wyeth Research, and Elizabeth Wyatt, former vice president of corporate licensing at Merck & Co. These individuals, as well as the other members of the Neose team, come from strong scientific, technical and business backgrounds and come together in formidable teams to advance our objectives.

INTELLECTUAL PROPERTY

Our expanding patent portfolio affords us many opportunities to create and improve therapeutic proteins. We own or license from various institutions 89 U.S. patents, and have multiple pending applications in the U.S. and other countries. We continue to strengthen our intellectual property estate by seeking patents for our technologies, including our proprietary reagents and enzymes, and products made using our technologies. In 2002, we filed significant patent applications covering new developments in our existing remodeling technologies, as well as our new technologies, including GlycoPEGylation and GlycoConjugation of proteins.

WE HAVE BUILT A STRONG FOUNDATION TO SUPPORT OUR DEVELOPMENT PROGRAMS

GROWING OUR BUSINESS OUR OBJECTIVE IS TO ASSEMBLE A PORTFOLIO OF IMPROVED AND NOVEL THERAPEUTIC PROTEINS THAT WILL RESULT IN ENHANCED QUALITY OF LIFE FOR PATIENTS. WE HAVE IN PLACE THE ELEMENTS FOR SUCCESS — A BROAD, RENEWABLE TECHNOLOGY, THE FACILITIES AND SCIENTIFIC STAFF NECESSARY TO SUPPORT OUR TECHNOLOGY, AND AN EXPERIENCED MANAGEMENT TEAM — ALL GUIDED BY A WELL-CONCEIVED STRATEGY.

IN 2002, WE MADE SOLID PROGRESS BY SETTING CLEAR OBJECTIVES AND MEETING THEM.

FOR 2003, WE EXPECT TO ACHIEVE THE FOLLOWING:

SELECT FINAL EPO CANDIDATE	Q2 – '03
IDENTIFY OUR SECOND PROPRIETARY PROTEIN	Q3 – '03
CONSISTENT FLOW OF DEALS	ONGOING
— CO-DEVELOPMENTS — R&D COLLABORATIONS — LICENSES	
IDENTIFY NEXT APPLICATION OF EMERGING TECHNOLOGY (GLYCOCONJUGATION)	2H – '03

WE REMAIN COMMITTED TO CONSISTENTLY DELIVERING ON THE OBJECTIVES WE SET, WITH EACH DESIGNED TO BRING US CLOSER TO COMMERCIALIZATION OF OUR PRODUCTS.

FINANCIAL SECTION

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SELECTED FINANCIAL DATA

The following Statements of Operations and Balance Sheet Data for the years ended December 31, 1998, 1999, 2000, 2001, and 2002, and for the period from inception (January 17, 1989) through December 31, 2002, 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 in this Annual Report.

(in thousands, except per share data)	Year ended December 31, 1998	1999	2000	2001	2002	Period from inception (January 17, 1989) to December 31, 2002
Statements of Operations Data:						
Revenue from collaborative agreements	$ 390	$ 422	$ 4,600	$ 1,266	$ 4,813	$ 17,446
Operating expenses:						
Research and development	9,912	10,649	12,094	14,727	18,879	97,253
Marketing, general and administrative	3,635	4,520	5,648	8,631	12,390	47,902
Severance	–	–	–	873	2,722	3,595
Total operating expenses	13,547	15,169	17,742	24,231	33,991	148,750
Other income	–	–	–	6,120	1,653	7,773
Interest income, net	1,250	1,429	4,642	3,516	1,108	15,473
Net loss	$(11,907)	$(13,318)	$ (8,500)	$(13,329)	$(26,417)	$(108,058)
Basic and diluted net loss per share	$ (1.25)	$ (1.25)	$ (0.63)	$ (0.95)	$ (1.85)	
Weighted-average shares outstanding used in computing basic and diluted loss per share	9,556	10,678	13,428	14,032	14,259	

(in thousands)	As of December 31, 1998	1999	2000	2001	2002
Balance Sheet Data:					
Cash, cash equivalents and marketable securities	$32,023	$33,235	$94,762	$76,245	$ 41,040
Total assets	46,265	52,239	114,768	105,786	83,092
Long-term debt	8,300	7,300	6,200	5,100	5,560
Deficit accumulated during the development stage	(46,494)	(59,812)	(68,312)	(81,641)	(108,058)
Total stockholders' equity	36,013	40,785	104,868	93,946	70,685

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

This Annual Report includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, statements about our plans, objectives, representations and contentions and are not historical facts, which typically may be identified by use of terms such as "anticipate," "believe," "estimate," "plan," "may," "expect," "intend," "could," "potential," and similar expressions, although some forward-looking statements are expressed differently. You should be aware that the forward-looking statements included in this Annual Report represent management's current judgment and expectations, but our actual results, events and performance could differ materially from those in the forward-looking statements. The forward looking statements are subject to a number of risks and uncertainties which are discussed in the section entitled "Factors Affecting the Company's Prospects" of Part I our Annual Report on Form 10-K for the year ended December 31, 2002, as filed with the Securities and Exchange Commission. We do not intend to update any of these factors or to publicly announce the results of any revisions to these forward-looking statements. 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 focused on improving glycoprotein therapeutics using our proprietary technologies. We are using our GlycoAdvance™, GlycoPEGylation™ and GlycoConjugation™ technologies to develop improved versions of currently marketed drugs with proven efficacy and to improve therapeutic profiles of glycoproteins in development for our partners. We expect these next generation proteins to offer significant advantages over drugs that are now on the market, potentially including less frequent dosing and improved safety and efficacy. In addition to developing our own products or co-developing products with others, we expect to enter into strategic partnerships for including our technologies into the product design and manufacturing processes of other biotechnology and pharmaceutical companies. While our primary goal is protein drug development, our technologies offer multiple opportunities to participate in the evolving therapeutic protein market by addressing other challenges, such as manufacturing efficiency, manufacturing consistency, and the use of non-mammalian cell expression systems.

As of December 31, 2002, we had an accumulated deficit of approximately $108 million. We expect additional losses in 2003 and over the next several years as we expand product research and development efforts, increase manufacturing scale-up activities and, potentially, begin sales and marketing activities.

APPLICATION OF CRITICAL ACCOUNTING POLICIES

Our Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") focuses on our financial statements, which 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.

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 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.

Valuation of Long-Lived Assets

We evaluate our long-lived assets for impairment 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.

Valuation of Acquired Intellectual Property

The carrying value of acquired intellectual property ("Acquired IP") on our balance sheet as of December 31, 2002 was $2.5 million. As of December 31, 2001 and 2002, our market capitalization exceeded the book value of our net assets by approximately $422 million and $53 million, respectively. Because most of our intellectual property portfolio is not reflected on our balance sheet, we believe the premium to book value reflected in our market capitalization is largely due to the market's valuation of our intellectual property portfolio. As a result of the decline during 2002 in the premium to book value reflected in our market capitalization, we believed it was appropriate to review our acquired intellectual property ("Acquired IP") for impairment as of December 31, 2002. Since the undiscounted sum of the estimated future cash flows from the Acquired IP exceeded the carrying value, we have not recognized an impairment.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS *continued*

We believe that the accounting estimate related to asset impairment of our Acquired IP is a "critical accounting estimate" because:

- the accounting estimate is highly susceptible to change from period to period because it requires company management to estimate future cash flows over the life of our Acquired IP by making assumptions about the timing and probability of our success in:
  - entering into new collaborations; and
  - developing and commercializing products that incorporate our technologies, either directly or with collaborators; and
- the recognition of an impairment would have a material impact on the assets reported on our balance sheet as well as our net loss.

Management's assumptions underlying the estimate of cash flows require significant judgment because we have limited experience in entering into collaborations with others to develop products incorporating our technologies. In addition, we have limited experience in developing products incorporating our technologies and we have no experience in commercializing any products. Management has discussed the development and selection of this critical accounting estimate 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.

In estimating the impact of future collaborations, we have made assumptions about the timing of entering into collaborations for potential products, most of which we are not yet developing. We have used data from public and private sources to estimate the types of cash flows that would occur at various stages of development for each product.

As of December 31, 2002, we estimate that our future cash flows, on an undiscounted basis, related to Acquired IP are greater than the current carrying value of the asset. Any decreases in estimated future cash flows could have an impact on the carrying value of the Acquired IP. If we had determined the Acquired IP to be fully impaired as of December 31, 2002, total assets would have been reduced by 3% and net loss would have been increased by 9%.

Valuation of Property and Equipment

Our property and equipment, which have a carrying value of $36.5 million as of December 31, 2002, have been recorded at cost and are being amortized on a straight-line basis over the estimated useful lives of those assets. Approximately $21.4 million of the carrying value represents the cost and, we believe, the fair value of construction-in-progress. We believe the remaining property and equipment carrying value of $15.1 million does not exceed its fair value.

Of the $21.4 million of carrying value of construction-in-progress, approximately $4.0 million, was expended as part of a planned $12.0 million renovation to a leased facility. We have suspended plans to complete these renovations and we have not yet made a final decision as to when or if we will resume this project. To the extent that we determine that the partially completed renovations are of no future use to us, we would be required to recognize an impairment loss in our statement of operations. If we had determined this asset to be fully impaired as of December 31, 2002, total assets would have been reduced by 5% and net loss would have been increased by 15%. If we decide to resume the project, we anticipate expending an additional $8.0 million to restart the project and complete the renovations.

Valuation of Investment in Convertible Preferred Stock

In 2000, we made an investment of approximately $1.3 million in convertible preferred stock of Neuronyx, Inc. Our equity investment, which represents an ownership interest of less than 1%, was made on the same terms as other unaffiliated investors. Accordingly, we recorded and carry our investment at cost. We will continue to evaluate the realizability of this investment and record, if necessary, appropriate impairments in value. No such impairments have occurred as of December 31, 2002. Future events could cause us to conclude that impairment indicators exist and the carrying value of our investment is impaired. If we had determined this investment to be fully impaired as of December 31, 2002, total assets would have been reduced by 2% and net loss would have been increased by 5%.

Revenue Recognition

Our revenue from collaborative agreements consists of up-front fees, research and development funding, and milestone payments. We recognize revenues from these agreements consistent with Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" (SAB 101), issued by the Securities and Exchange Commission. Non-refundable up-front 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. 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.

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 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 123 (in thousands, except per share data):

Year Ended December 31,	2000	2001	2002
Net loss – as reported	$ (8,500)	$ (13,329)	$ (26,417)
Add: Stock-based employee compensation expense included in reported net loss	70	125	171
Deduct: Total stock-based employee compensation expense determined under fair value-based method for all awards	(3,752)	(8,179)	(15,588)
Net loss – pro forma	$(12,182)	$ (21,383)	$ (41,834)
Basic and diluted net loss per share – as reported	$ (0.63)	$ (0.95)	$ (1.85)
Basic and diluted net loss per share – pro forma	$ (0.91)	$ (1.52)	$ (2.94)

LIQUIDITY AND CAPITAL RESOURCES

Overview

We have incurred operating losses each year since our inception. As of December 31, 2002, we had an accumulated deficit of approximately $108 million. We have financed our operations through private and public offerings of our securities, and revenues from our collaborative agreements. We had approximately $41 million in cash, cash equivalents and marketable securities as of December 31, 2002, compared to approximately $76 million in cash and cash equivalents as of December 31, 2001. The decrease for 2002 was primarily attributable to the use of cash to fund our operating loss and capital expenditures.

In February 2003, we sold approximately 2.9 million shares of common stock in a private placement to a group of institutional and individual investors, generating net proceeds of approximately $16.3 million. We believe that our existing cash and marketable securities, expected revenue from collaborations and license arrangements, and interest income should be sufficient to meet our operating and capital requirements at least through the middle of 2004, although changes in our collaborative relationships or our business, whether or not initiated by us, may cause us to deplete our cash and marketable securities sooner than the above estimate. The timing and amount of our future capital requirements and the adequacy of available funds will depend on many factors, including if and when any products manufactured using our technology are commercialized.

During 2002, we focused our business on the development of next generation proprietary protein therapeutics, which we plan to pursue both independently and in collaboration with selected partners. This development and commercialization will require substantial investments by us and our collaborators. Most of our 2002 revenues were derived from agreements that have been terminated or will conclude early in 2003. As a result, our 2003 revenues are difficult to project and will be largely dependent on entering into new collaborations and on the financial terms of any new collaborations. Other than revenues from any future collaborations, we expect to generate no 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. Accordingly, we will need to raise substantial additional funds to continue our business activities and fund our operations beyond the middle of 2004.

Capital Expenditures

During 2000, 2001, and 2002, we purchased approximately $1.5 million, $9.4 million, and $17.8 million, respectively, of property, equipment, and building improvements. The improvements during 2001 and 2002 consisted largely of the two following facility improvement projects:

- We completed construction in 2002 of a pilot manufacturing facility at our headquarters location for the production of enzymes and sugar nucleotides at commercial-scale in accordance with U.S. Food and Drug Administration's Good Manufacturing Practices regulations. The facility comprises approximately 20,000 square feet of processing areas and 3,500 square feet of utility space. It has bacterial and fungal fermentation capabilities and houses two 1,500 liter fermenters. We expended approximately $17.4 million for this project, of which approximately $8.2 million and $9.2 million were expended in 2001 and 2002, respectively.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS *continued*

- 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 for an expected cost of approximately $12.0 million. Later in 2002, we suspended plans to complete these renovations and we have not yet made a final decision as to when or if we will resume this project. Our property and equipment at December 31, 2002 includes approximately $4.0 million in renovations to this facility. To the extent that we determine the partially completed renovations are of no future use to us, we would be required to recognize an impairment loss in our statement of operations. If we decide to resume the project, we anticipate expending an additional $8.0 million to restart the project and complete the renovations.

In 2003, we expect our investment in capital expenditures to be approximately $3.0 million to $5.0 million, which excludes the impact of resuming the facility renovations described above. We may finance some or all of these capital expenditures through the issuance of new debt or equity. If we issue new debt, we may be required 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.

Long-term Debt

Montgomery County (Pennsylvania) IDA Bonds

In 1997, we issued, through the Montgomery County (Pennsylvania) Industrial Development Authority, $9.4 million of taxable and tax-exempt bonds, of which $5.1 million remains outstanding as of December 31, 2002. The bonds were issued to finance the purchase of our headquarters building and the construction of a pilot-scale manufacturing facility within our building. The bonds are supported by an AA-rated letter of credit, and a reimbursement agreement between our bank and the letter of credit issuer. The interest rate on the bonds will vary weekly, depending on market rates for AA-rated taxable and tax-exempt obligations, respectively. During 2002, the weighted-average, effective interest rate was 3.3% per year, including letter-of-credit and other fees. The terms of the bond issuance provide for monthly, interest-only payments and a single repayment of principal at the end of the twenty-year life of the bonds. However, under our agreement with our bank, we are making monthly payments to an escrow account to provide for an annual prepayment of principal. As of December 31, 2002, we had restricted funds relating to the bonds of approximately $1.0 million, which consisted of our monthly payments to an escrow account plus interest revenue on the balance of the escrow account. During 2003, we will be required to make payments of $1.2 million into the escrow account.

To provide credit support for this arrangement, we have given a first mortgage on the land, building, improvements, and certain machinery and equipment to our bank. We have also agreed to maintain a minimum required cash and short-term investments balance of at least two times the outstanding loan balance. If we fail to comply with this requirement, we are required to deposit with the lender cash collateral up to, but not more than, the loan's unpaid balance. At December 31, 2002, we were required to maintain $10.2 million of cash and short-term investments.

Equipment Loan

In December 2002, we borrowed approximately $2.3 million to finance the purchase of equipment, which is collateralizing the amount borrowed. The terms of the financing require us to pay monthly principal and interest payments over 36 months at an interest rate of 8%. During 2003, we will be required to make payments totalling approximately $0.8 million under this agreement.

Capital Lease Obligation

In November 2002, we entered into a capital lease to lease $50,000 of equipment. The terms of the lease require us to make monthly payments of $1,561 over 36 months. During 2003, we will be required to make payments totalling $19,000 under this agreement.

Summary of Contractual Obligations

In addition to entering into the equipment lease financing described above, we entered into an operating lease agreement during 2002 for a 40,000 square foot building in Horsham, Pennsylvania. Our aggregate rental obligation over the 20-year lease term is approximately $9.9 million. The following table summarizes our obligations to make future payments under current contracts:

		Payments due by period			
	Total	Less than 1 Year	1 – 3 Years	4 – 5 Years	After 5 Years
Long-term debt[1]	$7,361,000	$1,835,000	$2,856,000	$ 370,000	$2,300,000
Capital lease obligation[2]	50,000	16,000	34,000	–	–
Operating leases[3]	10,865,000	761,000	1,538,000	964,000	7,602,000
Purchase obligations[4]	832,000	634,000	194,000	4,000	–
Other long-term liabilities reflected on our balance sheet under GAAP[5]	451,000	185,000	170,000	96,000	–
Total contractual obligations	$19,559,000	$3,431,000	$4,792,000	$1,434,000	$9,902,000

1. See "Long-term debt" in this Liquidity and Capital Resources section for a description of the material features of our long-term debt.
2. See "Capital Lease Obligation" in this Liquidity and Capital Resources section for a description of the material features of our capital lease obligation.
3. See Note 13 of the Notes to Financial Statements included in this Annual Report for a description of our significant operating leases. The obligations presented in this table include $64,000 of deferred rent, which is included in the Other Liabilities section of our Balance Sheet.
4. Includes our commitments as of December 31, 2002 to purchase goods and services.
5. Represents the present value as of December 31, 2002 of the remaining payments under agreements with two former employees. The agreement relating to one of the employees will terminate in March 2003. Prior to the termination, the employee may agree to extend his non-competition and non-solicitation commitments for two additional years by entering into a separate non-competition agreement. If he does so, we will continue his medical benefits for an additional six months, extend his monthly payment of $39,622 for 24 additional months, and continue his stock option vesting and exercisability during the additional two-year period. This contingent commitment is not reflected in the above table or on our balance sheet as of December 31, 2002. These agreements are described in Note 11 of the Notes to Financial Statements included in this Annual Report.

Other Factors Affecting Liquidity

Wyeth Pharmaceuticals

In December 2001, we entered into a research, development and license agreement with Wyeth Pharmaceuticals, a division of Wyeth, for the use of our GlycoAdvance technology to develop an improved production process for Wyeth's biopharmaceutical compound, recombinant PSGL-Ig (P-selectin glycoprotein ligand), which was in Phase II clinical trials. In May 2002, we learned of Wyeth's decision to discontinue the development of rPSGL-Ig for the treatment of myocardial infarction based on Phase II results. Their decision was unrelated to the performance of our GlycoAdvance technology, which was to have been incorporated for Phase III and commercial production. Wyeth subsequently notified us of the termination of the agreement, effective September 2002. During 2002, we recognized approximately $3.8 million of revenue from this agreement. We expect to receive no further revenues from this collaboration.

Joint Venture with McNeil Nutritionals

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. In 1999, we reduced the carrying value of our initial investment in the joint venture of approximately $345,000 to zero to reflect our share of the joint venture's losses. We recorded this amount as research and development expense in our statements of operations. We will record our share of post-1999 losses of the joint venture, however, only to the extent of our actual or committed investment in the joint venture.

The joint venture developed a process for making fructooligosaccharides and constructed a pilot facility in Athens, Georgia. In 2001, the joint venture closed the pilot facility and is exploring establishing a manufacturing arrangement with a third party to produce this or other bulking agents. As a result, we do not intend to commit the joint venture to make any further investments in facilities.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS *continued*

During the years ended December 31, 2000, 2001, and 2002, we supplied to the joint venture research and development services and supplies, which cost approximately $1.6 million, $0.8 million, and $252,000, respectively, which were reimbursed to us by the joint venture. These amounts have been reflected as a reduction of research and development expense in our statements of operations. As of December 31, 2002, the joint venture owed us $16,000. We expect to provide fewer research and development services during 2003 compared to 2002, thereby reducing our expected reimbursement from the joint venture.

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, 2002, the joint venture had an accumulated loss since inception of approximately $10.2 million. 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 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. As of December 31, 2002, the joint venture owed McNeil Nutritionals approximately $8.5 million.

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.

RESULTS OF OPERATIONS

Years Ended December 31, 2002 and 2001 and Outlook for 2003

Our net loss for the year ended December 31, 2002 was approximately $26.4 million compared to approximately $13.3 million for the corresponding period in 2001. The following section explains the trends within each component of net loss for 2002 compared to 2001 and provides our estimate of trends for 2003 for each component.

Revenue from Collaborative Agreements. Revenues from collaborative agreements increased to approximately $4.8 million in 2002 from approximately $1.3 million in 2001. The increase in revenues during 2002 was primarily a result of our Wyeth Pharmaceuticals collaboration, which was terminated in the third quarter of 2002. Of the increase, $1.0 million was non-cash, and represented the remaining amortization of the up-front fee that Wyeth paid in December 2001. As required under SAB 101, we deferred the up-front fee and began to amortize this amount as revenue over the expected performance period of the Wyeth agreement. Upon termination of the Wyeth agreement, the unamortized portion of the up-front fee was recognized as revenue.

Most of our 2002 revenues were derived from agreements that have been terminated or will conclude early in 2003. As a result, our 2003 revenues are difficult to project and are largely dependent on entering into new collaborations and on the financial terms of any new collaborations.

Research and Development Expense. Research and development expenses for the year ended December 31, 2002 were approximately $18.9 million, compared to approximately $14.7 million for the year ended December 31, 2001. The increase was primarily attributable to increases in the number of employees as well as increased laboratory supplies and service expenses.

In January 2003, we announced the selection of an improved erythropoietin as our first proprietary candidate for development. We are planning to conduct various preclinical activities during 2003 and the first half of 2004, with the goal of beginning clinical trials in the second half of 2004. In addition, we intend to generate internal data on other potential proprietary drug candidates, and we expect to announce our second proprietary candidate for development in the second half of 2003. As a result of these activities, we expect our 2003 research and development expenses to be significantly greater than they were in 2002.

Marketing, General and Administrative Expense. Marketing, general and administrative expenses for the year ended December 31, 2002 were approximately $12.4 million, compared to approximately $8.6 million for the corresponding period in 2001. The 2002 period contained higher personnel costs (including payroll, recruiting, and relocation), legal, and consulting expenses than the comparable 2001 period, which increases resulted primarily from recruiting of senior executives and focusing our business on the development of next generation proprietary protein therapeutics. During 2003, we expect our marketing, general and administrative expenses to increase by less than 10% over 2002.

Severance Expense. During the year ended December 31, 2002, we incurred severance expense of approximately $2.7 million compared to approximately $0.9 million for the year ended December 31, 2001. Of the $2.7 million incurred in 2002, approximately $1.6 million is a non-cash charge related to stock option modifications for an agreement entered into with one of our officers in connection with his retirement. We have no current plans to incur severance expenses during 2003.

Other Income and Expense. During the year ended December 31, 2002, we recognized approximately $1.7 million 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 do not expect to recognize any additional other income during 2003.

Interest income for the year ended December 31, 2002 was approximately $1.1 million, compared to approximately $3.7 million for the corresponding period in 2001. The decrease was due to lower average cash and cash equivalents and marketable securities balances, as well as lower interest rates, during 2002. Our interest income during 2003 is difficult to project, and will depend largely on prevailing interest rates and whether we complete any collaborative agreements and any additional equity or debt financings during the year.

Interest expense for the year ended December 31, 2002 was zero, compared to $188,000 for the corresponding period in 2001. The decrease was due to the fact that in 2002 we capitalized $150,000 of interest expense on our two capital construction projects, as discussed in the Liquidity and Capital Resources section of this MD&A. 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. Our interest expense during 2003 is difficult to project, and will depend largely on prevailing interest rates and whether we complete any additional debt financings, and whether we decide to resume and complete the facility renovations described in the Liquidity and Capital Resources section of this MD&A.

Years Ended December 31, 2001 and 2000

Our net loss for the year ended December 31, 2001 was approximately $13.3 million compared to approximately $8.5 million for the corresponding period in 2000. The following section explains the trends within each component of net loss for 2001 compared to 2000.

Revenue from Collaborative Agreements. Revenues from collaborative agreements decreased to approximately $1.3 million in 2001 from approximately $4.6 million in 2000. Substantially all of our revenues during 2001 were payments received by us under our collaborative agreement with Wyeth Nutrition.

Research and Development Expense. Research and development expenses increased to approximately $14.7 million in 2001 from approximately $12.1 million in 2000. The increase was primarily attributable to the addition of new employees in 2001 and the expenses associated with our San Diego facility, which we began leasing in April 2001. In addition, our joint venture with McNeil Nutritionals reimbursed Neose approximately $0.8 million in 2001, which was approximately $0.8 million less than in 2000, for the cost of research and development services and supplies provided to the joint venture. The reimbursement amounts have been reflected as a reduction of research and development expense in our statements of operations for 2000 and 2001.

Marketing, General and Administrative Expense. Marketing, general and administrative expenses increased to approximately $8.6 million in 2001 from $5.6 million in 2000. The increase was primarily attributable to the hiring of additional business development personnel, increased expenses for marketing GlycoAdvance, and increased legal and filing expenses associated with our growing patent portfolio.

Severance Expense. During the year ended December 31, 2001, we incurred severance expense of approximately $0.9 million, which included non-cash charges of approximately $0.8 million related to stock option modifications in connection with the separation of employees from Neose.

Other Income and Expense. We realized a gain of approximately $6.1 million in 2001 from the sale of shares of Genzyme General common stock, which we received as a result of Genzyme's acquisition of Novazyme Pharmaceuticals, Inc. in September 2001. Interest income decreased to approximately $3.7 million in 2001 from approximately $5.1 million in 2000 due to lower average cash and marketable securities balances and lower interest rates during 2001. Interest expense decreased to $188,000 in 2001 from approximately $0.5 million in 2000 due to lower average loan balances and lower interest rates during 2001.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS *continued*

RECENT ACCOUNTING PRONOUNCEMENTS

Statement of Financial Accounting Standard No. 143, "Accounting for Asset Retirement Obligations" (SFAS 143), which was released in August 2001, addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and their associated asset retirement costs. SFAS 143 requires an enterprise to record the fair value of an asset retirement obligation as a liability in the period in which it incurs a legal obligation associated with the retirement of intangible long-lived assets that result from the acquisition, construction, development, or normal use of the asset. The enterprise is also required to record a corresponding increase to the carrying amount of the related long-lived asset (i.e. the associated asset retirement cost) and to depreciate that cost over the life of the asset. The liability is changed at the end of each period to reflect the passage of time (i.e. accretion expense) and changes in the estimated future cash flows underlying the initial fair value measurement. Because of the extensive use of estimates, most enterprises will record a gain or loss when they settle the obligation. We are required to adopt SFAS 143 for our fiscal year beginning January 1, 2003; we do not expect the adoption of SFAS 143 to have a material impact on our financial position or results of operations.

In April 2002, the Financial Accounting Standards Board ("FASB") issued SFAS 145, "Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13, and Technical Corrections." SFAS 145 amends existing guidance on reporting gains and losses on the extinguishment of debt to prohibit the classification of the gain or loss as extraordinary, as the use of such extinguishments have become part of the risk management strategy of many companies. SFAS 145 also amends SFAS 13 to require sale-leaseback accounting for certain lease modifications that have economic effects similar to sale-leaseback transactions. The provisions of the Statement related to the rescission of Statement No. 4 are applied in fiscal years beginning after May 15, 2002. Earlier application of these provisions is encouraged. The provisions of the Statement related to Statement No. 13 were effective for transactions occurring after May 15, 2002, with early application encouraged. The adoption of SFAS 145 is not expected to have a material effect on our financial statements.

In June 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standard No. 146, "Accounting for Exit or Disposal Activities" (SFAS 146). SFAS 146 addresses significant issues regarding the recognition, measurement and reporting of costs associated with exit and disposal activities, including restructuring activities. SFAS 146 also addresses recognition of certain costs related to terminating a contract that is not a capital lease, costs to consolidate facilities or relocate employees and termination of benefits provided to employees that are involuntarily terminated under the terms of a one-time benefit arrangement that is not an ongoing benefit arrangement or an individual deferred compensation contract. SFAS 146 is effective for exit or disposal activities that are initiated after December 31, 2002. Adoption of SFAS 146 is not expected to have a material impact on our financial position or results of operations.

In November 2002, the FASB issued Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness to Others, an interpretation of FASB Statements No. 5, 57 and 107 and a rescission of FASB Interpretation No. 34." This Interpretation elaborates on the disclosures to be made by a guarantor in its interim and annual financial statements about its obligations under guarantees issued. The Interpretation also clarifies that a guarantor is required to recognize, at inception of a guarantee, a liability for the fair value of the obligation undertaken. The initial recognition and measurement provisions of the Interpretation are applicable to guarantees issued or modified after December 31, 2002, and are not expected to have a material effect on our financial statements. The disclosure requirements are effective for financial statements of interim and annual periods ending after December 31, 2002.

In December 2002, the FASB issued SFAS No. 148, "Accounting for Stock-Based Compensation – Transition and Disclosure, an amendment of FASB Statement No. 123." This Statement amends FASB Statement No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition for a voluntary change to the fair value method of accounting for stock-based employee compensation. In addition, this Statement amends the disclosure requirements of Statement No. 123 to require prominent disclosures in both annual and interim financial statements. Certain of the disclosure modifications are required for fiscal years ending after December 15, 2002, and are included in the notes to the financial statements included in this Annual Report.

In January 2003, the FASB issued Interpretation No. 46, "Consolidation of Variable Interest Entities, an interpretation of ARB No. 51." This Interpretation addresses the consolidation by business enterprises of variable interest entities as defined in the Interpretation. The Interpretation applies immediately to variable interests in variable interest entities created after January 31, 2003, and to variable interests in variable interest entities obtained after January 31, 2003. Because we have no involvement with any variable interest entities, the application of this Interpretation is not expected to have a material effect on our financial statements.

INDEPENDENT AUDITORS' REPORT

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

We have audited the accompanying balance sheet of Neose Technologies, Inc. (a development-stage company) as of December 31, 2002, and the related statements of operations, stockholders' equity and comprehensive loss, and cash flows for the year then ended, and for the period from January 17, 1989 (inception) through December 31, 2002. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of Neose Technologies, Inc. as of December 31, 2001 and for each of the years in the two-year period ended December 31, 2001 and for the period from January 17, 1989 (inception) through December 31, 2002, to the extent related to the period from January 17, 1989 (inception) through 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) through December 31, 2001, is based solely on the report of the other auditors.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. 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 audit provides a reasonable basis for our opinion.

In our opinion, based on our audit and the report of other auditors, the 2002 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, 2002, and the results of its operations and its cash flows for the year then ended, and for the period from January 17, 1989 (inception) through December 31, 2002, in conformity with accounting principles generally accepted in the United States of America.

KPMG LLP

Philadelphia, Pennsylvania
February 19, 2003

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

The following is a copy of a report issued by Arthur Andersen LLP and included in the 2001 Form 10-K/A report for the fiscal year ended December 31, 2001 filed on April 30, 2002. This report has not been reissued by Arthur Andersen LLP, and Arthur Andersen LLP has not consented to its use in this Annual Report. For further discussion, see Exhibit 23.2 to our Annual Report on Form 10-K for the year ended December 31, 2002.

Report of Independent Public Accountants
To Neose Technologies, Inc.:

We have audited the accompanying consolidated balance sheets of Neose Technologies, Inc. (a Delaware corporation in the development stage) and subsidiaries as of December 31, 2000 and 2001, and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the three years in the period ended December 31, 2001, and for the period from inception (January 17, 1989) to December 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the 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.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Neose Technologies, Inc. and subsidiaries as of December 31, 2000 and 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001, and for the period from inception (January 17, 1989) to December 31, 2001, in conformity with accounting principles generally accepted in the United States.

ARTHUR ANDERSEN LLP

Philadelphia, Pennsylvania
January 25, 2002

BALANCE SHEETS

(in thousands, except per share amounts)	December 31, 2001	2002
Assets		
Current assets:		
Cash and cash equivalents	$ 76,245	$ 31,088
Marketable securities	–	9,952
Restricted funds	902	977
Prepaid expenses and other current assets	1,635	558
Total current assets	78,782	42,575
Property and equipment, net	22,649	36,508
Acquired intellectual property, net	3,105	2,507
Other assets	1,250	1,502
Total assets	$ 105,786	$ 83,092
Liabilities and Stockholders' Equity		
Current liabilities:		
Current portion of long-term debt	$ 1,100	$ 1,851
Accounts payable	719	1,127
Accrued compensation	855	1,339
Accrued expenses	2,844	1,880
Deferred revenue	1,222	320
Total current liabilities	6,740	6,517
Long-term debt	5,100	5,560
Other liabilities	–	330
Total liabilities	11,840	12,407
Commitments (Note 13)		
Stockholders' equity:		
Preferred stock, $.01 par value, 5,000 shares authorized, none issued	–	–
Common stock, $.01 par value, 30,000 shares authorized; 14,089 and 14,330 shares issued; 14,083 and 14,324 shares outstanding	141	143
Additional paid-in capital	176,124	178,945
Treasury stock, 6 shares at cost	(175)	(175)
Deferred compensation	(503)	(170)
Deficit accumulated during the development stage	(81,641)	(108,058)
Total stockholders' equity	93,946	70,685
Total liabilities and stockholders' equity	$ 105,786	$ 83,092

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

STATEMENTS OF OPERATIONS

(in thousands, except per share amounts)	Year Ended December 31, 2000	2001	2002	Period from inception (January 17, 1989) to December 31, 2002
Revenue from collaborative agreements	$ 4,600	$ 1,266	$ 4,813	$ 17,446
Operating expenses:				
Research and development	12,094	14,727	18,879	97,253
Marketing, general and administrative	5,648	8,631	12,390	47,902
Severance	–	873	2,722	3,595
Total operating expenses	17,742	24,231	33,991	148,750
Operating loss	(13,142)	(22,965)	(29,178)	(131,304)
Other income	–	6,120	1,653	7,773
Interest income	5,111	3,704	1,108	18,778
Interest expense	(469)	(188)	–	(3,305)
Net loss	$(8,500)	$(13,329)	$ (26,417)	$(108,058)
Basic and diluted net loss per share	$ (0.63)	$ (0.95)	$ (1.85)	
Weighted-average shares outstanding used in computing basic and diluted net loss per share	13,428	14,032	14,259	

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 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

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 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	13	29	–	–	–	–	–
Shares issued to employees in lieu of cash compensation	–	–	8	–	44	–	–	–	–	–
Deferred compensation related to grant of stock options	–	–	–	–	360	–	(360)	–	–	–
Shares issued to stockholder related to the 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 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 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)
Sales 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 gains 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

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 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 modifications 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 and warrants	–	–	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.

STATEMENTS OF CASH FLOWS

(in thousands)	Year ended December 31, 2000	2001	2002	Period from inception (January 17, 1989) to December 31, 2002
Cash flows from operating activities:				
Net loss	$ (8,500)	$(13,329)	$(26,417)	$(108,058)
Adjustments to reconcile net loss to cash used in operating activities:				
Depreciation and amortization	2,051	2,422	2,376	13,109
Non-cash compensation	1,083	1,379	1,195	4,773
Common stock issued for non-cash and other charges	–	–	–	35
Changes in operating assets and liabilities:				
Prepaid expenses and other current and non-current assets	(465)	(1,052)	825	(810)
Accounts payable	(154)	636	408	1,127
Accrued compensation	146	254	484	1,383
Accrued expenses	(405)	(208)	734	1,778
Deferred revenue	(416)	833	(902)	320
Other liabilities	–	–	330	330
Net cash used in operating activities	(6,660)	(9,065)	(20,967)	(86,013)
Cash flows from investing activities:				
Purchases of property and equipment	(1,455)	(9,371)	(17,826)	(47,108)
Proceeds from sale-leaseback of equipment	–	–	–	1,382
Purchases of marketable securities	(81,077)	(103,465)	(60,411)	(384,738)
Proceeds from sales of marketable securities	–	–	–	11,467
Proceeds from maturities of and other changes in marketable securities	76,174	131,238	51,000	363,860
Purchase of acquired technology	(1,000)	–	–	(4,550)
Investment in equity securities	(1,250)	–	–	(1,250)
Restricted cash related to acquired technology	1,500	–	–	–
Net cash provided by (used in) investing activities	(7,108)	18,402	(27,237)	(60,937)
Cash flows from financing activities:				
Proceeds from issuance of debt	–	–	2,261	14,216
Repayment of debt	(1,000)	(1,100)	(1,100)	(8,152)
Restricted cash related to debt	(108)	(9)	(75)	(906)
Proceeds from issuance of preferred stock, net	–	–	–	29,497
Proceeds from issuance of common stock, net	68,762	335	384	137,224
Proceeds from exercise of stock options and warrants	2,738	868	1,577	6,406
Acquisition of treasury stock	–	(175)	–	(175)
Dividends paid	–	–	–	(72)
Net cash provided by (used in) financing activities	70,392	(81)	3,047	178,038
Net increase (decrease) in cash and cash equivalents	56,624	9,256	(45,157)	31,088
Cash and cash equivalents, beginning of period	10,365	66,989	76,245	–
Cash and cash equivalents, end of period	$ 66,989	$ 76,245	$ 31,088	$ 31,088
Supplemental disclosure of cash flow information:				
Cash paid for interest	$ 481	$ 284	$ 142	$ 3,445
Non-cash investing activities:				
Increase (decrease) in accrued property and equipment	$ 220	$ 1,525	$ (1,698)	$ 102
Non-cash financing activities:				
Issuance of common stock for dividends	$ –	$ –	$ –	$ 90
Issuance of common stock to employees in lieu of cash compensation	$ –	$ –	$ –	$ 44

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

NOTES TO FINANCIAL STATEMENTS

NOTE 1. BACKGROUND

We are a biopharmaceutical company focused on improving glycoprotein therapeutics using our proprietary technologies. We are using our GlycoAdvance™, GlycoPEGylation™ and GlycoConjugation™ technologies to develop improved versions of currently marketed drugs with proven efficacy and to improve therapeutic profiles of glycoproteins in development for our partners. We expect these next generation proteins to offer significant advantages over drugs that are now on the market, potentially including less frequent dosing and improved safety and efficacy. In addition to developing our own products or co-developing products with others, we expect to enter into strategic partnerships for including our technologies into the product design and manufacturing processes of other biotechnology and pharmaceutical companies. While our primary goal is protein drug development, our technologies offer multiple opportunities to participate in the evolving therapeutic protein market by addressing other challenges, such as manufacturing efficiency, manufacturing consistency, and the use of non-mammalian cell expression systems. Neose was initially incorporated in January 1989, and began operations in October 1990.

In February 2003, we sold approximately 2.9 million shares of common stock in a private placement to a group of institutional and individual investors at a price of $6.00 per share, generating net proceeds of approximately $16.3 million.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

In December 2002, we dissolved our subsidiaries and, therefore, are no longer presenting our financial statements on a consolidated basis.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States 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, 2001 and 2002, cash equivalents consisted of securities and obligations of either the U.S. Treasury or U.S. government agencies. Our cash balances have been kept on deposit primarily at one bank and in amounts greater than $100,000, 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, 2002, we held a marketable security that was an obligation of a U.S. government agency. The security, which is classified as held-to-maturity, had an original maturity of 11 months. The security's amortized cost, which was $9,952,000, as of December 31, 2002 includes $200,000 of accrued interest. The security's fair value as of December 31, 2002 was $9,979,000. Additionally, there was $341,000 of interest earned throughout 2002 on securities that matured during the year.

Restricted Funds

We are required to make monthly payments to an escrow account to provide for an annual prepayment of principal of our Industrial Development Authority bonds (see Note 6). As of December 31, 2002, we had restricted funds of $1.0 million, which consisted of our monthly payments to the escrow account plus interest earned on the balance of the escrow account.

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. Depreciation and amortization are provided using the straight-line method over the estimated useful lives of the related assets or the lease term, whichever is shorter. We generally use depreciable lives of three to seven years for laboratory and office equipment, and three to twenty years for building and improvements. Expenditures for maintenance and repairs are charged to expense as incurred, and expenditures for major renewals and improvements are capitalized.

Impairment of Long-Lived Assets

As required by Statement of Financial Accounting Standards No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets," we assess the recoverability of long-lived assets for which an indicator of impairment exists. Specifically, we calculate, and recognize, any impair-

NOTES TO FINANCIAL STATEMENTS *continued*

ment losses by comparing the carrying value of these assets to our estimate of the undiscounted future operating cash flows. Although our current and historical negative cash flows are indicators of impairment, we believe the future cash flows to be received from our long-lived assets will exceed the assets' carrying value. Accordingly, we have not recognized any impairment losses through December 31, 2002.

Revenue Recognition

Revenue from collaborative agreements consists of up-front fees, research and development funding, and milestone payments. In accordance with Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" (SAB 101), non-refundable up-front 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.

Income Taxes

We account for income taxes under the asset and liability method in accordance with Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes." 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.

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, 2000, 2001, and 2002, 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 9 for a summary of outstanding options.

Comprehensive Loss

Our comprehensive loss for the years ended December 31, 2000, 2001, and 2002 was approximately $8.5 million, $13.3 million, and $26.4 million, respectively. Comprehensive loss is comprised of net loss and other comprehensive income or loss. Our only source of other comprehensive income or loss is unrealized gains and losses on our marketable securities that are classified as available-for-sale.

Fair Value of Financial Instruments

As of December 31, 2002, the carrying values of cash and cash equivalents, restricted funds, accounts receivable, accounts payable, accrued expenses, and accrued compensation approximate their respective fair values. In addition, we believe the carrying value of our debt instruments, which do not have readily ascertainable market values, approximates their fair values.

Stock-based 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 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 SFAS 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 123 (in thousands, except per share data):

Year Ended December 31,	2000	2001	2002
Net loss – as reported	$ (8,500)	$ (13,329)	$ (26,417)
Add: Stock-based employee compensation expense included in reported net loss	70	125	171
Deduct: Total stock-based employee compensation expense determined under fair value-based method for all awards	(3,752)	(8,179)	(15,588)
Net loss – pro forma	$(12,182)	$ (21,383)	$ (41,834)
Basic and diluted net loss per share – as reported	$ (0.63)	$ (0.95)	$ (1.85)
Basic and diluted net loss per share – pro forma	$ (0.91)	$ (1.52)	$ (2.94)

Recent Accounting Pronouncements

Statement of Financial Accounting Standard No. 143, "Accounting for Asset Retirement Obligations" (SFAS 143), which was released in August 2001, addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and their associated asset retirement costs. SFAS 143 requires an enterprise to record the fair value of an asset retirement obligation as a liability in the period in which it incurs a legal obligation associated with the retirement of intangible long-lived assets that result from the acquisition, construction, development, or normal use of the asset. The enterprise is also required to record a corresponding increase to the carrying amount of the related long-lived asset (i.e. the associated asset retirement cost) and to depreciate that cost over the life of the asset. The liability is changed at the end of each period to reflect the passage of time (i.e. accretion expense) and changes in the estimated future cash flows underlying the initial fair value measurement. Because of the extensive use of estimates, most enterprises will record a gain or loss when they settle the obligation. We are required to adopt SFAS 143 for our fiscal year beginning January 1, 2003; we do not expect the adoption of SFAS 143 to have a material impact on our financial position or results of operations.

In April 2002, the Financial Accounting Standards Board ("FASB") issued SFAS No. 145, "Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13, and Technical Corrections" (SFAS 145). SFAS 145 amends existing guidance on reporting gains and losses on the extinguishment of debt to prohibit the classification of the gain or loss as extraordinary, as the use of such extinguishments have become part of the risk management strategy of many companies. SFAS 145 also amends SFAS 13 to require sale-leaseback accounting for certain lease modifications that have economic effects similar to sale-leaseback transactions. The provisions of the Statement related to the rescission of Statement No. 4 are applied in fiscal years beginning after May 15, 2002. Earlier application of these provisions is encouraged. The provisions of the Statement related to Statement No. 13 were effective for transactions occurring after May 15, 2002. The adoption of SFAS 145 is not expected to have a material effect on our financial statements.

In June 2002, the FASB issued Statement of Financial Accounting Standard No. 146, "Accounting for Exit or Disposal Activities" (SFAS 146). SFAS 146 addresses significant issues regarding the recognition, measurement and reporting of costs associated with exit and disposal activities, including restructuring activities. SFAS 146 also addresses recognition of certain costs related to terminating a contract that is not a capital lease, costs to consolidate facilities or relocate employees and termination of benefits provided to employees that are involuntarily terminated under the terms of a one-time benefit arrangement that is not an ongoing benefit arrangement or an individual deferred compensation contract. SFAS 146 is effective for exit or disposal activities that are initiated after December 31, 2002. Adoption of SFAS 146 is not expected to have a material impact on our financial position or results of operations.

In November 2002, the FASB issued Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness to Others, an interpretation of FASB Statements No. 5, 57 and 107 and a rescission of FASB Interpretation No. 34." This Interpretation elaborates on the disclosures to be made by a guarantor in its interim and annual financial statements about its obligations under guarantees issued. The Interpretation also clarifies that a guarantor is required to recognize, at inception of a guarantee, a liability for the fair value of the obligation undertaken. The initial recognition and measurement provisions of the Interpretation are applicable to guarantees issued or modified after December 31, 2002, and are not expected to have a material effect on our financial statements.

In December 2002, the FASB issued SFAS No. 148, "Accounting for Stock-Based Compensation – Transition and Disclosure, an amendment of FASB Statement No. 123." This Statement amends FASB Statement No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition for a voluntary change to the fair value method of accounting for stock-based employee compensation. In addition, this Statement amends the disclosure requirements of Statement No. 123 to require prominent disclosures in both annual and interim financial statements. Certain of the disclosure modifications are required for fiscal years ending after December 15, 2002, and are included in Notes 2 and 9.

In January 2003, the FASB issued Interpretation No. 46, "Consolidation of Variable Interest Entities, an interpretation of ARB No. 51." This Interpretation addresses the consolidation by business enterprises of variable interest entities as defined in the Interpretation. The Interpretation applies immediately to variable interests in variable interest entities created after January 31, 2003, and to variable interests in variable interest entities obtained after January 31, 2003. Because we have no involvement with any variable interest entities, the application of this Interpretation is not expected to have a material effect on our financial statements.

Reclassification

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

NOTES TO FINANCIAL STATEMENTS *continued*

NOTE 3. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following (in thousands):

December 31,	2001	2002
Building and improvements	$ 14,482	$ 14,872
Laboratory and office equipment	8,227	8,964
Land	700	700
Construction-in-progress	8,196	21,440
	31,605	45,976
Less accumulated depreciation	(8,956)	(9,468)
	$ 22,649	$ 36,508

The construction in progress amounts represent amounts incurred related to improvements to our existing facility in Horsham, Pa. and to a newly-leased facility in Horsham, Pa. During 2001 and 2002, we incurred $8.2 million and $9.2 million, respectively, for the construction and validation of our cGMP facility at our existing Horsham location. Our cGMP facility was placed in-service in January 2003. Of the total cost of $17.4 million, $13.1 million is considered building improvements and will be depreciated over 20 years and $4.3 million is laboratory equipment and will be depreciated over seven years. Separately, in 2002 we incurred $4.0 million for the design and renovations of our newly leased facility in Horsham. We then suspended plans to complete these renovations and we have not yet made a final decision as to when or if we will resume this project. To the extent that we determine the partially completed renovations are of no future use to us, we would be required to recognize an impairment loss in our statement of operations.

In 2001 and 2002, we capitalized $70,000 and $150,000, respectively, of interest expense in connection with our facility improvement projects. Depreciation expense was approximately $1.5 million, $1.8 million, and $2.3 million for the years ended December 31, 2000, 2001, and 2002, respectively. In 2002, we wrote off $1.8 million of fully depreciated laboratory and office equipment.

NOTE 4. ACQUIRED INTELLECTUAL PROPERTY

In 1999, we acquired the carbohydrate-manufacturing patents, licenses, and other intellectual property of Cytel Corporation for aggregate consideration of $4.8 million. The acquired intellectual property consists of core technology with alternative future uses.

The acquired intellectual property balance is being amortized to research and development expense in our statement of operations over eight years, which is the estimated useful life of the technology. Amortization expense relating to the acquired intellectual property for the years ended December 31, 2000, 2001, and 2002 was approximately $0.5 million, $0.6 million, and $0.6 million, respectively.

NOTE 5. OTHER ASSETS

Investment in Convertible Preferred Stock

In 2000, we made an investment of approximately $1.3 million in convertible preferred stock of Neuronyx, Inc., and entered into a research and development collaboration with Neuronyx for the discovery and development of drugs for treating Parkinson's disease and other neurological diseases. The collaboration agreement provides for each of Neose and Neuronyx to perform and fund specific tasks, and to share in any financial benefits of the collaboration. We incurred research and development expense related to this collaboration of $352,000, $1,045,000, and $297,000 for the years ended December 31, 2000, 2001, and 2002, respectively. Our equity investment, which represents an ownership interest of less than 1%, was made on the same terms as other unaffiliated investors. Accordingly, we have recorded and carry our investment at cost. We will continue to evaluate the realizability of this investment and record, if necessary, appropriate impairments in value. No such impairments have occurred as of December 31, 2002.

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 for an MBA degree. Interest accrues on the loan at 4.71% per year, and is payable annually beginning in May 2002. We have 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 will forgive the accrued interest as it becomes due and, if the employee is terminated without cause, we will forgive all outstanding principal and interest. As of December 31, 2001 and 2002, the amounts outstanding under the agreement, including accrued interest, were $72,000 and $121,000, respectively.

NOTE 6. LONG-TERM DEBT

Long-term debt consisted of the following (in thousands):

December 31,	2001	2002
Industrial development authority bonds	$ 6,200	$ 5,100
Equipment loan	–	2,261
Capital lease obligation	–	50
	6,200	7,411
Less current portion	(1,100)	(1,851)
	$ 5,100	$ 5,560

Minimum principal repayments of long-term debt as of December 31, 2002 were as follows (in thousands): 2003–$1,851; 2004–$1,964; 2005–$926; 2006–$270; 2007–$100; and thereafter–$2,300.

Industrial Development Authority Bonds

In 1997, we issued, through the Montgomery County (Pennsylvania) Industrial Development Authority, $9.4 million of taxable and tax-exempt bonds. The bonds are supported by an AA-rated letter of credit, and a reimbursement agreement between our bank and the letter of credit issuer. The interest rate on the bonds will vary weekly, depending on market rates for AA-rated taxable and tax-exempt obligations, respectively. During 2000, 2001, and 2002, the weighted-average, effective interest rate was 7.5%, 5.3%, and 3.3% per year, including letter-of-credit and other fees.

The terms of the bond issuance provide for monthly, interest-only payments and a single repayment of principal at the end of the twenty-year life of the bonds. However, under our agreement with our bank, we are making monthly payments to an escrow account to provide for an annual prepayment of principal. As of December 31, 2002, we had restricted funds relating to the bonds of $1.0 million, which consisted of our monthly payments to an escrow account plus interest earned on the balance of the escrow account.

To provide credit support for this arrangement, we have given a first mortgage on land, building, improvements, and certain equipment to our bank. The net book value of the pledged assets was $7.6 million as of December 31, 2002. We have also agreed to maintain a minimum required cash and short-term investments balance of at least two times the outstanding loan balance. If we fail to comply with this covenant, we are required to deposit with the lender cash collateral up to, but not more than, the loan's unpaid balance. At December 31, 2002, we were required to maintain $10.2 million of cash and short-term investments.

Equipment Loan

During 2002, we borrowed $2.3 million secured by laboratory equipment, which had a book value of $2.3 million as of December 31, 2002. We are required to make monthly principal and interest payments at an annual rate of 8% over a three-year period ending January 2006.

Capital Lease Obligation

In November 2002, we entered into a capital lease obligation for computer equipment that had a book value of $50,000. 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.

NOTE 7. ACCRUED EXPENSES

Accrued expenses consisted of the following (in thousands):

December 31,	2001	2002
Accrued property and equipment	$ 1,800	$ 102
Accrued outside research expenses	286	573
Accrued professional fees	340	500
Accrued employee relocation	–	315
Accrued other expenses	418	390
	$ 2,844	$ 1,880

NOTE 8. STOCKHOLDERS' EQUITY

Common Stock

In February 2003, we sold approximately 2.9 million shares of common stock in a private placement to a group of institutional and individual investors at a price of $6.00 per share, generating net proceeds of approximately $16.3 million.

In March 2000, we offered and sold 2.3 million shares of our common stock at a public offering price of $32.00 per share. Our net proceeds from the offering after the payment of underwriting fees and offering expenses were approximately $68.6 million.

In June 1999, we sold 1.5 million shares of common stock in a private placement to a group of institutional and individual investors at a price of $9.50 per share, generating net proceeds of approximately $13.4 million. In January 1999, we sold 286,097 shares of common stock to Johnson & Johnson Development Corporation at a price of $13.98 per share, generating net proceeds of $4.0 million.

In January 1997, we sold 1,250,000 shares of common stock in a public offering at a price of $17.50 per share. Our net proceeds from this offering after the payment of placement fees and offering expenses were approximately $20.3 million.

Our initial public offering closed in February 1996. We sold 2,587,500 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 approximately $29.1 million. In connection with this offering, all outstanding shares of Series A, C, D, E, and F Convertible Preferred Stock converted into 2,410,702 shares of common stock.

NOTES TO FINANCIAL STATEMENTS *continued*

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 9. COMPENSATION PLANS

Stock Option Plans

We have three stock option plans, the 1991, 1992, and 1995 Stock Option Plans, under which a total of 5,051,666 shares of common stock have been reserved. In addition, we granted nonqualified stock options outside of these plans in 1995 to two consultants to purchase an aggregate of 69,998 shares and in 2002 to our Chief Executive Officer and President to purchase 487,520 shares. The 1995 Stock Option Plan, which incorporates the two predecessor plans, provides for the granting of both incentive stock options and nonqualified stock options to our employees, officers, directors, and consultants. In addition, the plan allows us to issue shares of common stock directly either through the immediate purchase of shares or as a bonus tied to either an individual's performance or our attainment of prescribed milestones. Incentive stock options may not be granted at an exercise price less than the fair market value on the date of grant. In addition, the plan includes stock appreciation rights to be granted at our discretion. The stock options are exercisable over a period, which may not exceed ten years from the date of grant, determined by our board of directors. A summary of the status of stock options as of December 31, 2000, 2001, 2002, and changes during each of the years then ended, is presented below:

	2000		2001		2002	
	Number Outstanding	Weighted-Average Exercise Price Per Share	Number Outstanding	Weighted-Average Exercise Price Per Share	Number Outstanding	Weighted-Average Exercise Price Per Share
Balance as of January 1	2,152,037	$ 12.41	2,506,901	$ 16.61	3,112,256	$ 20.39
Granted	616,140	28.94	789,035	32.48	1,588,721	16.92
Exercised	(247,501)	11.06	(79,055)	11.28	(209,307)	7.42
Canceled	(13,775)	12.89	(104,625)	27.98	(164,801)	22.49
Balance as of December 31	2,506,901	$ 16.61	3,112,256	$ 20.39	4,326,869	$ 19.66
Options exercisable as of December 31	1,412,499	$ 12.29	1,782,271	$ 14.86	2,041,726	$ 17.86

The following table summarizes information about stock options outstanding as of December 31, 2002:

	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
$ 0.90 – $ 5.70	129,342	2.7	$ 3.16	129,342	$ 3.16
$ 6.06 – $ 10.47	964,969	9.0	$ 8.45	184,028	$ 9.18
$ 10.62 – $ 15.13	1,193,285	5.7	$ 13.35	957,241	$ 13.82
$ 15.25 – $ 27.40	427,898	6.3	$ 20.60	288,023	$ 19.30
$ 28.06 – $ 41.13	1,611,375	8.7	$ 32.13	483,092	$ 32.26
	4,326,869	7.5	$ 19.66	2,041,726	$ 17.86

Fair Value Disclosures

We have elected to adopt only the disclosure provisions of SFAS 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 $70,000, $125,000, and $171,000 of compensation expense related to employee stock options for the years ended December 31, 2000, 2001, and 2002, respectively. In addition, we recorded approximately $0.8 million and $1.6 million of expense related to the modification of certain stock options to former employees for the years ended December 31, 2001 and 2002. See Note 11 for a description of severance expense.

The weighted-average fair value of options granted in 2000, 2001, and 2002 was $17.49, $22.55, and $12.81, respectively. The fair value of each option grant was estimated on the date of grant using the Black-Scholes option-pricing model. We used the following weighted-average assumptions for 2000, 2001, and 2002 grants, respectively: risk-free interest rate of 4.7%, 4.9%, and 4.2%; expected life of 4.3, 6.1, and 6.7 years; volatility of 75%, 75%, and 80%; and a dividend yield of zero. The weighted-average fair value of employee purchase rights granted under our employee stock purchase plan (see below) in 2000, 2001, and 2002 was $8.45, $11.60, and $15.37, respectively. The fair value of the purchase rights was estimated using the Black-Scholes model with the following weighted-average assumptions for 2000, 2001, and 2002, respectively: risk-free interest rate of 5.0%, 4.6%, and 2.9%; expected life of 14, 16, and 17 months; volatility of 70%, 75%, and 80%; and a dividend yield of zero.

A summary of options granted at exercise prices equal to, greater than, and less than the market price on the date of grant is presented below:

Year Ended December 31,	2000	2001	2002
Exercise Price = Market Value			
Options granted	608,900	610,400	1,578,800
Weighted-average exercise price	$ 29.27	$ 30.96	$ 16.98
Weighted-average fair value	$ 17.56	$ 21.29	$ 12.79
Exercise Price > Market Value			
Options granted	–	–	–
Weighted-average exercise price	$ –	$ –	$ –
Weighted-average fair value	$ –	$ –	$ –
Exercise Price < Market Value			
Options granted	7,240	178,635	9,921
Weighted-average exercise price	$ 4.83	$ 37.67	$ 6.00
Weighted-average fair value	$ 11.54	$ 26.85	$ 15.46

Non-employee Stock Options

During the years ended December 31, 2000 and 2001, we recognized approximately $1.0 million and $463,000 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 approximately $0.6 million 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 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 150,000 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. 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;
- 1,000 shares per purchase; or
- the number of shares per year that does not exceed the quotient of $25,000 divided by the market price per share on the employee's entry date into the offering period.

A total of 35,163 shares of common stock remained available for issuance under the ESPP as of December 31, 2002. The total purchases of common stock under the ESPP during the years ended December 31, 2000, 2001, and 2002, were 10,990 shares at a total purchase price of approximately $0.2 million, 17,790 shares at a total purchase price of approximately $0.3 million, and 32,149 shares at a total purchase price of approximately $0.4 million, respectively. We have not recorded any compensation expense for the ESPP.

401(k) Plan

We maintain a 401(k) Savings Plan (401(k) Plan) for our employees. Employee contributions are voluntary and are determined on an individual basis, with a maximum annual amount equal to the lesser of the maximum amount allowable under federal income tax regulations or 15% of the participant's compensation. We match employee contributions up to specified limits. We contributed $113,000, $149,000, and $176,000 to the 401(k) Plan for the years ended December 31, 2000, 2001, and 2002, respectively.

NOTES TO FINANCIAL STATEMENTS *continued*

NOTE 10. REVENUES FROM COLLABORATIVE AGREEMENTS

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: up-front fees, research and development funding, milestone revenues, and royalties on product sales. The amount of revenues from collaborators that accounted for at least 10% of our collaborative revenues in each of the years ended December 31, 2000, 2001, and 2002 are listed in the following table (in thousands):

Year Ended December 31,	2000	2001	2002
Bristol-Myers	$ 3,320	$ –	$ –
Wyeth	1,167	1,167	4,472
Other collaborators	113	99	341
	$ 4,600	$ 1,266	$ 4,813

During 2002, we recognized $3.8 million related to one of our Wyeth collaborations, which was terminated in September 2002. Of this amount, $1.0 million was non-cash, and represented the recognition of a $1.0 million up-front fee, which we received from Wyeth in December 2001. As required under SAB 101, we deferred the up-front fee and began to amortize this amount as revenue over the expected performance period of the related Wyeth agreement.

NOTE 11. SEVERANCE EXPENSE

We incurred severance expense of approximately $0.9 million and $2.7 million during the years ended December 31, 2001 and 2002, respectively, in connection with the separation of employees from Neose. For 2002, approximately $0.6 million was paid during 2002, approximately $0.5 million is reflected in accrued compensation and other liabilities in our balance sheet as of December 31, 2002 and will be paid through December 2006, and approximately $1.6 million was a non-cash charge related to the modification of stock options. For 2001, $82,000 was paid during the year and approximately $0.8 million was a non-cash charge related to the modifications of stock options.

In March 2002, we entered into a Separation and Consulting Agreement with our former Chief Executive Officer. Under this agreement, we agreed to provide medical benefits to Dr. Roth and to pay him $39,622 per month for twelve months. During 2002, we recorded severance expense related to this agreement of $309,000, which represented the present value of his future benefit payments. On or before the first anniversary of the agreement, Dr. Roth may agree to extend his non-competition and non-solicitation commitments for two additional years by entering into a separate non-competition agreement. If he does so, we will continue his medical benefits for an additional six months, extend the monthly payment of $39,622 for 24 additional months, and continue his stock option vesting and exercisability during the additional two-year period. If Dr. Roth enters into the separate non-competition agreement, we will record a liability in the amount of the present value of the future payments and a corresponding asset for the value of the non-competition commitment. The asset would be amortized over the two-year term of the agreement.

In January 2002, we entered into a retirement agreement with our Vice President, Research. Under the agreement, he terminated his employment effective June 30, 2002. We have committed to pay a retirement benefit over a five-year period. We will continue to provide Dr. McGuire health insurance benefits through December 31, 2003. During 2002, we recorded severance expense related to this agreement of approximately $0.5 million, which represented the present value of his future retirement benefit. In addition, we extended the period during which he may exercise his stock options and recorded a non-cash severance charge of approximately $1.6 million associated with this option modification.

NOTE 12. OTHER INCOME

In 2000, we invested approximately $0.6 million 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 expense in the statement of operations for 2000 due to uncertainty regarding realizability. In March 2001, Novazyme committed to pay us approximately $1.7 million in November 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 $1.7 million due to uncertainty regarding the fair value of the note, thereby reducing our cost basis to zero. In September 2001, Genzyme General acquired Novazyme. As a result, 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 approximately $6.1 million, which has been reflected as other income in our statement of operations. Genzyme also assumed Novazyme's obligation to pay us approximately $1.7 million. In November 2002, Genzyme paid us $1.7 million, which resulted in the recognition of a gain that has been reflected as other income in our statement of operations.

NOTE 13. COMMITMENTS

Leases

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. In July 2001, we entered into a lease agreement for approximately 5,000 square feet of office and warehouse

space in Pennsylvania. The lease term expires in December 2004. In February 2002, we entered into a lease agreement for approximately 40,000 square feet of laboratory and office space in Pennsylvania. Our facility rental expense for the years ended December 31, 2000, 2001, and 2002 was approximately $112,000, $248,000, and $583,000, respectively. Minimum future annual payments under our operating lease agreements as of December 31, 2002 were as follows (in thousands): 2003–$761; 2004–$782; 2005–$756; 2006–$519; 2007–$445; and thereafter–$7,602.

License Agreements

We have entered into agreements with various entities under which we have been granted licenses to use patent rights and technology. Typically, these agreements will terminate upon the expiration of the applicable patent rights, and require us to reimburse the licensor for fees related to the acquisition and maintenance of the patents licensed to us. In addition, we usually are required to pay royalties to the licensor based either on sales of applicable products by us or specified license fees, milestone fees, and royalties received by us from sublicensees, or both.

NOTE 14. INCOME TAXES

As of December 31, 2002, we had net operating loss carryforwards for federal and state income tax purposes of approximately $11.7 million and $7.0 million, respectively. In addition, we had federal research and development credit carryforwards of approximately $3.2 million. All of these carryforwards begin to expire in 2004. Approximately $8.1 million of the federal net operating loss carryforwards result from tax deductions related to equity-based compensation, which is considered a capital contribution, and not a tax benefit, for financial reporting purposes. 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 this tax benefit. In addition, pursuant to the Tax Reform Act of 1986, the annual utilization of our net operating loss carryforwards will be limited. We do not believe that these limitations will have a material adverse impact on the utilization of our net operating loss carryforwards. The approximate income tax effect of each type of temporary difference and carryforward is as follows (in thousands):

December 31,	2001	2002
Benefit of net operating loss carryforwards	$ 1,141	$ 1,388
Research and development credit carryforwards	2,686	3,217
Capitalized research and development	14,532	17,796
Start-up costs	11,906	15,827
Depreciation and amortization	3,485	5,410
Deferred compensation	1,494	1,978
Accrued expenses not currently deductible	182	534
Deferred revenue	56	102
	35,482	46,252
Valuation allowance	(35,482)	(46,252)
	$ –	$ –

NOTE 15. 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. In 1999, we reduced the carrying value of our initial investment in the joint venture of $345,000 to zero to reflect our share of the joint venture's losses. We recorded this amount as research and development expense in our statement of operations. We will record our share of post-1999 losses of the joint venture only to the extent of our actual or committed investment in the joint venture.

The joint venture developed a process for making fructooligosaccharides and constructed a pilot facility in Athens, Georgia. In 2001, the joint venture closed the pilot facility and is exploring establishing a manufacturing arrangement with a third party to produce this or other bulking agents. As a result, we do not intend to commit the joint venture to make any further investments in facilities.

For the year ended December 31, 2002, the joint venture had a net loss and a loss from continuing operations of approximately $406,000. The joint venture had no revenues during 2002. As of December 31, 2002, the joint venture had no assets, $150,000 of current liabilities, and $8.5 million noncurrent liabilities, which consisted of amounts owed to McNeil Nutritionals.

During the years ended December 31, 2000, 2001, and 2002, we supplied to the joint venture research and development services and supplies, which cost approximately $1.6 million, $0.8 million, and $252,000, respectively, which were reimbursed to us by the joint venture. These amounts have been reflected as a reduction of research and development expense in our statements of operations. As of December 31, 2002, the joint venture owed us approximately $16,000. We expect to provide fewer research and development services during 2003 compared to 2002, thereby reducing our expected reimbursement from the joint venture.

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, 2002, the joint venture had an accumulated loss since inception of approximately $10.2 million. 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. As of December 31, 2002, the joint venture owed McNeil Nutritionals approximately $8.5 million.

BOARD OF DIRECTORS
CORPORATE GOVERNANCE PRINCIPLES

As adopted 12-12-02

The following are the corporate governance principles and practices of the Board of Directors.

I. STATEMENT ON CORPORATE GOVERNANCE

The corporate governance standards established by the Board provide a structure within which directors and management can effectively pursue the Company's objectives for the benefit of its stockholders. The Company's business is managed under the direction of the Board of Directors, with the Board delegating the conduct of business to the Chief Executive Officer and other members of the management team. The principal functions of the Board are to:

- Select and evaluate the Chief Executive Officer.
- Establish the Company's strategic direction.
- Monitor the Company's performance.
- Approve management compensation plans and programs.
- Advise and counsel management.
- Review succession planning.
- Review the structure and operation of the Board.
- Promote stockholder value.

II. BOARD STRUCTURE

A. Board Size and Composition

The Company's Certificate of Incorporation provides for the annual election of directors. The Board, on the recommendation of the Corporate Governance Committee, will annually evaluate and determine the appropriate size and composition of the Board.

B. Board Independence

1. **Number of Independent Directors.** The Board believes that as a matter of policy at least two-thirds of the directors should be independent.
2. **Definition of Independent Director.** No director shall qualify as "independent" unless the Board has affirmatively determined that the director has no material relationship with the Company (either directly, or as a partner, stockholder or officer of an organization that has such a relationship with the Company). When making these determinations, the Board should consider all relevant facts and circumstances, and all such determinations made by the Board, along with the bases therefor, shall be publicly disclosed in the Company's annual proxy statement. When assessing the materiality of a director's relationship with the Company, the Board should consider the issue not merely from the standpoint of the director, but also from that of persons or organizations with which the director has an affiliation. The following persons shall not, under any circumstances, be determined by the Board to be independent:
   a. A director who is a former employee of the Company and whose employment with the Company ended less than 5 years prior to the date of the determination.
   b. A director who is, or in the past 5 years has been, affiliated with or employed by a present or former (i.e., within the past five years) auditor of the Company or of an affiliate of the Company.
   c. A director who is, or in the past 5 years has been, part of an interlocking directorate whereby an executive officer of the Company serves on the compensation committee of another company that employs the director.
   d. A director who has an immediate family member who falls into, or in the past 5 years has fallen into, any of the preceding three categories.

   In addition, for purposes of eligibility to serve on the Audit Committee, no director shall qualify as "independent" unless director fees, including fees for service on committees of the Board, are the only compensation paid to the director by the Company. Disallowed compensation for a member of the Audit Committee would include fees paid directly or indirectly for services as a consultant or legal or financial advisor to the director or the director's firm.
3. **Conflict of Interest.** Directors will disclose any business relationships with the Company or any other potential conflicts of interest as they become aware of them, and will update annually their responses to the Directors and Officers Questionnaire. Under the Board's conflict of interest policy, directors may not enter into a transaction or other business dealings with the Company without first disclosing the transaction and obtaining advance approval by the Board. The director must recuse himself or herself from Board consideration and decision on any such transaction.
4. **Separation of Chairman and Chief Executive Officer.** The bylaws of the Company permit the roles of Chairman and Chief Executive Officer to be performed by the same individual. As a matter of policy, the Board believes that separation of these functions is not required, and whether to combine the roles, or not, is solely a matter of the Board's discretion, considering the circumstances and the individual or individuals in question.

C. Committee Structure

1. **Number of Committees.** There are three standing committees of the Board: Audit, Compensation, and Corporate Governance. Additional standing committees may be created, on the recommendation of the Corporate Governance Committee, by resolution of the Board.
2. **Independent Members.** The Audit, Compensation and Corporate Governance Committees are comprised solely of independent directors.
3. **Assignment of Committee Members.**
   a. Composition of Committees. The Corporate Governance Committee annually assesses the appropriate size and composition of the Board committees and recommends to the Board any changes in committee assignments. Committee assignments may be periodically changed to broaden the directors' knowledge of the Company's business and to take fullest advantage of the breadth of directors' expertise. While rotating committee assignments should be considered periodically, committee rotation is not mandatory, since the Board believes there are significant benefits attributable to continuity, experience gained in service on particular committees, and utilizing most effectively the individual talents of Board members.
   b. Special requirement for Audit Committee. The Audit Committee shall be composed of at least three members, all of whom are financially literate, or become so within a reasonable period of the date of their appointment to the committee. For purposes of this guideline, "financial literacy" shall mean familiarity with the Company's financial statements, including its balance sheet, income statement and cash flow statement, and general knowledge of key business and financial risks and related controls or control processes. Such knowledge may be acquired after appointment to the committee through review of educational materials or other resources. In addition, at least one member of the Audit Committee will have accounting or related financial management expertise, which shall mean a solid background in finance, accounting or auditing, acquired through past employment experience, professional training, or any other comparable experience that results in the individual's financial sophistication.

III. DIRECTOR SELECTION AND EVALUATION

A. Board Membership Criteria

Candidates nominated for election or reelection to the Board should possess the following qualifications:

- Highest personal and professional ethics, integrity and values;
- An inquiring and independent mind;
- Practical wisdom and mature judgment;
- Broad training and experience at the policy making level in business, government, education or technology;
- Expertise that is useful to the Company and complementary to the background and experience of other Board members, so that an optimum balance of expertise among members on the Board can be achieved and maintained;
- Willingness to devote the required amount of time to carrying out the duties and responsibilities of Board membership;
- Commitment to serve on the Board over a period of years to develop knowledge about the Company's operations; and
- Involvement only in activities or interests that do not create a conflict with the director's responsibilities to the Company and its stockholders.

The Corporate Governance Committee determines the appropriate mix of skills and characteristics required to best fill the needs of the Board at a given point in time and periodically reviews and updates the criteria as deemed necessary.

B. Procedure for Selecting Nominees

Each year the Corporate Governance Committee considers the needs of the Board, reviews the performance of the board and recommends a slate of director candidates to nominate for election at the annual meeting of stockholders. The Corporate Governance Committee may consider candidates proposed before the meeting by stockholders, but has the sole discretion to recommend a slate of candidates for the Board's approval. Directors are elected by stockholder vote at the annual meeting of stockholders. Between annual meetings, the Board may elect directors to fill vacancies.

C. Criteria and Procedure for Evaluating Individual Director Performance

The Corporate Governance Committee oversees the process of evaluating the performance of individual directors, Board committees and the Board as a whole. Each committee conducts an annual self-assessment of its performance. The Corporate Governance Committee reviews the self-assessments and reports its findings and recommendations to the Board. The Corporate Governance Committee conducts an annual assessment of the effectiveness of the full Board. The Corporate Governance Committee evaluates periodically the performance of individual directors.

BOARD OF DIRECTORS
CORPORATE GOVERNANCE PRINCIPLES *continued*

D. Orientation and Continuing Education

It shall be the responsibility of the Corporate Governance Committee to ensure an orientation and continuing education for all directors.

E. Limits on Other Board Memberships

The Corporate Governance Committee considers whether a potential candidate for director has the time available, in light of other business and personal commitments, to perform the responsibilities required for effective service on the Board. After election to the Board, it is expected that a director will notify the Chairman of the Corporate Governance Committee prior to joining another corporate board and will discuss with the Chairman any potential conflict of interest that may arise. Among the criteria used in evaluating director performance is whether the director is prepared for meetings and spends the time required for effective service to the Board. In light of this, the Board does not believe that it is necessary to establish any limit on the number of other boards on which a director may serve.

IV. BOARD OPERATIONS

A. Director Compensation

The Corporate Governance Committee considers and recommends to the Board the appropriate structure and amount of director compensation. Employee directors receive no compensation, other than their normal salary, for serving on the Board or its committees.

B. Stock Ownership

To enhance the alignment of interests of Directors with interests of stockholders, the Board encourages Directors to own common shares of the Company.

C. Meetings

The Corporate Governance Committee considers and makes recommendations on the number of regular meetings of the Board. Directors are expected to attend regularly Board meetings and meetings held each year by committees on which the directors sit. In addition to the foregoing, the non-management directors of the Company shall meet at regularly scheduled executive sessions without management, to be presided over by the Chair of the Corporate Governance Committee.

D. Agendas and Advance Distribution of Meeting Materials

The Chairman typically establishes the agenda for each Board meeting and arranges for distribution of copies of the preliminary agenda sufficiently in advance of the meeting to assure directors are apprised of the principal matters to be considered. Each director is free to suggest additional items for the agenda and to raise at any regular meeting subjects for discussion that are not on the agenda.

Information and data that are important to the Board's understanding of the business and of matters to be considered at the meeting are distributed for review at least three business days prior to the meeting, unless circumstances require a later distribution. Sensitive matters may be discussed at the meeting without the prior distribution of written materials. For convenience, the agenda and materials may be distributed again at the meeting along with any materials which could not be sent in advance.

E. Board Access to Senior Management

Board members may, in their discretion, have access to management. Board members are generally expected to coordinate direct contact with management through the Chief Executive Officer. At the invitation of the Board, senior management may attend and make presentations at meetings of the full Board, and at such committee meetings as the chairs of the committees request.

F. Information About Developments

The Chief Executive Officer keeps the Board apprised of new developments between regular meetings of the Board.

G. Corporate Spokesperson

The Board believes that executive management should speak for the Company. Individual directors may, from time to time, meet or otherwise communicate with various constituencies that are involved with the Company, but it is expected that Board members would do this with knowledge of management, and in most cases, at the request of management. Board members shall refer any requests for public comment to the Chief Executive Officer.

V. COMMITTEE OPERATIONS

A. Committee Charters

All standing committees have charters outlining their duties and responsibilities which have been approved by the Board. The committees review the charters on an annual basis and recommend to the Board any necessary revisions.

B. Committee Meetings and Agenda

The schedule of regular meetings of each committee, and a forward agenda of regularly recurring items to be considered by the committee, are established on an annual basis when the calendar for Board meetings is developed. The chair of each committee, in consultation with appropriate members of management, has the authority to place additional items on the agenda, and to schedule ad hoc or special meetings of the committee, subject to the requirements of notice and quorum.

C. Committee Reports

Each committee chair reports to the full Board, at the next meeting of the Board following the committee meeting, with respect to matters considered and actions taken by the committee.

D. Committee Attendance by Chairman and Chief Executive Officer

The Chairman and the Chief Executive Officer may attend the meeting of any committee, even if they are not members of the committee, except when (1) the Committee is meeting in executive session and (2) the non-management directors are meeting as described in Section IV.C above.

VI. MANAGEMENT OVERSIGHT

A. Executive Compensation

The Compensation Committee is responsible for administering executive compensation programs, policies and practices. The Compensation Committee may use the services of an outside consultant to assist it in evaluating executive compensation levels compared to peers in general industry. The Compensation Committee shall set the compensation of the Chief Executive Officer and shall approve the compensation of senior executives upon the recommendation of the Chief Executive Officer.

B. Executive Stock Ownership

To enhance the alignment of interests of executives with interests of stockholders, the board encourages executives to own common shares of the company.

C. Chief Executive Officer Evaluation

The Chief Executive Officer shall submit an annual self-assessment of his performance to the Chairman of the Compensation Committee for submission to the full Board. The Compensation Committee coordinates the Board's role in establishing performance criteria for the Chief Executive Officer and evaluates the Chief Executive Officer's performance annually.

D. Succession Planning

The Compensation Committee shall have the responsibility of assessing succession planning for management and leadership of the Company.

VII. DISCLOSURE OF PRINCIPLES AND COMMITTEE CHARTERS

These Corporate Governance Principles, and the charters of each of the Board's standing committees, shall be published on the Company's website and made available in print to any stockholder upon request. The Company's annual report shall contain a statement to the effect of the foregoing sentence.

VIII. ANNUAL SELF-EVALUATION

The Board shall conduct annually a self-evaluation to determine whether it and its committees are functioning effectively.

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 21, 2003, there were approximately 200 holders of record and 3500 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, 2001	High	Low
First Quarter	$44.38	$22.38
Second Quarter	46.97	23.25
Third Quarter	47.42	30.15
Fourth Quarter	41.81	27.31

Year Ended December 31, 2002	High	Low
First Quarter	$37.30	$29.80
Second Quarter	32.58	9.07
Third Quarter	11.06	6.41
Fourth Quarter	14.00	5.90

CORPORATE HEADQUARTERS

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info@neose.com E-mail

CORPORATE WEB SITE

www.neose.com

ANNUAL MEETING

The annual meeting of shareholders will be held at 9:00 a.m. on Tuesday, May 13, 2003 at our corporate headquarters.

OUTSIDE GENERAL COUNSEL

Pepper Hamilton LLP
Philadelphia, PA

INDEPENDENT AUDITORS

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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TRANSFER AGENT & REGISTRAR

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40 Wall Street
New York, NY 10005
212-936-5100

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.

Design: Creative Strategy Group, Inc. | csg-design.com Printing: Innovation Printing & Lithography, Inc.

CORPORATE INFORMATION

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David A. Zopf, M.D.
Executive Vice President

Robert I. Kriebel
Sr. Vice President and Chief Financial Officer

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

George J. Vergis, Ph.D.
Sr. Vice President, Business and Commercial Development

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

A. Brian Davis
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Marjorie A. Hurley, Pharm.D.
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Chester A. Meyers, Ph.D.
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Wendy L. Nagy
Vice President and Associate General Counsel

W. Kevin Pelin
Vice President, Manufacturing Operations

BOARD OF DIRECTORS

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Chairman of the Board

C. Boyd Clarke
President and Chief Executive Officer
Neose Technologies, Inc.

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.

P. Sherrill Neff
Managing Partner
Quaker BioVentures, L.P.

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

Lowell E. Sears
Chairman and CEO
Sears Capital Management

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

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