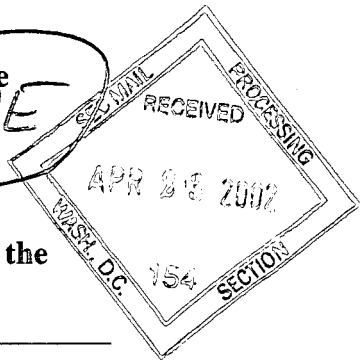
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K



☒ **Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.**

For the fiscal year ended December 31, 2001,

OR

☐ **Transition Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the transition period from _____ to _____

Commission File Number 000-24537

DYAX CORP.

(Exact name of Company as specified in its charter)

Delaware	**04-3053198**
(State of Incorporation)	(IRS Employer Identification No.)

300 Technology Square, Cambridge, Massachusetts 02139
(Address of principal executive offices and zip code)

Company's telephone number, including area code: **(617) 250-5500**

Securities registered pursuant to Section 12(b) of the Act:	**None**
Securities registered pursuant to Section 12(g) of the Act:	**Common Stock, $.01 Par Value**
	(Title of Class)

Indicate by checkmark whether the Company (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Company was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by checkmark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Company's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

The aggregate market value of the Company's common stock held by nonaffiliates of the Company as of March 25, 2002, based on the last reported sale price of the Company's common stock on The Nasdaq National Market as of the close of business on that day, was $64,381,724. The number of shares outstanding of the Company's Common Stock, $.01 Par Value, as of March 25, 2002, was 19,579,489.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company's Definitive Proxy Statement for its 2002 Annual Meeting of Shareholders to be held on May 16, 2002, which Definitive Proxy Statement will be filed with the Securities and Exchange Commission not later than 120 days after the Company's fiscal year-end of December 31, 2001, are incorporated by reference into Part III of this Form 10-K.

ANNUAL REPORT ON FORM 10-K
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PART I

ITEM 1. BUSINESS

This Annual Report on Form 10-K contains forward-looking statements, including statements regarding our results of operations, research and development programs, clinical trials and collaborations. Statements that are not historical facts are based on our current expectations, beliefs, assumptions, estimates, forecasts and projections for our business and the industry and markets in which we compete. The statements contained in this report are not guarantees of future performance and involve certain risks, uncertainties and assumptions, which are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed in such forward-looking statements. Important factors which may affect future operating results, research and development programs, clinical trials and collaborations include, without limitation, those set forth in Exhibit 99.1 "Important Factors That May Affect Future Operations and Results" to this Form 10-K, which is incorporated into this item by this reference.

Overview

We are a biopharmaceutical company principally focused on the discovery, development and commercialization of therapeutic products. Two of our product candidates are in early stage clinical trials and we are preparing to begin clinical trials for one of these candidates in a second indication. We also have a number of other research and development programs. Our focus is on protein, peptide and antibody-based drugs. We use a proprietary and patented method, known as phage display, to identify a broad range of compounds with potential for the treatment of various diseases. We are using phage display technology to build a broad portfolio of product candidates that we plan to develop and commercialize either ourselves or with others. We believe that our phage display technology can assist in rapidly and cost-effectively determining the potential medical uses of newly discovered proteins and genes and facilitate subsequent discovery of biopharmaceutical product candidates. Given the quantity of genetic information made available by the mapping of the human genome, we believe that the advantages of our technology over other technologies should increase in importance. We believe that phage display can have the greatest potential impact on our business through our discovery of proprietary biopharmaceuticals.

Although we will continue to seek collaborators to co-develop the product candidates in our portfolio, we expect to fund a substantial portion of such development ourselves. We plan to continue to invest substantially in programs using our phage display technology to discover new product candidates. We have accumulated losses since inception as we have invested in our businesses. We seek to offset some of our development costs by generating a combination of revenue from the partnering of our portfolio of product candidates, through our non-core activities that include funded research for others in separations and diagnostic imaging, and the licensing of our phage display patents, as well as a greater market penetration for our chromatography products. We do not expect to generate significant profits until therapeutic products from our development portfolio reach the market. Obtaining regulatory approvals to market therapeutic products is a long and arduous process. We cannot currently predict when, if ever, we will obtain such approvals.

On behalf of collaborators, we also use phage display technology to identify compounds that can be used in therapeutics, diagnostic imaging, the development of research reagents, and in purifying and manufacturing biopharmaceuticals and chemicals. We are further leveraging our phage display technology through collaborations and licenses that are structured to generate revenues through research funding, license fees, technical and clinical milestone payments and royalties.

Through our Biotage subsidiary we develop, manufacture and sell chromatography separations systems and products that are used in laboratories and pharmaceutical manufacturing to separate molecules in liquid mixtures. We are a leading developer, manufacturer and supplier of chromatography

separations systems that use disposable cartridges to separate and thereby purify pharmaceuticals being produced for research or clinical development.

Background

Traditional drug discovery has relied on screening thousands of potential biopharmaceutical candidates one at a time. With the advent of modern biology, scientists were better able to identify an individual target and the role that it played in a specific disease. Until recently, however, identifying and isolating the genetic basis of targets was a laborious and time-consuming process. Scientists were limited to several hundred identified human genes and their encoded proteins to use as targets out of the estimated 30,000 total human genes.

Recent improvements in life science research tools and significant investments of financial and scientific resources have greatly accelerated the identification of human genetic sequence information. Scientists now know the identity of most of the genes in the human genome. However, with few exceptions, scientists do not understand the function of an individual gene in health and disease.

Furthermore, traditional approaches to identifying the genes that cause a disease and screening drug candidate compounds that positively affect the disease are too time consuming to effectively evaluate the large number of newly identified human genes. The mapping of the human genome has created a significant potential role for technologies that can facilitate the following:

- *Target validation.* The first step in the discovery and development of a biopharmaceutical is to identify a molecular target that is involved in a disease. The binding of a molecule to another molecule, or target, is the mechanism nature uses to modulate biochemical and physiological processes such as cellular growth, differentiation, metabolism or death. When scientists demonstrate that the presence or absence of the target is correlated to a disease state, they conclude that they have validated the target.
- *Discovery of Biopharmaceutical Leads.* Once scientists identify and validate a disease target, they search for a compound that will bind to this target to achieve a desired effect. In order for a binding compound to be considered a promising biopharmaceutical product candidate, it must have a high degree of specificity, which means it must be able to distinguish between the correct target and other closely related molecules. For maximal effectiveness, the compound must bind tightly to the target under appropriate physiological conditions. The binding strength of a molecule for its target is referred to as affinity. To a great extent, the safety and efficacy of a biopharmaceutical product depends on its affinity and specificity of the therapeutic for the disease target. Scientists use several drug discovery technologies to identify product candidates, known as leads, with appropriate affinity and specificity.

New technologies are required to validate targets rapidly and discover biopharmaceutical leads with appropriate specificity and affinity. We believe that phage display offers significant advantages over other technologies for addressing these challenges.

Other Drug Discovery Technologies

Scientists use several technologies to address the need for rapid drug discovery, including combinatorial chemistry, single target high throughput screening and hybridoma technology. These technologies play important, though specific, roles in accelerating the productivity and effectiveness of drug discovery and are likely to continue to be used into the foreseeable future.

Combinatorial Chemistry. Combinatorial chemistry involves the creation of large collections of chemical compounds for identifying leads. Combinatorial chemistry has made possible the synthesis of up to millions of molecules in a shorter period of time than previously possible. Over the last decade, the field of combinatorial chemistry has been augmented by computational approaches to facilitate

molecular design and synthesis. While both combinatorial chemistry and computational approaches are useful in drug discovery, they are limited by several significant factors:

- libraries of these compounds are expensive to produce and screen;
- library compounds and costly biological reagents are consumed during the screening process; and
- initial leads rarely have the requisite affinity, purity or specificity and therefore require time-consuming and expensive optimization procedures.

Target High Throughput Screening. High throughput screening is a highly automated method used to test large populations of potential drug candidates for activity against a single target. Typically, scientists use automated equipment to add the target to tens of thousands of miniaturized testing vessels, each containing a different compound, to identify those compounds that bind to the target. Scientists then optimize these binding compounds one-step at a time using an iterative design and synthesis and testing regimens to achieve the desired binding affinity and specificity for the target. This process has produced several drug candidates based upon the rapid screening of well-known genetic targets. While this process was acceptable when targets were discovered one at a time, its usefulness is limited now that thousands of potential targets are available.

Hybridoma Technology. Antibodies are part of the body's principal defense mechanism against disease-causing organisms. Antibodies recognize and bind to a specific target referred to as an antigen. When bound to a target the antibody triggers physiological processes that protect humans against disease. The antibodies that are produced naturally consist of a mixture of molecules having varying affinities and specificities for the target. Hybridoma technology allows the production of a homogenous antibody preparation capable of binding a specific portion of a target with a known specificity and affinity. The resulting antibody is called a monoclonal antibody.

Historically, mice have been the source of cells that produce monoclonal antibodies that have been developed into biopharmaceutical products. Although a mouse monoclonal antibody can be produced to bind to a specific antigen, the mouse antibody contains characteristic protein sequences that tend to be recognized as foreign by the human immune system, and this may impair efficacy (due to rapid protein elimination) and/or cause life threatening allergic responses in humans. The measure of the immune response that a mouse monoclonal antibody produces in a human is known as its immunogenicity. Using new technical approaches, scientists have been able to replace most of the mouse protein sequences of a monoclonal antibody with corresponding human sequences. These new antibodies retain the target affinity and specificity of the mouse antibody but do not trigger as extensive of an immune response in humans. The new antibodies are referred to as "humanized" or "chimeric" monoclonal antibodies. More recently, scientists have specifically engineered laboratory mice to replace their mouse antibody genes with a portion of the large number of possible human antibody genes. When immunized with a purified target, these "human mice" produce fully human antibodies that bind to the target. These antibodies are called "human-mouse" antibodies.

These monoclonal antibody approaches have yielded multiple successes for antibody-based products. There are currently at least eight monoclonal antibodies approved for human therapy, and we estimate that there are over 100 other monoclonal antibodies in clinical trials. These approaches, however, are limited by several significant factors:

- they typically require at least four to six months to produce a sufficient quantity of antibody for testing;
- they are generally able to produce antibodies against only one target per test group of mice at a time;
- they are limited by the range of target candidates that the mouse immune system recognizes as foreign and to which its immune system can respond.

The abundance of potential disease targets within the human genome emphasizes the need and associated opportunity for a more rapid, high throughput, cost effective process for discovering human antibodies and other new biopharmaceutical lead compounds.

Phage Display

In the late 1980s, Dyax scientists invented phage display, a novel method to individually display up to tens of billions of peptides and proteins, including human antibodies and enzymes, on the surface of a small bacterial virus called a bacteriophage or phage. Using phage display, we are able to produce and search through large collections, or libraries, of peptides and proteins to rapidly identify those compounds that bind with high affinity and high specificity to targets of interest. We describe the technology of phage display in more detail under the caption "Dyax Technology".

Our phage display process generally consists of the following steps:

- generating one or more phage display libraries;
- screening new and existing phage display libraries to select binding compounds with high affinity and high specificity; and
- producing and evaluating the selected binding compounds.

Scientists can use phage display to improve the speed and cost effectiveness of drug discovery and optimization. Phage display offers important advantages over, and can be used synergistically to improve, other drug discovery technologies such as combinatorial chemistry, single target high throughput screening and monocolonal antibodies, which are currently employed to identify binding proteins. Over the past decade, our scientists, collaborators and licensees have applied this powerful technology to a wide range of biopharmaceutical applications. We and our collaborators and licensees are using phage display technology at many stages of the drug discovery process to identify and determine the function of novel targets and to discover biopharmaceutical leads.

Advantages of Phage Display Technology in Therapeutic Drug Discovery. We believe our phage display technology has the following advantages over other drug discovery technologies:

Diversity and Abundance. Many of our phage display libraries contain billions of potential binding compounds that are rationally-designed variations of a particular peptide or protein framework. Furthermore, we can isolate a diverse family of genes by including, for example, those that encode human antibodies. The size and diversity of our libraries significantly increase the likelihood of identifying binding compounds with high affinity and high specificity for the target. Once we generate libraries, we can reproduce them rapidly in phage and use them for an unlimited number of screenings.

Speed and Cost Effectiveness. We can construct phage display libraries in a few months and screen them in a few weeks to identify binding compounds. Conventional or combinatorial chemistry approaches require between several months and several years to complete this process. Similarly, mouse and human-mouse technologies generally require four to six months to identify an antibody. As a result, our phage display technology can significantly reduce the time and expense required to identify a protein, peptide or antibody with desired binding characteristics.

Automated Parallel Screening. In an automated format, we can apply our phage display technology to many targets simultaneously to discover specific, high-affinity proteins, including human monoclonal antibodies, for each target. In contrast, human-mouse antibody technology identifies antibodies that bind to a single target per test group of mice and is difficult to automate. Among antibody technologies, phage display is particularly well suited for functional genomic applications, due to the large number of genetic targets that need to be screened for specific antibodies.

Rapid Optimization. We screen phage display libraries to identify binding compounds with high affinity and high specificity for the desired target and can design and produce successive generations of phage display libraries to further optimize the leads. We have demonstrated between 10- and 100-fold improvement in binding affinity with second generation phage display libraries. This optimization cannot occur with humanized mouse or human-mouse antibody technologies and cannot progress as rapidly or with equivalent diversity.

Complements Other Drug Discovery Technologies. Phage display works synergistically with other drug discovery technologies, including human-mouse antibody technology and high throughput screening, to improve drug candidate screening. For example, following immunization of "human mice," we can collect the antibody genes from the mice and use them to build a phage display library for rapid screening and optimization of the antibody leads. This process allows for more rapid selection of a highly diverse population of therapeutic human antibodies. High throughput parallel screening can be used to expose multiple targets simultaneously to the diversity of proteins expressed by our phage libraries. This combination of phage display with automated, high throughput screening technology allows a multi-target approach to lead discovery that is more efficient than the traditional single-target approach. The resulting increase in discovery throughput and capacity is advantageous considering the large number of new genomic targets.

Advantages of our Phage Display Technology in Other Applications. Our phage display technology also has potentially broad applications in other areas:

Affinity Separations Products. Purification of a biopharmaceutical product is a complex, multi-step process, which can be a time-consuming step in the discovery process and is often the most expensive step in the manufacturing process. Our phage display technology is a powerful tool for developing new separations media that can be designed using small stable compounds known as ligands that have high affinity for the biopharmaceutical product. We believe that for some biopharmaceutical products this affinity purification will be more cost effective and efficient than other purification processes. Affinity purification should be particularly useful for purifying the large number of new biopharmaceutical and diagnostic leads and products resulting from advances in genomics.

Diagnostic and Imaging Products. Binding compounds are essential to most diagnostic products. Often the binding compounds that we discover for biopharmaceutical and separations targets can be used in diagnostic or imaging formats to assess therapeutic effectiveness and monitor disease progression. As biopharmaceuticals are being designed for unique gene targets, the availability of diagnostic methods to detect the relevant gene target will be essential to correctly match patients with appropriate therapy.

Research Reagents. Binding compounds are active components of many research products used in drug discovery and development, specifically to detect and analyze proteins. We are able to use our phage display technology to identify and develop antibodies that can be used in these areas, including antibodies for use in biochips and western blots for protein quantification in the field of proteomics.

Our Business Strategy

Our goal is to become a fully integrated biopharmaceutical company. We use our phage display technology to discover and develop novel products aimed at addressing unmet medical needs. We expect to maximize the value of our phage display technology primarily by pursuing internal product discovery and development programs. Our business model is designed to augment this value creation through a combination of collaborative arrangements to discover therapeutic products for others and to exploit our technology in non-core areas such as separations, diagnostic imaging and research reagents and through our patent licensing program.

The following are the principal elements of our business strategy:

- *Discover and Develop Proprietary Biopharmaceutical Products.* We have internally developed two proteins, both of which are in Phase II clinical trials in Europe. One of these product candidates is being developed and commercialized in an alliance with Genzyme and the other with Debiopharm. For one of these candidates, we are also preparing to initiate clinical trials for a second indication. We are also expanding our pipeline by identifying peptides, proteins and antibodies that may be developed as candidates for the treatment of some inflammatory diseases and cancers. We intend to identify new leads for targets that we discover or license from others. We intend to develop and commercialize these leads ourselves or through collaborative arrangements.
- *Leverage Our Technology Through Biopharmaceutical Product Collaborations.* We are leveraging our technology and maximizing our opportunities through collaborative arrangements with several biotechnology and pharmaceutical companies for the discovery and/or development of biopharmaceuticals. The goal of this strategy is to build a more diverse portfolio of product candidates and to increase our opportunities for success.
- *Leverage Our Technology By Licensing Our Phage Display Patents and Libraries.* We are further creating value from our phage display patents by licensing them to companies and institutions on a non-exclusive basis to encourage the broad application of our technology. We make some of our phage display libraries available to some of our licensees in limited fields in exchange for technology transfer payments, milestone payments and royalties. We intend to enter into additional license agreements for our phage display patents and libraries.
- *Leverage Phage Display in Non-Therapeutic Areas.* We are applying our phage display technology to develop diagnostic products for *in vivo* imaging. We have partnered the development of *in vivo* imaging products with the Bracco Group, a leader in the imaging products market. We are collaborating with BD Biosciences in the research products field and have licensed Amersham Biosciences non-exclusively in the area of separations. Through collaborative arrangements with pharmaceutical and biotechnology companies, we are identifying compounds that purify the collaborator's specific biopharmaceutical product.
- *Continue to Extend Our Intellectual Property and Technology.* We plan to continue to develop internally and to acquire technology that is complementary to our existing technology. Through our patent licensing program, we will continue to enhance our phage display technology by obtaining access to phage display improvements that our licensees develop.

Our Biopharmaceutical Programs

We are using phage display technology internally and through collaborative arrangements to discover and develop biopharmaceutical products. Our product development programs are primarily focused on inflammatory diseases and cancers.

Inflammatory Diseases

DX-890 (formerly known as EPI-HNE-4). In a number of inflammatory diseases, the body secretes an excess of the enzyme known as neutrophil elastase, or elastase. Excess elastase activity, or a decrease in the elastase inhibitor destroys lung tissue. Using phage display, we have developed a novel human neutrophil elastase inhibitor, DX-890. This inhibitor binds to elastase with high affinity and high specificity, suggesting that it may be a potent and specific treatment for lung disease mediated by elastase. Based on its biological activity, DX-890 may be effective in stopping the destruction of lung

tissue due to excess elastase activity. DX-890 may be an effective therapy in a variety of inflammatory diseases, including:

- *Cystic Fibrosis.* There are approximately 55,000 patients in the United States and Europe who suffer from cystic fibrosis. The median survival age of cystic fibrosis patients is approximately 32 years. A genetic mutation causes a number of problems including progressive lung destruction and frequent infections in these patients. Large amounts of elastase are found in the lungs of cystic fibrosis patients where it is thought to play a significant role in the disease process. The elastase directly destroys tissue and contributes to recurrent infections, a cycle of inflammation, and repeated tissue destruction. Current treatments inadequately prevent this cycle of inflammation, infection, and destruction of tissue. By blocking elastase, DX-890 may significantly prevent tissue destruction in cystic fibrosis and preserve pulmonary function.
- *Chronic Obstructive Pulmonary Diseases.* Approximately 16 million Americans suffer from chronic obstructive pulmonary diseases, which include chronic bronchitis and emphysema. Genetic mutations or inhaled irritants, including cigarette smoke, cause these diseases, which are characterized by a progressive deterioration in lung function. Over $14 billion is spent annually to treat this group of diseases, which is the fourth leading cause of death in the United States. Elastase is thought to play a role in the progressive destruction of lung tissue in these diseases. DX-890 may block elastase and retard further damage, improving the quality of life and life expectancy for these patients.
- *Alpha1 Anti-Trypsin Deficiency.* Alpha1 Anti-Trypsin, or A1AT deficiency is a genetic disease affecting nearly 100,000 patients in the United States. The role of A1AT in normal people is to modulate the effect of neutrophil elastase. A1AT is the body's natural inhibitor to neutrophil elastase and makes certain the enzyme does its job without causing excessive destruction. Patients who are genetically deficient in A1AT have lung and liver damage caused by the overactivity of neutrophil elastase. Current therapy utilizes plasma derived A1AT to supplement the low levels seen in patients with a genetic deficiency. DX-890 may be an effective replacement therapy to prevent lung damage in these patients.
- *Ulcerative Colitis.* Ulcerative colitis is an inflammatory bowel disease that affects 400,000 people in the United States. The etiology of the disease is currently unknown but these patients suffer from severe inflammation of the lower gastro-intestinal tract and often require very potent immunosuppressive therapy. Patients with ulcerative colitis are at risk for frequent bowel infections, bowel obstructions from chronic inflammation, recurrent painful and bloody diarrhea, and colonic rupture. We are determining whether DX-890 could potentially be used as a therapy for these patients.

Our collaborator Debiopharm has completed Phase I clinical trials in Europe to evaluate the safety of aerosol administration of DX-890 to healthy volunteers. A Phase II clinical trial is currently underway in Europe evaluating the safety and efficacy of DX-890 in adult cystic fibrosis patients. Additional Phase II studies in adult and pediatric cystic fibrosis patients are being planned. We will convene scientific advisory panels in the first half of 2002 to facilitate the selection of a second indication for DX-890.

Other Inflammatory Diseases or Conditions

DX-88. The enzyme kallikrein is a key component responsible for the regulation of the inflammation and coagulation pathways. Excess kallikrein activity is thought to play a role in a number of inflammatory and autoimmune diseases. Using phage display, we have developed DX-88, a high affinity, high specificity inhibitor of human kallikrein. In disease states where inhibiting kallikrein is desirable for a therapeutic effect, DX-88 may have fewer side effects and/or greater efficacy than naturally occurring inhibitors, which lack its specificity and affinity for kallikrein.

- *Hereditary Angioedema*. Between 5,000 and 12,000 patients in the United States suffer from hereditary angioedema, which is a genetic disease that can cause painful swelling of the larynx, gastrointestinal tract and/or extremities. Severe swelling of the larynx is life-threatening and may require insertion of a breathing tube into the airway to prevent asphyxiation. In the United States, the only currently approved and available treatments during severe attacks are steroids, pain control, removal of the inciting event, and rehydration. Patients are frequently given synthetic anabolic steroids but these have a variety of side effects and may not be well tolerated. Researchers believe kallikrein is a primary mediator of both the pain and swelling in hereditary angioedema. DX-88, a potent kallikrein inhibitor, may decrease the severity and frequency of symptoms during the acute attacks of hereditary angioedema and therefore provides an effective treatment for this disease.

- *Complications of Cardiopulmonary Bypass*. In the United States there are approximately 600,000 cardiac surgeries annually which use cardiopulmonary bypass, the vast majority of which involve cardiopulmonary bypass graft surgery, known as CABG. Cardiopulmonary bypass elicits a systemic inflammatory response, which adversely affects the patient post operatively. Nearly all patients undergoing CABG experience significant intraoperative blood loss, requiring transfusion. In addition it has been estimated that 25% of patients have post-operative cardiac, pulmonary, hematologic or renal dysfunction. Kallikrein has been implicated in the body's response to cardiopulmonary bypass as a major contributor to the significant blood loss seen in CABG patients and to the pathologic inflammation that plays a role in the complications of CABG surgery. Aprotinin, a kallikrein inhibitor derived from cattle, is currently approved in the U.S. for use to reduce transfusion requirements in patients undergoing CABG. DX-88 may have benefits over this existing therapy, since the DX-88 compound is recombinant rather than bovine sourced, and its sequence is based on that of a human protein, which should make it appear less foreign to the patient's immune system. DX-88 is also 1,000 times more potent than aprotinin and is a more specific inhibitor of kallikrein. We believe that DX-88 may offer equal or improved outcomes in the patient population, require lower doses and result in fewer side effects than aprotinin.

In collaboration with Genzyme, we have successfully completed a Phase I clinical trial to evaluate the safety of intravenous administration of DX-88 in healthy subjects. We have begun enrollment of patients in a Phase II clinical trial in three countries in Europe in our lead indication, hereditary angioedema. Our Phase II trial for hereditary angioedema progressed slower than we expected. As a result, late in 2001, we made a number of changes to facilitate the study's rate of accrual. We amended the protocol criteria to include the more frequent peripheral form of hereditary angiodema so that more episodes could be included in the trial. We have initiated additional clinical sites in Europe and will do so in the U.S. during the coming year. We are preparing to initiate a Phase I/II study in the U.S. in patients undergoing cardiopulmonary bypass during CABG.

Other Biopharmaceutical Discovery and Development Programs

We are pursuing biopharmaceutical discovery programs in the fields of immunology, tumor angiogenesis, tumor biology and inflammation using optimized phage libraries that express peptides, proteins and human antibodies. We have been able to establish a broad discovery platform to identify compounds that interact with a wide array of targets that have been shown to be involved in pathologic processes and are membrane proteins, circulating proteins or enzymes. Our processes have been automated, thus we are now able to evaluate a large number of molecules binding to each target. In this way we can rapidly identify and select a specific peptide, protein or antibody with the desired biochemical and biological characteristics.

Our Therapeutic Product Collaborations

Debiopharm. On January 24, 2001 we entered into a collaboration and license agreement with Debiopharm S.A. for the commercialization of our neutrophil elastase inhibitor, DX-890, for the treatment of cystic fibrosis. This agreement arose out of our March 1997 research and development program with Debiopharm for the clinical development of DX-890. Debiopharm is responsible for funding the clinical development program for Europe and North America. Under our collaboration and license agreement, Debiopharm has exclusive rights to commercialize DX-890 in Europe for cystic fibrosis, acute respiratory distress syndrome and chronic obstructive pulmonary diseases and for these indications we have retained the rights to North America and the rest of the world. If we wish to outlicense the commercialization of any of these indications to a third party outside of Europe, Debiopharm has a first right of refusal to obtain the outlicensing rights. We have also retained worldwide rights to DX-890 for all other therapeutic indications, subject to Debiopharm's first right to negotiate for a license in Europe should another party not already have such rights or if we do not wish to retain the indication. Under this collaboration, we are entitled to receive a percentage of revenues generated by Debiopharm from the commercialization of the cystic fibrosis product in Europe and we will pay Debiopharm a percentage of royalties we receive on product sales outside of Europe. None of the product candidates developed under this collaboration have been approved for sale. Thus, we have neither paid nor received any royalties to date and our future receipts of royalties will depend on future sales of any products that may be developed and approved for sale. The parties' financial obligations to each other on product sales will expire on the later of ten years from the first commercial sale of a product or the life of the patent rights covering the product.

Genzyme. In October 1998, we entered into a collaboration agreement with Genzyme Corporation for the development of DX-88 as a treatment for hereditary angioedema and other inflammatory diseases. Genzyme will jointly oversee development with us and provide a commercialization plan and exclusive marketing and distribution services for all products developed in the collaboration. When we entered into the collaboration, Genzyme provided us with a $3.0 million loan facility and purchased preferred stock for a total purchase price of $3.0 million. We funded the first $6.0 million of development and commercialization costs, and under our agreement will share equally with Genzyme all subsequent development and commercialization costs of the collaboration. We will be entitled to receive potential milestone payments of $10.0 million for the first FDA approved product derived from DX-88, and up to $15.0 million for additional therapeutic indications, as well as 50% of the profits from sales of products developed under this collaboration. The term of this collaboration is perpetual unless terminated by either party with prior written notice or upon a material breach by the other party or immediately upon a change of control or bankruptcy of the other party. We currently anticipate that this collaboration will not terminate until the parties determine that no commercial products will result from the collaboration or, if commercial products are eventually sold, until the sale of those products is no longer profitable. Because the drug discovery and approval process is lengthy and uncertain, we do not expect to be able to determine whether any commercial products will result under this collaboration until the completion of clinical trials.

Our Technology and Target Access Collaborations for Therapeutics

In addition to our therapeutic product development collaborations with Debiopharm and Genzyme, we are also leveraging our phage display technology in a variety of other collaborations and licenses to enhance the discovery of therapeutic leads for ourselves and our collaborators and to access targets for our own biopharmaceutical discovery programs. In addition to the specific arrangements discussed below, we have also licensed others, e.g., Amgen Inc. and Imclone Systems, Inc., to use our phage display technology in the therapeutics field. We also seek to gain access to targets by in-licensing them from academic institutions. For example, in November 2001, we obtained from Licentia Ltd., an

exclusive license in the therapeutics and diagnostics fields to an angiogenesis target that was developed by Dr. Kari Alitalo of the University of Helsinki.

Human Genome Sciences, Inc. In October 2001, we modified our collaboration and license agreement with Human Genome Sciences, Inc., or HGSI, effective as of July 1, 2001. Under the modified agreement, we will receive non-exclusive research access to up to 20 HGSI targets. We will fund our own research in connection with such targets through June 2003 using one-half of the research personnel previously allocated to the HGSI funded research effort under our original March 2000 agreement. This modification reduces the overall funding commitment of HGSI by approximately $4.0 million. We have options to obtain exclusive licenses to develop therapeutic product candidates for up to three of the targets for which we fund the research, subject to achieving specified research goals, and HGSI has options to assume development and commercialization of the product candidates upon the completion of the first Phase IIa clinical trial. The modified agreement also adds technical milestones that may be payable to us in connection with the portion of the research that continues to be funded by HGSI until March 2003. The $6.0 million upfront license fees that we received in March 2000 under the original agreement are now being recognized as revenue over the term of the modified agreement. We will receive milestones and royalties on all products developed by HGSI under the collaboration and will share HGSI's revenues on any of those products that it outlicenses and HGSI will receive milestones and royalties on any therapeutic products developed by us. This agreement will terminate upon the expiration of the last to expire of the parties' royalty obligations under the agreement. The parties' royalty obligations will expire on a country by country and product by product basis on the later of ten years after the first country wide launch of a product or the expiration of the last to expire of the applicable product patents. If, for example, a U.S. patent is issued covering products developed under this agreement, then the royalty obligations will terminate on the earlier of ten years from the date of first commercial sale of a product or twenty years after the patent application filing date. Currently, no products have been developed under this collaboration. Either party may terminate this agreement upon failure to pay amounts due for thirty days or upon any material breach if not cured within sixty days.

Corvas. In September 2001, we entered into a collaboration agreement with Corvas International, Inc. to discover and develop cancer therapeutics focused on serine protease inhibitors. In the research phase of the collaboration, we are using our phage display technology to identify small protein, peptide and antibody compounds that bind to two serine protease targets that were isolated and characterized by Corvas. These compounds will be evaluated principally for cancer treatment using *in vitro* and *in vivo* models. Each party bears the expense of its efforts during the research phase. The compounds generated in the collaboration may serve as drug candidates that may be jointly developed by us and Corvas with the development costs to be shared equally by the parties. The parties will also share equally any profits realized from the commercialization of any of the compounds.

Abgenix. In January 2001, we entered into a collaboration and license agreement with Abgenix, Inc. to develop new technology for discovering and developing human antibody therapeutics. Under this agreement, we will combine our phage display technology with Abgenix's XenoMouse™ technology to create libraries of human antibody sequences for each party's drug discovery programs. We will share equally with Abgenix the costs of creating the new libraries. Each party will have the right to use for internal research use any antibodies it discovers and each party is entitled to select a number of therapeutic product candidates for product development. If either party develops any antibody product from leads discovered from the libraries, commercialization fees will be paid to the other party.

XTL Biopharmaceuticals. In December 2000, we entered into a collaboration agreement with XTL Biopharmaceuticals pursuant to which we will combine our phage display technology with XTL's Trimera technology with the goal of discovering fully human monoclonal antibodies for the treatment of

and/or prevention of selected fungal infections. The parties will share equally the cost of the research projects conducted under this collaboration. The parties may develop and/or commercialize any of the product candidates discovered during the research projects.

Leveraging Phage Display in Non-Core Areas and Through Licensing

While our focus is on therapeutic programs, we are able to leverage our phage display technology in a number of other ways. Specifically, we have formed collaborations in the diagnostic imaging and research product fields. We also license others to practice our phage display technology. In addition to the specific transactions discussed below, we previously used our phage display technology to identify peptides for Epix Medical, Inc. to use in blood clot imaging applications in the magnetic resonance imaging field. We also continue to seek collaborative partners in the discovery and development of affinity separations products. We have granted a non-exclusive license to Amersham Biosciences, a market leader in the separations media field, to practice our phage display patents to discover ligands from peptide libraries for chromatography separations.

Diagnostics Imaging Collaborations

Bracco Group. In November 2000, we entered into a collaboration with Bracco Group to exploit diagnostic imaging and related therapeutic applications of our phage display technology. We granted Bracco exclusive worldwide rights to our phage display technology for the development of diagnostic imaging products. Bracco also has the right to develop diagnostic imaging products using our product leads that have potential imaging applications. Bracco also has the opportunity to evaluate for possible imaging applications the peptide leads that we have access to through our alliance with The Burnham Institute. We received a $3.0 million up-front licensing fee, and will receive an additional $3.0 million per year in research funding for a total of three to six years from the commencement of the collaboration in connection with the performance of research projects aimed at the discovery of product leads for Bracco for which Bracco will have an exclusive license in the imaging field. Subject to Bracco's exclusive rights in the imaging field and a limited option in therapeutics in favor of Bracco, we have retained ownership rights to the leads we generate during the collaboration and have retained rights for ourselves in therapeutics and other fields. We will also receive development milestones and royalties on Bracco's product sales. Bracco's royalty obligation to us for each product arising out of the collaboration is for ten years from the date the product is first launched for sale in each country. Bracco has a right to terminate our collaboration on six months prior notice, which may only be given after the funded research term expires. Either party may terminate the agreement for material breach by the other party if the breach is not cured within sixty days.

Research Products

BD Biosciences. In June 2001 we entered into a collaboration and license agreement with BD Biosciences, a division of Becton, Dickinson and Company, to discover antibodies using our phage display technology. Under the terms of the agreement, BD Biosciences has obtained rights to antibodies identified using our proprietary human antibody library and screening technology. BD Biosciences has the exclusive right to market our antibodies as research products to the life science market. BD Biosciences also has the option to extend its rights to *in vitro* diagnostic products. We have retained all rights to use these antibodies in the therapeutic field. Under the agreement, we will perform research using our antibody phage display technology for a period of up to three years. In addition to the license fee, we will receive royalties on all of BD Bioscience's product sales. BD Bioscience is obligated to pay royalties on a product by product basis for a period of ten years from the first product sale.

Patent and Library Licensing Programs

We have established a broad licensing program for our phage display patents for use in the fields of therapeutics, *in vitro* diagnostics and phage display research kits. Through this program, we grant companies and research institutions non-exclusive licenses to practice our phage display patents in their discovery and development efforts in the licensed fields. We also grant licenses to use our phage display libraries in selected fields. We have granted over 55 companies and institutions patent licenses as a result of these efforts. We believe that the success of our patent licensing program provides support for our patent position in phage display, enhances the usefulness of phage display as an enabling discovery technology and generates short term and long term value for us through licensing fees, milestones and royalties. Under these non-exclusive licenses, we have retained rights to practice our phage display technology in all fields. Our license agreements generally provide for signing or technology transfer fees, annual maintenance fees, milestone payments based on successful product development and royalties based on any future product sales. In addition, under the terms of our license agreements, most licensees have agreed not to sue us for using phage display improvement patents developed by the licensee that are dominated by our phage display patents. We believe that these covenants and provisions allow us to practice enhancements to phage display developed by our licensees and some have granted us specific access to certain technologies developed or controlled by the licensee.

Affinity Separations.

Purification of biopharmaceutical products is a complex, multi-step process, which can often be rate-limiting in the development of new biopharmaceuticals and can be the most expensive step in product manufacturing. We believe that our phage display technology is a powerful tool for developing new affinity separations media that can cost-effectively and efficiently purify complex biological therapeutic products. Our phage display technology can be used to generate small, stable binding compounds, known as ligands, that have high affinity and high specificity for desired biological compounds. Since affinity chromatography can typically purify the desired biopharmaceutical in a single column, one affinity chromatography column should be able to replace multiple conventional chromatography columns that otherwise would be required. We have developed ligands that bind and release targets in predetermined conditions that can be used for the purification of biopharmaceuticals. We believe that these new affinity separations products can reduce the time, cost and risk associated with purification at the discovery, development and production stages.

We have successfully completed funded affinity separations discovery projects for Wyeth and HGSI. Wyeth and HGSI have each entered into a license with us to use the ligand that we developed in their discovery project for purification of Wyeth's recombinant blood factor product for treating hemophilia, and HGSI's B-Lymphocyte Stimulator Protein. Under both of these license agreements, we will be entitled to commercial milestones and product royalties for any product that may be purified using our ligand.

Biotage Separations Products

Purification of a pharmaceutical product is a complex, time-consuming process, which can often be the dominant bottleneck in drug discovery and production. A widely used separations technology, chromatography, is used for purification during the discovery, development and manufacture of a pharmaceutical product. Liquid chromatography separates molecules in a mixture by making use of the different rates at which the molecules in the solution accumulate on the surface of another material known as separations media. In this technology, the molecules in solution pass through a chamber, or column, packed with separations media. The migration rates of different molecules through the column vary due to differences in the strength of binding interactions with the media in the column. This differential separation of molecules can be used to purify a desired novel therapeutic compound.

We develop, manufacture and sell chromatography separations systems and consumables through our Biotage subsidiary under the Biotage trade name. Our customers use these systems and consumables in separations processes from the discovery scale, where small amounts of a compound are purified for research work, through the preparative and production scales, where a product is manufactured for commercialization. We have designed our FLASH and BioFLASH systems to use prepacked cartridges at all of these scales for a wide range of chemical and biological materials. Our customers in the pharmaceutical industry use our Flex, Quad, Horizon and Flash systems for parallel throughput purification of synthetic organic molecules, synthetic peptides, and natural products. We customize our Kiloprep systems to meet the requirements of development and manufacturing scale chromatography applications for the production of peptides and DNA diagnostics. We are a leading developer and manufacturer of chromatography systems that use disposable cartridges to purify pharmaceuticals being produced for research and clinical development. Our prepacked, disposable cartridges can be packed with a wide range of separations, or chromatography, media from a variety of sources. We believe that cartridge-based chromatography systems provide competitive advantages to our customers compared to manually packed systems, including:

- greater speed and convenience;
- lower cost due to less labor and reduced solvent use;
- improved safety by minimizing exposure of production personnel to media and hazardous solvents; and
- reproducible performance.

We believe Biotage's product line addresses a large and fast growing drug discovery and scale-up market. In 2001, sales of purification products for drug discovery, combinatorial and medicinal chemistry increased nearly 37% and represented 84% of Biotage's revenue. Biotage has focused its resources to gain the maximum return from the drug discovery segment. With fewer global opportunities, the production systems business has been structured to execute opportunistic projects and absorb factory overhead. Biotage intends to maximize its high potential in discovery purification.

The following table summarizes our principal chromatography products:

Products	Market Segment	Applications
BioFLASH systems	Biopharmaceutical discovery and production	Protein and peptide purification
		Antibody purification
FLASH systems Parallex Flex, Horizon and Quad systems	Pharmaceutical discovery	Novel compound purification
		High throughput compound purification Natural products
Production FLASH, Kiloprep systems	Pharmaceutical production	Production scale purification
		Peptide and synthetic DNA purification
FLASH, BioFLASH and Kiloprep cartridges	Pre-packed disposable cartridges for all Biotage systems	Disposable cartridges for use on all Biotage systems

Dyax Technology

Molecular binding is the key to the function of most biopharmaceutical products. The binding of a molecule to a target is the mechanism nature uses to modulate biochemical and physiological processes such as cellular growth, differentiation, metabolism and death. To effect these processes, naturally occurring binding molecules typically distinguish between the correct target and other closely related molecules (specificity), and bind more tightly to the target than non-target molecules (affinity), under appropriate physiological conditions. Biopharmaceutical products bind to targets, including cellular receptors and enzymes, to achieve a desired effect, and those with higher affinity and specificity are thought to be preferable. Binding also plays a significant role in diagnostics, research reagents and separations products.

Phage Display

Living organisms, such as viruses, have the ability to display a foreign gene product, or protein, on their surfaces. Based on this ability of organisms to display proteins, our scientists developed our patented phage display technology for displaying large collections of proteins on filamentous bacteriophage or "phage," a virus that infects laboratory bacteria. Our phage display technology is a broadly applicable method for the display and selection of proteins with desired binding properties. Our phage display process generally consists of the following steps:

Generating a Phage Display Library. The generation of a phage display library is based upon a single protein framework and contains tens of billions of variations of this protein. The first step in generating a library is the selection of the protein framework upon which the library will be created. This selection is based on the desired product properties, such as structure, size, stability, or lack of immunogenicity. We then determine which amino acids in the framework will be varied, but do not vary amino acids that contribute to the framework structure. We also control the exact numbers and types of different amino acids that are varied, so that the resulting phage display library consists of a diverse set of chemical entities, each of which retains the desired physical and chemical properties of the original framework.

The next step is the creation of a collection of genes that encode the designed variations of the framework protein. We can easily generate diverse collections of up to hundreds of millions of different synthetic DNA sequences. Each new DNA sequence, or gene, encodes a single protein sequence that will be displayed on the surface of the individual phage that contain this gene. The scientists combine the new DNA sequences with phage genome DNA and certain enzymes so that the new DNA is inserted into a specific location of the phage genome. The result is that the new protein is displayed on the phage surface fused to one of the naturally occurring phage proteins. The phage acts as a physical link between the displayed protein and its gene.

In addition to fused synthetic DNA sequences, we can also use naturally occurring genes, such as cDNA, which are sequences that represent all of the expressed genes in a cell or organism, to create a library. We have also inserted genes from antibody expressing human cells into the phage genome. Using these genes, we have constructed phage display libraries that express billions of different human antibodies on the phage surface. From one of these libraries, individual antibody fragments can be selected and used to build highly specific human monoclonal antibodies.

The new phage genome is then transferred into laboratory bacteria, where the phage genome directs the bacterial cells to produce thousands of copies of each new phage. The collection of phage displaying multiple peptides or proteins is referred to as a phage display library. Because we can reproduce the phage display library by infecting a new culture of laboratory bacteria to produce millions of additional copies of each phage, we can use libraries for a potentially unlimited number of screenings.

Screening Phage Display Libraries. We can then select binding compounds with high affinity and high specificity by exposing the library to specified targets of interest and isolating the phage that display compounds that bind to the target. For certain applications of phage display, such as separations, we can design the binding and release conditions into the selection process. Each individual phage contains the gene encoding one potential binding compound, and when its displayed protein is selected in the screening procedure, it can be retrieved and amplified by growth in laboratory bacteria.

To screen a phage display library, we expose the library to the target under desired binding conditions. The target is normally attached to a fixed surface, such as the bottom of a tube, or a bead, allowing removal of phage that do not express binding compounds that recognize the target. Once these unbound phage are washed away, the phage containing the selected binding compounds can be released from the target. Since the phage are still viable, they can be amplified rapidly by again infecting bacteria. The capacity of the phage to replicate itself is an important feature that makes it particularly well-suited for rapid discovery of specific binding compounds. We can amplify a single phage by injecting it into bacteria and producing millions of identical phage in one day.

If the binding affinity of the compounds identified in an initial screening for a target is not considered sufficiently high, information derived from the binding compounds identified in the initial screening can be used to design a new focused library. The design, construction and screening of a second generation library, known as affinity maturation, can lead to increases of 10- to 100-fold in the affinity of the binding compounds for the target.

Evaluation of Selected Binding Compounds. Screening phage display libraries generally results in the identification of one or more groups of related binding compounds such as proteins, peptides, or antibodies. These groups of compounds are valuable in providing information about which chemical features are necessary for binding to the target with affinity and specificity, as well as which features can be altered without affecting binding. Using DNA sequencing, we can determine the amino acid sequences of the binding compounds and identify the essential components of desired binding properties by comparing similarities and differences in such sequences. If desired, scientists can further optimize the binding compounds by building additional phage display libraries based on these key components and repeating this process. We can complete the entire selection process in several weeks. We can produce small amounts of the binding compound by growing and purifying the phage. For production of larger amounts, we can remove the gene from the phage DNA and place it into a standard recombinant protein expression system. Alternatively, if the identified binding compound is sufficiently small, it can be chemically synthesized. These binding compounds can be evaluated for desired properties including affinity, specificity and stability under conditions that will be encountered during its intended use. From each group of compounds, scientists can identify, develop and test a compound with the desired properties for utility as a biopharmaceutical, diagnostic or affinity separations product.

The entire phage display process for identifying compounds that bind to targets of interest is nearly identical whether the ultimate product is to be used for biopharmaceuticals, diagnostics, research reagents or separations, which allows for an efficient use of scientific resources across a broad array of commercial applications.

Competition

Therapeutic Products. We compete in industries characterized by intense competition and rapid technological change. New developments occur and are expected to continue to occur at a rapid pace. Discoveries or commercial developments by our competitors may render some or all of our technologies, products or potential products obsolete or non-competitive.

Our principal focus is on the development of therapeutic products. We will conduct research and development programs to develop and test product candidates and demonstrate to appropriate regulatory agencies that these products are safe and efficacious for therapeutic use in particular indications. Therefore our principal competition going forward, as further described below, will be companies who either are already marketing products in those indications or are developing new products for those indications. Substantially all of these organizations have greater financial resources and experience than we do.

For our DX-88 product candidate, our competitors for the treatment of HAE include Aventis Behring and Baxter Healthcare, which currently market plasma-derived C1 esterase inhibitor products, which are approved for the treatment of HAE in Europe. In addition, other competitors would be companies seeking to develop recombinant C1 inhibitors, and companies that market and develop corticosteroid drugs or other anti-inflammatory compounds. Bayer currently markets aprotinin, which is indicated for reduction of blood loss in patients undergoing cardiopulmonary bypass during CABG. A number of companies, including Alexion, are developing additional products to reduce the complications of cardiopulmonary bypass.

For our DX-890 product candidate, our competitors in the development of treatments for cystic fibrosis include Genentech, Genzyme, Xoma and Biogen. A number of other companies are also developing neutrophil elastase inhibitors for broader indications. These include Inhale Therapeutic Systems, Aventis, Medea Research, Cortech, Inc., Roche, Ono, Eli Lilly, Lexin, SuperGen, Teijin, GlaxoSmithkline, Arriva, Sanofi-Synthelabo, and Ivax.

For potential oncology product candidates coming out of our biopharmaceutical discovery and development programs, competitors could include Bristol-Meyers Squibb, Pfizer, GlaxoSmithkline, Genentech, Pharmacia, Wyeth and numerous other pharmaceutical and biotechnology companies.

In addition, most large pharmaceutical companies seek to develop orally available small molecule compounds against many of the targets for which we and others are seeking to develop protein, peptide, and/or antibody products.

Our phage display technology is one of several technologies available to generate libraries of compounds that can be used to discover and develop new protein, peptide, and/or antibody products. The primary competing technology platforms that pharmaceutical, diagnostics and biotechnology companies use to identify antibodies that bind to a desired target are transgenic mouse technology and the humanization of murine antibodies derived from hybridomas. Abgenix Inc., Medarex Inc., Genmab, and Protein Design Labs, Inc. are leaders in these technologies. Further, we license our phage display patents and libraries to other parties in the fields of therapeutics and *in vitro* diagnostic products on a non-exclusive basis. Our licensees may compete with us in the development of specific therapeutic and diagnostic products. In particular, Cambridge Antibody Technology Group plc (CAT), Morphosys AG, and Crucell , all of which have licenses to our base technology, compete with us, both to develop therapeutics and to offer research services to larger pharmaceutical and biotechnology companies. Biosite Diagnostics has partnered with Medarex, Inc. to combine phage display technology with the transgenic mouse technology, to create antibody libraries derived from the RNA of immunized mice. Others are attempting to develop new antibody engineering technology. These include Phylos which is developing ribosomal display technology and antibody mimics, Diversys, which is developing combinatorial arrays for large-scale screening of antibodies, and Novagen, which is developing cDNA display technology.

Separation Products. Chromatography is only one of several methods of separation, including centrifugation and filtration, used in the manufacture of biopharmaceutical products. Biotage faces active competition from other suppliers of separations products. The principal competitors in Biotage's existing product markets include Nova Sep, Isco, Inc. and Gilson, Inc. In addition, many pharmaceutical companies have historically assembled their own chromatography systems and

hand-packed their own cartridges. Biotage's principal competitor in the prepacked disposable cartridge market for its FLASH cartridges is Isco, which has started selling non-interchangeable cartridges. In addition others may be able to use conventional or combinatorial chemistry approaches, or develop new technology, to identify binding molecules for use in separating and purifying products.

Patents and Proprietary Rights

Our success is significantly dependent upon our ability to obtain patent protection for our products and technologies, to defend and enforce our issued patents, including patents related to phage display, and to avoid the infringement of patents issued to others. Our policy generally is to file for patent protection on methods and technology useful for the display of binding molecules, on biopharmaceutical, diagnostic and separation product candidates, and on chromatography product improvements and applications.

Our proprietary position in the field of phage display is based upon patent rights, technology, proprietary information, trade secrets and know-how. Our patents and patent applications for phage display include U.S. Patent Nos. 5,837,500, which expires June 29, 2010, 5,571,698, which expires June 29, 2010, 5,403,484, which expires April 4, 2012, and 5,223,409, which expires June 29, 2010, European Patent No. 436,597, which expires September 1, 2009, issued patents in Canada and Israel, and pending patent applications in the United States and other countries. These phage display patent rights contain claims covering inventions in the field of the surface display of proteins and certain other peptides, including surface display on bacteriophage.

For our therapeutic product candidates, we file for patent protection on groups of peptides, proteins and antibody compounds that we identify using phage display. These patent rights now include U.S. Patent No. 5,666,143, which expires September 2, 2014, claiming sequences of peptides that have neutrophil elastase inhibitory activity, including the sequence for DX-890; and U.S. Patent Nos. 5,994,125, which expires January 11, 2014, 5,795,865, which expires August 18, 2015, 6,057,287, which expires August 18, 2015, and 6,333,402, which expires January 11, 2014 claiming sequences of peptides that have human kallikrein inhibitory activity, including the sequence for DX-88, and polynucleotide sequences encoding these peptides.

For our affinity separation technology our patent rights include U.S. Patent No. 6,326,155, which expires March 20, 2016. The patent rights cover methods for identifying affinity ligands to purify biological molecules. The patented method can be used in combination with our proprietary phage display technology, making it a powerful tool for biological purification, discovery and development.

To protect our chromatography separations products, we rely primarily upon trade secrets and know-how, as well as the experience and skill of our technical personnel. We also have several patents and patent applications claiming specific inventions relating to our proprietary chromatography systems and cartridges. For example, on September 25, 2001, we obtained U.S. Patent No. 6,294,087 which expires August 20, 2018. This patent relates to our chromatography cartridge product line and covers our current Quad™ and Flash 12+™, 25+™ and 40+™ cartridges.

There are no legal challenges to our phage display patent rights or our other patent rights now pending in the United States. However, we cannot assure that a challenge will not be brought in the future. We plan to protect our patent rights in a manner consistent with our product development and business strategies. If we bring legal action against an alleged infringer of any of our patents, we expect the alleged infringer to claim that our patent is invalid, not infringed, or not enforceable for one or more reasons, thus subjecting that patent to a judicial determination of infringement, validity and enforceability. In addition, in certain situations, an alleged infringer could seek a declaratory judgment of non-infringement, invalidity or unenforceability of one or more of our patents. We cannot be sure that we will have sufficient resources to enforce or defend our patents against any such challenges or that a challenge will not result in an adverse judgment against us or the loss of one or more of our

patents. Uncertainties resulting from the initiation and continuation of any patent or related litigation, including those involving our patent rights, could have a material adverse effect on our ability to maintain and expand our licensing program and collaborations, and to compete in the marketplace.

Our first phage display patent in Europe, European Patent No. 436,597, was opposed by two parties in late 1997. The oppositions primarily relate to whether the written description of the inventions in this patent is sufficient under European patent law. A hearing on these oppositions was held on April 6, 2000 and our patent was revoked. We have appealed this decision to the Technical Board of Appeal. This appeal suspends the Opposition Division's decision and reinstates our patent pending the decision of the Technical Board of Appeals. Although we will be able to enforce this patent during the appeal, any infringement action we file will likely be stayed pending the results of the appeal. Oral proceedings are scheduled before the Technical Board in our appeal on July 2, 2002. The decision of the Technical Board will be final. We also have two other patent applications related to the phage display technology pending in the European Patent Office. During the continued prosecution of these applications, the Examining Division will consider the grounds on which the Opposition Division revoked our first patent taken together with the Technical Board's decision on our appeal. We cannot assure you that we will prevail in the appeal proceedings or during prosecution of our two European patent applications or in any other opposition or litigation contesting the validity or scope of our European patents. We will not be able to prevent other parties from using our phage display technology in Europe if we are not successful in the reinstatement of our first European patent or if the European Patent Office does not grant us another patent that we can maintain after any opposition.

Our phage display patent rights are central to our non-exclusive patent licensing program. We offer non-exclusive licenses under our phage display patent rights to companies and non-profit institutions in the fields of therapeutics and *in vitro* diagnostics. In jurisdictions where we have not applied for, obtained, or maintained patent rights, we will be unable to prevent others from developing or selling products or technologies derived using phage display. In addition, in jurisdictions where we have phage display patent rights, we cannot assure that we will be able to prevent others from selling or importing products or technologies derived using phage display.

Presently, we are engaged in a United States court proceeding relating to patents owned by a third party. George Pieczenik and I.C. Technologies America, Inc. sued us in New York for patent infringement of United States patents 5,866,363, 4,528,266 and 4,359,535. The complaint was dismissed for lack of jurisdiction and the decision of the District Court was upheld by the Court of Appeals for the Federal Circuit. Dr. Pieczenik has petitioned the United States Supreme Court for permission to appeal the Federal Circuit's decision. We intend to oppose that petition. Grant of the petition would not overrule the dismissal of the New York action. Rather, it would merely give Dr. Pieczenik the right to appeal the dismissal. On July 12, 2000, the plaintiffs filed the complaint against us in the United States District Court in Massachusetts alleging infringement of the same three patents that were at issue in the New York case. A claim construction hearing was held on December 13, 2001. We are awaiting a decision. After the court construes the claims asserted against us by Dr. Pieczenik, the court will determine whether or not our activities infringe these claims and if these claims are valid and enforceable. Although we cannot predict the outcome of this litigation, we believe that the lawsuit is unlikely to have a material adverse effect on our business.

We are aware that other parties have patents and pending applications to various products and processes relating to phage display technology. Through licensing our phage display patent rights, we have secured a limited ability to practice under some of the third party patent rights relating to phage display technology. These rights are a result of our standard license agreement, which contains a covenant by the licensee that it will not sue us under the licensee's phage display improvement patents. In addition, we may seek affirmative rights of license or ownership under patent rights relating to phage display technology owned by other parties. If we are unable to obtain and maintain such covenants and licenses on reasonable terms it could have a material adverse effect on our business.

We have filed and in the future we may file more, oppositions or other challenges to patents issued to others. To date, we have filed oppositions against two European patents relating to the phage display field. In the first of these oppositions, the Opposition Division revoked a patent issued to Acambis Research Limited. An appeal of this decision is pending. In the second opposition, the Opposition Division maintained a patent issued to CAT. We intend to appeal that decision. We do not believe these European patents cover any of our present activities, but we cannot predict whether the claims in these patents may, in their current or future form, cover our future activities. If any of these patents do cover any of our activities, then our activities in Europe may be affected unless licenses to them are available on reasonable terms.

Patent positions are complex in the fields of biotechnology, biopharmaceutical and diagnostic products and separation processes and products. There are several companies that have patents relating to phage display, including for example, Applied Molecular Evolution, Biosite, Xoma, Morphosys, CAT and Genentech. Third party patent owners may contend that we need a license or other rights under their patents in order for us to commercialize a process or product. The issues relating to the validity, enforceability and possible infringement of such patents present complex factual and legal issues that we periodically reevaluate. In order for us to commercialize a process or product, we may need to license the patent rights of other parties. We are aware of certain patents for which we may need to obtain licenses to commercialize some of our products and technologies. While we believe that we will be able to obtain any needed licenses, we cannot assure that these licenses, or licenses to other patent rights that we identify as necessary in the future, will be available on reasonable terms, if at all. If we decide not to seek a license, or if licenses are not available on reasonable terms, we may become subject to infringement claims or other legal proceedings, which could result in substantial legal expenses. If we are unsuccessful in these actions, adverse decisions may prevent us from commercializing the affected process or products.

In all of our activities, we substantially rely on proprietary materials and information, trade secrets and know-how to conduct research and development activities and to attract and retain collaborative partners, licensees and customers. Although we take steps to protect these materials and information, including the use of confidentiality and other agreements with our employees and consultants in both academic and commercial relationships, we cannot assure you that these steps will be adequate, that these agreements will not be violated, or that there will be an available or sufficient remedy for any such violation, or that others will not also develop similar proprietary information.

Government Regulation

The production and marketing of any of our future biopharmaceutical or diagnostic products will be subject to numerous governmental laws and regulations on safety, effectiveness and quality, both in the United States and in other countries where we intend to sell the products. In addition, our research and development activities in the United States are subject to various health and safety, employment and other laws and regulations.

United States FDA Approval

In the United States, the U.S. Food & Drug Administration subjects products intended for diagnostic or therapeutic use in humans to rigorous regulation. In addition, products intended for use in the manufacturing of these products, such as separations media and equipment, are subject to certain FDA manufacture and quality standards.

The steps required before a new pharmaceutical or *in vivo* diagnostic product can be sold in the United States include:

- preclinical tests;

- submission of an Investigational New Drug Application to the FDA which must become effective before initial human clinical testing can begin;
- human clinical trials to establish safety and effectiveness of the product, which normally occurs in three phases each monitored by the FDA;
- submission and approval by the FDA of a New Drug or Biologics License Application; and
- compliance with the FDA's Good Manufacturing Practices regulations and facility and equipment validations and inspection.

The requirements for testing and approval for *in vitro* diagnostic products may be somewhat less onerous than for pharmaceutical products, but similar steps are required. All our biopharmaceutical or diagnostic product leads, including our neutrophil elastase inhibitor, DX-890, our plasma kallikrein inhibitor, DX-88, and the pharmaceutical and diagnostic products of our collaborators and licensees, will need to complete successfully the FDA-required testing and approvals before they can be marketed. There is no assurance that we or our collaborators can gain the necessary approvals. Failure to do so would have a negative adverse effect on our future business.

Foreign Regulatory Approval

In many countries outside the United States, governmental regulatory authorities similar to the FDA must approve the investigational program and/or marketing application for pharmaceutical and diagnostic products. The investigational documentation requirements vary from country to country and certain countries may require additional testing. Following the conclusion of the clinical evaluation of a medicinal product, a single marketing authorization can be prepared and submitted to European Union member states for biotechnology products like those we are currently developing. If approved, the marketing authorization is valid in all member states. However, the national laws of each member state govern manufacturing requirements, advertising and promotion, and pricing and reimbursement. Therefore, the time to market can vary widely among member states. For non-European Union member states, marketing authorizations must generally be sought on a country-by-country basis. In addition, the export to foreign countries for testing, approval and /or marketing of medicinal products that have been manufactured in the US but not approved for marketing by the FDA is subject to US law as well as the laws of the importing country and may require FDA approval. There is no assurance that we will be able to gain the necessary approvals in a timely fashion or at all. Failure to do so will have a negative adverse effect on our future business.

Environmental, Health, Safety and Other Regulations

In addition to the laws and regulations that apply to the development, manufacture and sale of our products, our operations are subject to numerous foreign, federal, state and local laws and regulations. Our research and development activities involve the use, storage, handling and disposal of hazardous materials, chemicals and radioactive compounds and, as a result, we are required to comply with regulations and standards of the Occupational Safety and Health Act, Nuclear Regulatory Commission and other safety and environmental laws. Although we believe that our activities currently comply with all applicable laws and regulations, the risk of accidental contamination or injury cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result, which could have a material adverse effect on our business, financial condition and results of operations.

Manufacturing

Therapeutic Products. We currently rely on contract manufacturers for the production of our therapeutic recombinant proteins for preclinical and clinical studies, including the manufacture of both the bulk drug substance and the final pharmaceutical product. The testing of the resultant products is

the responsibility of the contract manufacturer and/or an independent testing laboratory. These materials must be manufactured and tested according to strict regulatory standards established for pharmaceutical products. Despite our close oversight of these activities, there is no assurance that the technology can be readily transferred from our facility to that of the contractors, that the process can be scaled up adequately to support clinical trials or that the required quality standards can be achieved. To date we have identified only a few facilities that are capable of performing these activities and willing to contract their services. There is no assurance that the supply of clinical materials can be maintained during the clinical development of our product candidates.

It is our current intent to rely on contract manufacturers for the production and testing of marketed pharmaceuticals following the approval of one or more of our products. The quality standards for marketed pharmaceuticals are even greater than for investigational products. The inability of these contractors to meet the required standards and/or to provide an adequate and constant supply of the pharmaceutical product would have a material adverse effect on our business.

Separation Products. We manufacture and sell chromatography systems and cartridges through our Biotage subsidiary. Subcontractors manufacture components for chromatography systems to our specifications. We purchase commercial media for certain prepacked cartridges, which we repack and sell in disposable cartridges. A small number of components of our chromatography systems are currently purchased from single sources. However, we believe that alternative sources for these components are readily available, if necessary, and that we will be able to enter into acceptable agreements to obtain these components from such alternate sources at similar costs with only a temporary disruption or delay in production.

The affinity separations products which we are developing for use in a customer's or collaborative partner's clinical or commercial manufacturing processes, need to be manufactured under highly controlled conditions. We currently contract for the production of affinity ligands from manufacturers who have appropriate facilities; however, should this situation change, our inability to obtain these components could have a material adverse effect on our business, financial condition or results of operations.

Sales and Marketing

Therapeutic Products. We do not currently have any therapeutic products approved for sale. For any products that are approved in the future for diseases where patients are treated primarily by limited numbers of physicians, we intend in most cases to conduct sales and marketing activities ourselves in North America and, possibly, in Europe. For any product that we intend to market and sell ourselves, we do not expect to establish direct sales capability until shortly before the products are approved for commercial sale, but we will begin product management and market education activities earlier during clinical trials. For markets outside of North America, including possibly European markets, we will seek to establish arrangements where our products are sold by pharmaceutical companies which are already well established in these regions. For products that are indicated for conditions where patients may be treated by large numbers of internists, general surgeons, or family practitioners, we will seek to establish arrangements under which our products will be sold and marketed by large pharmaceutical organizations with thousands of sales representatives. These arrangements will generally be world-wide on a product-by-product basis.

Biotage Products. Our Biotage separations business has a sales and marketing group of 37 people in the United States, Europe and Japan. In selected countries we sell Biotage products through independent distributors. As new products are introduced and the market for our Biotage products grows, we anticipate increasing our direct marketing and sales capacity.

Other Product Areas. For areas other than therapeutic products and Biotage products, we will generally seek to establish arrangements with leading companies in particular business areas under which those companies develop the products based on Dyax technology and conduct sales and marketing activities through their established channels.

Employees

As of December 31, 2001, we had 239 employees, including 56 with Ph.Ds and 3 with M.D.s. Approximately 110 of our employees are in research and development, 44 in manufacturing, 44 in sales and marketing and 41 in administration. Our workforce is non-unionized, and we believe that our relations with employees are good.

ITEM 2. PROPERTIES

We currently lease and occupy 25,326 square feet of laboratory and office space in Cambridge, Massachusetts for the research and development of therapeutic and diagnostic products. This space is covered by two leases, which expire on April 30, 2002 and June 30, 2002. On June 13, 2001, we signed a ten-year lease with the Massachusetts Institute of Technology. The leased property is located in Cambridge and serves as our corporate headquarters and main research facility. Under the terms of the lease, we will initially lease 67,197 square feet. We currently occupy this space for corporate and administrative purposes and anticipate that we will occupy the research facility portion of the property in the second quarter of 2002. We are obligated to lease an additional 24,122 square feet by the sixty-fifth month from the initial occupancy date. We have the option to extend the lease for two additional five-year terms. We have provided the lessor with a Letter of Credit in the amount of $4,279,000, which may be reduced after the fifth year of the lease term. We maintain 10,000 square feet of laboratory and office space in Liege, Belgium through our Belgium subsidiary to support our research efforts.

We also lease 28,200 square feet of manufacturing, office and storage space in Charlottesville, VA to support our separations business. The lease for the Charlottesville facility expires January 31, 2003. Biotage, Inc. has purchased approximately 7 acres of land in Charlottesville, VA on which it will build a 51,000 square foot facility to support all of Biotage's activities in Charlottesville. We plan to occupy the facility by late 2002 or early 2003. Biotage also leases approximately 4,000 square feet of office space in the United Kingdom and a small facility in Japan to support marketing efforts for the Biotage products. We believe that our current space plans are adequate for our foreseeable needs and that we will be able to obtain additional space, as needed, on commercially reasonable terms.

ITEM 3. LEGAL PROCEEDINGS

Except for the proceedings described in Item 1, "Business—Patents and Proprietary Rights", which is incorporated into this item by this reference, we are not a party to any material legal proceedings.

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

During the quarter ended December 31, 2001, no matters were submitted to a vote of security holders through the solicitation of proxies or otherwise.

PART II

ITEM 5. MARKET FOR THE COMPANY'S COMMON STOCK AND RELATED SECURITY HOLDER MATTERS

Our common stock is traded on The Nasdaq National Market under the symbol DYAX. At March 27, 2002, there were 19,594,844 shares of our common stock outstanding, which were held by approximately 323 common stockholders of record, and consist of approximately 2,100 beneficial owners.

The following table sets forth, for the periods indicated, the high and low selling prices for our common stock as reported on the Nasdaq National Market:

	High	Low
Fiscal year ended December 31, 2001:		
First Quarter	$20.94	$6.56
Second Quarter	$19.99	$6.81
Third Quarter	$21.24	$6.05
Fourth Quarter	$11.99	$6.59

	High	Low
Fiscal year ended December 31, 2000:		
Third Quarter (beginning August 15, 2000)	$45.31	$18.50
Fourth Quarter	$54.12	$16.50

We have never declared or paid cash dividends on our capital stock. We currently intend to retain our future earnings, if any, for use in our business and therefore do not anticipate paying cash dividends in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our Board of Directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs and plans for expansion.

On August 14, 2000 the Securities and Exchange Commission declared effective our Registration Statement on Form S-1 (File No. 333-37394) in connection with the initial public offering of our common stock. J.P. Morgan & Co., Lehman Brothers and Pacific Growth Equities, Inc. served as managing underwriters of the offering.

On August 18, 2000, we sold 4,600,000 shares of our common stock (including 600,000 shares pursuant to the exercise by the underwriters of their over-allotment option) at a price of $15.00 per share to the underwriters. The offering terminated with the sale of all of the securities that were registered. We received proceeds in the initial public offering of approximately $62.4 million, net of underwriter commissions of approximately $4.8 million and other offering costs of approximately $1.8 million. No expenses were paid or payments made to our directors, officers or affiliates or 10% owners of any class of our equity securities. From August 18, 2000 through December 31, 2001, we used approximately $16.4 million to fund operating activities, $11.3 million for the purchase of fixed assets and we hold the remaining proceeds in cash and cash equivalents.

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following table summarizes certain selected consolidated financial data, which should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Company's consolidated financial statements and related notes included elsewhere in this Form 10-K.

	December 31,				
	2001	2000	1999	1998	1997
In thousands, except per share data:					
Consolidated Statement of Operations Data:					
Revenues:					
Product revenues	$ 18,803	$ 15,782	$ 12,596	$ 9,641	$ 7,138
Product development and license fee revenues	14,237	9,434	4,237	4,490	2,192
Total revenues	33,040	25,216	16,833	14,131	9,330
Operating expenses:					
Cost of products sold	8,805	7,495	5,515	4,164	2,931
Research and development:					
Other research and development	18,745	14,391	10,618	6,778	5,625
Non-cash compensation	687	1,089	423	306	—
Selling, general and administrative:					
Other selling, general and administrative	23,254	18,089	14,069	10,061	6,787
Non-cash compensation	867	1,332	516	375	75
Total operating expenses	52,358	42,396	31,141	21,684	15,418
Loss from operations	(19,318)	(17,180)	(14,308)	(7,553)	(6,088)
Other income, net	2,153	1,991	1,121	401	265
Net loss	$ (17,165)	$ (15,189)	$ (13,187)	$ (7,152)	$ (5,823)
Basic and diluted net loss per share	$ (.89)	$ (1.77)	$ (6.81)	$ (4.22)	$ (3.95)
Shares used in computing basic and diluted net loss per share	19,244,809	8,577,912	1,936,907	1,694,782	1,473,474

	December 31,				
	2001	2000	1999	1998	1997
In thousands:					
Consolidated Balance Sheet Data:					
Cash and cash equivalents	$ 51,034	$ 74,205	$ 16,726	$ 25,491	$ 4,762
Working capital	44,010	71,798	15,279	26,515	5,314
Total assets	81,441	91,405	29,608	34,416	10,636
Long-term obligations, less current portion	4,240	1,580	1,249	586	1,078
Accumulated (deficit)	(84,009)	(66,844)	(51,655)	(38,468)	(31,316)
Total stockholders' equity	55,464	69,857	19,300	29,410	5,671

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The discussion in this item and elsewhere in this report contains forward-looking statements involving risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements. These risks and uncertainties include those described under "Important Factors That May Affect Future Operations and Results" below.

Overview

We are a biopharmaceutical company principally focused on the discovery, development and commercialization of therapeutic products. Two of our product candidates are in early stage clinical trials and we are preparing to begin clinical trials for one of these candidates in a second indication. We use a proprietary, patented method, known as phage display, to identify a broad range of compounds with the potential for the treatment of various diseases. We are using phage display technology to build a broad portfolio of product candidates that we plan to develop and commercialize either ourselves or with others. On behalf of collaborators, we also use phage display technology to identify compounds that can be used in therapeutics, diagnostic imaging, the development of research reagents, and in purifying and manufacturing biopharmaceuticals and chemicals. We are further leveraging our phage display technology through collaborations and licenses that are structured to generate revenues through research funding, license fees, technical and clinical milestone payments, and royalties.

We also develop, manufacture and sell chromatography separations systems and products through our Biotage subsidiary. We are a leading developer, manufacturer and supplier of chromatography separations systems that use disposable cartridges to separate and purify pharmaceuticals being produced for research and clinical development.

Results of Operations

Year Ended December 31, 2001 and 2000

Total revenues for 2001 were $33.0 million, compared with $25.2 million in 2000, an increase of $7.8 million or 31%. Product revenues and product development and license revenues accounted for 57% and 43% respectively, of total revenues in 2001, as compared with 63% and 37% in 2000. Product revenues increased to $18.8 million in 2001 from $15.8 million in 2000, an increase of $3.0 million or 19%. The increase in product revenues is due to increased unit sales in Biotage's drug discovery purification systems and consumable business. Product development and license fee revenues increased to $14.2 million in 2001 from $9.4 million in 2000, an increase of $4.8 million or 51%. The increase in product development and license fee revenues is primarily due to a full year of amortization associated with the upfront payments on several large funded collaborative arrangements, which were entered into during 2000, as well as the continued expansion of our phage display licensing program, including the recognition of a perpetual patent license in 2001. As a result of amortization of upfront fees for collaborations signed in 2000, our deferred revenues decreased to $9.4 million from $11.3 million as of December 31, 2001 and 2000, respectively. These product development and license fees are amortized over the expected term of each agreement, ranging from one to six years.

Cost of products sold in 2001 was $8.8 million compared to $7.5 million in 2000, an increase of $1.3 million or 17%. The cost of products sold as a percentage of product revenues remained constant at 47%.

Research and development expenses for 2001 were $19.4 million, compared with $15.5 million in 2000, an increase of $4.0 million or 26%. The increase resulted primarily from increased compound manufacturing and related expenditures for clinical trials, salaries and fringe expenses, and expenditures on new collaborative arrangements. These increases were partially offset by a decrease in non-cash compensation because deferred compensation in 2000 included the acceleration of vesting of certain restricted stock related to the completion of our initial public offering.

As of December 31, 2001, we had two product candidates in Phase II clinical trials, DX-88 for hereditary angiodema and DX-890 for cystic fibrosis. We expect both product candidates to complete Phase II trials during 2002 but the length of time needed to complete clinical trials can vary substantially. An estimation of product completion dates and completion costs can vary significantly and are difficult to predict. We expect that we will incur the most significant clinical development costs of these product candidates during Phase III trials. Research and development expenses are comprised of costs incurred in performing research and development activities including salaries and benefits, clinical trial and related costs, contract manufacturing and other outside costs, and overhead costs. Research and development costs are expensed as incurred.

Selling, general and administrative expenses increased to $24.1 million in 2001 from $19.4 million in 2000, an increase of $4.7 million or 24%. The increase is primarily due to increased salaries and fringe expenses in business development and corporate administrative functions, professional fees related to expanding and protecting our intellectual property and meeting the reporting requirements of a public company, and selling and marketing expenses at Biotage as we continue to expand our sales capabilities including opening a Japanese sales subsidiary. These increases were partially offset by a decrease in non-cash compensation because deferred compensation in 2000 included the acceleration of vesting of certain restricted stock related to the completion of our initial public offering.

Net other income increased to $2.2 million in 2001 from $2.0 million in 2000, due to an increase in interest income earned from a higher average invested cash balance.

Net loss in 2001 was $17.2 million compared to $15.2 million in 2000.

Year Ended December 31, 2000 and 1999

Total revenues for 2000 were $25.2 million, compared with $16.8 million in 1999, an increase of $8.4 million or 50%. Product revenues and product development and license revenues accounted for 63% and 37% respectively, of total revenues in 2000, as compared with 75% and 25% in 1999. Product revenues increased to $15.8 million in 2000 from $12.6 million in 1999, an increase of $3.2 million or 25%. The increase in product revenues is primarily due to increased unit sales in Biotage's drug discovery purification consumable business. Product development and license fee revenues increased to $9.4 million in 2000 from $4.2 million in 1999, an increase of $5.2 million or 123%. The increase in product development and license fee revenues is due to several large funded collaborative arrangements which were entered into during 2000, as well as the continued expansion of our phage display licensing program. As a result of new collaborations in 2000, our deferred revenues increased to $11.3 million from $2.9 million as of December 31, 2000 and 1999, respectively. These product development and license fees are amortized over the expected term of each agreement, ranging from one to six years.

Cost of products sold in 2000 was $7.5 million compared to $5.5 million in 1999, an increase of $2.0 million or 36%. The cost of products sold as a percentage of product revenues increased to 47% in 2000 from 44% in 1999. The increase is primarily due to inventory obsolescence, related to bulk media and component piece parts for older systems, and foreign exchange rate fluctuations, resulting from pounds sterling denominated product sales.

Research and development expenses for 2000 were $15.5 million, compared with $11.0 million in 1999, an increase of $4.4 million or 40%. The increase resulted primarily from expenditures on new collaborative arrangements, compound manufacturing expenditures for Phase I clinical trials of DX-88, which began in April 2000 and increased internal efforts to develop biopharmaceutical, separations and diagnostic products and industrial enzymes. Non-cash compensation increased due to the acceleration of vesting of certain restricted stock related to the completion of our initial public offering and a larger spread between the fair market value of the common stock and option exercise prices.

Selling, general and administrative expenses increased to $19.4 million in 2000 from $14.6 million in 1999, an increase of $4.8 million or 33%. The increase is primarily due to increased personnel in sales and marketing functions at Biotage in connection with the growth in product revenues and in legal, finance and human resources to support corporate administrative functions for our increased research efforts. There were also increases of approximately $375,000 of costs for discontinued merger and acquisition activities and $691,000 of additional patent and related legal expenses. Non-cash compensation increased due to the acceleration of vesting of certain restricted stock related to the completion of our initial public offering and a larger spread between the fair market value of the common stock and option exercise prices.

Net other income increased to $2.0 million in 2000, from $1.1 million in 1999, due to a higher average balance available for investment as a result of the proceeds from our initial public offering in August 2000.

Our net loss in 2000 was $15.2 million compared to $13.2 million in 1999.

Liquidity and Capital Resources

Through December 31, 2001, we have funded our operations principally through the sale of equity securities, which have provided aggregate net cash proceeds since inception of approximately $131.7 million, including net proceeds of $62.4 million from our August 2000 initial public offering. We have also generated funds from product revenues, product development and license fee revenues, interest income and other sources. As of December 31, 2001, we had cash and cash equivalents of approximately $51.0 million, a decrease of $23.2 million from December 31, 2000. Our excess funds are currently invested in U.S. Treasury obligations.

Our operating activities used cash of $13.9 million and $4.1 million for the years ended December 31, 2001 and 2000, respectively. The use of cash in both years resulted primarily from our losses from operations and changes in our working capital accounts, net of depreciation, amortization and non-cash compensation expense. Cash used for operating activities increased for the year ended December 31, 2001 primarily due to a reduction in cash received from large funded collaborative arrangements included in deferred revenue.

Our investing activities used cash of $10.4 million and $2.4 million for the years ended December 31, 2001 and 2000, respectively. Our investing activities consisted of purchases of fixed assets. We estimate that we will invest an additional $6.0 million in 2002 for leasehold improvements to satisfy our facilities requirements for our research activities. Additionally, our Biotage subsidiary will continue construction on a 51,000 square foot facility in Charlottesville, Virginia at a cost of approximately $4.0 million to $6.0 million, which we plan to finance partially through debt. We have been approved for a loan of up to $4.25 million to fund the construction of this facility, subject to the execution and delivery to the bank of related legal documents. We are required to advance the first $1.25 million of construction costs prior to drawing down on the loan. The loan cannot exceed the lower of 70% of the completed appraised value or 70% of actual construction costs. Interest is payable monthly on the amount outstanding until completion of the construction, limited to a maximum of 16 months. Upon completion of the construction or 16 months, the loan will be converted to a term loan and will be repaid over twenty years with interest between 5.83% and 7.00%. The interest rate will be adjusted every five years but may be adjusted earlier if we do not maintain an average non-interest bearing compensating balance of $750,000 at the lender. As of December 31, 2001, there was no amount outstanding.

Our financing activities provided $842,000 and $64.0 million for the years ended December 31, 2001 and 2000, respectively. Our 2001 financing activities consisted primarily of proceeds from the exercise of stock options and from the employee stock purchase plan, and proceeds from long-term obligations, offset by repayments of long-term obligations.

We have historically financed fixed asset purchases through capital lease arrangements. At December 31, 2001, there is an open facility with a lender, but the lender has no obligation to fund any further amounts. The capital lease obligations are collateralized by the assets sold to the lessor. The leasehold improvement obligations are currently collateralized by a stand-by letter of credit for the amount financed. If at the end of any quarter, our unrestricted cash is less than the greater of $25.0 million or annualized cash needs, we must provide to the lender an irrevocable letter of credit in the amount equal to the amount of leasehold improvements financed, which was $2.9 million at December 31, 2001. Annualized cash needs are determined by multiplying the cash used in operations on a consolidated basis for the most recently ended quarter by four. We believe that we will be able to obtain funding for our future fixed asset purchases through our existing or alternative lenders. If we cannot obtain additional funding we will have to use our existing cash and cash equivalents to fund future fixed asset purchases.

We currently have a $3.0 million loan facility available from Genzyme Corporation that was established as part of the collaboration to bring DX-88 to market. Interest on any outstanding balance accrues at a rate equal to one percent over the prime rate. There is currently no amount outstanding under this facility.

Outlook

In 2002, we anticipate total revenues will increase by approximately 18% to 22%. Product revenues should continue to grow at approximately the same rate as 2001. Product development and license revenues should grow at a more moderate pace, as we focus more on internal research programs rather than on funded collaborative programs. We expect cost of products sold as a percentage of product revenues to decline, driven primarily by our program of leveraging suppliers and growth in quantity buying. Also, in late 2001, we implemented new Oracle Material Resource Planning capabilities, which should improve factory productivity and material planning. Research and development expenses are expected to rise approximately 75% to 100% in 2002. The increase is expected to come from a significant expansion of our laboratory facilities, continued progress of our lead compounds through clinical trials, commencement of clinical trials for additional indications for our lead compounds and expanded development of our preclinical pipeline. Growth in selling, general and administrative expenses is expected to slow to approximately 10% to 15%.

Statements about our expectations of the period of time through which financial resources will be adequate to support our operations are forward-looking statements that involve risks and uncertainties. Actual results could vary as a result of a number of factors. We believe that existing cash and cash equivalents plus anticipated cash flow from product revenues and existing collaborations will be sufficient to support our current operating plans through 2002. We expect to spend approximately $25.0 to $30.0 million in cash during 2002. If our existing resources are insufficient to satisfy our liquidity requirements, we may need to sell additional equity or debt securities. The sale of any equity or debt securities may result in additional dilution to our stockholders, and we cannot be certain that additional financing will be available in amounts or on terms acceptable to us, if at all. If we are unable to obtain any required additional financing, we may be required to reduce the scope of our planned research, development and commercialization activities, which could harm our financial condition and operating results.

Contractual Obligations

We have long-term obligations for fixed asset purchases. Minimum future payments under our long-term obligations as of December 31, 2001 are as follows:

2002	$ 2,460,000
2003	2,350,000
2004	1,907,000
2005	202,000
2006 and thereafter	—
Total future minimum payments	6,919,000
Less: amount representing interest	(485,000)
Present value of future minimum payments	6,434,000
Less: current portion	(2,194,000)
Long-term obligations	$ 4,240,000

We have non-cancelable operating leases in the United States and Europe. Minimum future lease payments under these leases as of December 31, 2001 are as follows:

2002	$ 4,541,000
2003	3,959,000
2004	3,827,000
2005	3,710,000
2006 and thereafter	30,670,000

Critical Accounting Policies

The United States Securities and Exchange Commission ("SEC") recently issued disclosure guidance for "critical accounting policies." The SEC defines "critical accounting policies" as those that require application of management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods.

Our accounting policies are described in Note 2 in the consolidated financial statements. Since not all of these accounting policies require management to make difficult, subjective or complex judgments or estimates, they are not all considered critical accounting policies. However, the following policies could be deemed to be critical within the SEC definition.

Inventories

Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out (FIFO) method. If it is determined that cost is less than market value, then cost is used for inventory valuation. If market value is less than cost, then we write down the related inventory to market value. If a write down to the current market value is necessary, the market value cannot be greater than the net realizable value.

Inventories are continually reviewed for slow moving, obsolete and excess items. Inventory items identified as slow-moving are evaluated to determine if an adjustment is required. Additionally, our industry is characterized by regular technological developments that could result in obsolete inventory. Our estimates may prove to be inaccurate, in which case we may have understated or overstated the valuation of the excess and obsolete inventory. If our inventory is determined to be overvalued, we would recognize additional cost of goods sold at the time of such determination. Therefore, although we make every effort to ensure the accuracy of our estimates, any significant unanticipated changes in

demand or technological developments could have a significant impact on the value of our inventory and our results of operations. At December 31, 2001 and 2000, our inventory balance was $3.3 million and $2.7 million, respectively.

Allowance for doubtful accounts

We estimate the uncollectibility of our accounts receivable. When evaluating the adequacy of our allowance for doubtful accounts, we analyze our accounts receivable aging, historical bad debts, customer concentrations, customer credit-worthiness and current economic trends. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. Our accounts receivable balance net of allowances for doubtful accounts was $7.1 million and $6.5 million at December 31, 2001 and 2000, respectively.

Valuation of long-lived and intangible assets

We review long-lived assets, including goodwill, for impairment whenever events or changes in business circumstances indicate that the carrying amount of assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Factors considered important which could trigger an impairment review include the following:

- Significant change relative to historical or projected future operating results;
- Significant changes in the use of the assets or the strategy for the overall business;
- Significant industry or economic trends and developments.

Each impairment test is based on a comparison of the undiscounted cash flow to the recorded value of the asset. When it is determined that the carrying value of intangibles, long-lived assets and related goodwill may not be recoverable based upon the existence of one or more of the above indicators of impairment, the asset is written down to its estimated fair value on a discounted cash flow basis. No impairment losses have been recognized in any of the periods presented herein.

Revenue recognition

Product revenue is derived from sales of Biotage chromatography separations systems and cartridges. Generally, product revenue is recognized upon shipment. If an installation obligation exists, a portion of revenue equal to the fair value of the installation service is deferred and recognized upon the completion of the installation. For product revenue arrangements that require significant installation services and contain customer acceptance criteria, all revenue is recognized upon the completion of the installation and satisfaction of the customer acceptance criteria.

We enter into product development agreements with collaborative partners for the development of therapeutic, diagnostic and separations products. The terms of the agreements typically include non-refundable signing fees, funding for research and development, milestone payments and royalties on product sales derived from collaborations. Non-refundable signing fees are recognized as services are performed over the expected term of the collaboration. Funding for research and development, where the amounts recorded are non-refundable if research efforts are unsuccessful, is recognized as the related expenses are incurred. Upon achievement of milestones, a portion of the milestone payment equal to the percentage of the collaboration completed through that date is recognized. The remainder is recognized as services are performed over the remaining term of the collaboration. Royalties are recognized when earned. Significant assumptions and estimates include expected term of the agreement, total expected cost and total expected revenue. Our assumptions and estimates may prove to be inaccurate. Therefore, although we make every effort to ensure the accuracy of our estimates, any significant unanticipated changes in our estimates could have a material impact on deferred revenue and our results of operations. At December 31, 2001 and 2000, our deferred revenue related to product development agreements was $4.8 million and $6.2 million, respectively.

Litigation Claims

We are engaged in a United States court proceeding relating to patents owned by a third party. Also, two parties have opposed our first phage display patent in Europe. We make provisions for claims specifically identified for which we believe the likelihood of an unfavorable outcome is probable and reasonably estimable. We record at least the minimum estimated liability related to claims where there is a range of loss and the loss is considered probable. Because of the uncertainties related to the likelihood and amount of loss on any of our pending claims, we are unable to make a reasonable estimate of the liability that could result from an unfavorable outcome of those claims. As additional information becomes available, we assess the potential liability related to our pending claims and revise our estimates. Future revisions in our estimates of the potential liability could materially impact our results of operation and financial position. We maintain insurance coverage that limits the exposure for any single claim as well as total amounts incurred per policy year, and we believe our insurance coverage is adequate. We make every effort to use the best information available to us in determining the level of liability reserves. As of December 31, 2001, we have no reserves for litigation settlements.

Related Party Transactions

Our President, Chief Executive Officer and Chairman of the Board also serves as an outside director of and consultant to Genzyme Corporation ("Genzyme") and as an outside director of Genzyme Transgenics Corporation, a company in which Genzyme owns approximately 26%. At December 31, 2001, Genzyme owns approximately 2.8% of our common stock outstanding.

In October 1998, we entered into a joint development and commercialization agreement with Genzyme for one of our proprietary therapeutic compounds for the treatment of chronic inflammatory diseases, with initial development to be focused on the treatment of hereditary angioedema. Under the agreement, we funded the first $6.0 million dollars of development costs. We have agreed to establish a limited liability company, in which we will own 50% and Genzyme will own 50%, and fund equally all development and commercialization costs subsequent to the first $6.0 million. Genzyme has extended to us a $3.0 million line of credit, which accrues interest on any outstanding balance at the Prime Rate plus 1.0%. We may use the line of credit to fund a portion of such development costs or for any of our other research and development programs. At December 31, 2001, we had not utilized any of the available line of credit. In addition, we will be entitled to receive significant milestone payments and up to 50% of the profits from sales of products developed under this collaboration.

Tax Loss Carryforwards

We have net operating loss carryforwards available to offset future federal taxable income of approximately $70.6 million as of December 31, 2001, and research credits of approximately $1.7 million available to offset future federal tax. Included in the $70.6 million of net operating loss carryforwards is $1.4 million of net operating loss carryforwards relating to the benefit from the exercise of stock options, which will be credited to additional paid in capital when realized. The net operating loss and credit carryforwards expire at various dates from 2004 through 2021. As a result of certain acquisitions and stock issued over the past five years, the availability of the net operating loss carryforwards may be subject to annual limitation under section 382 of the Internal Revenue Code. We also have net operating loss carryforwards for income tax purposes related to our foreign subsidiaries of approximately $2.2 million as of December 31, 2001, which expire over various periods.

Recent Pronouncements

In June 2001, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 141, "Business Combinations" and SFAS No. 142, "Goodwill and Other Intangible Assets". SFAS 141 requires that all business combinations be accounted for using the purchase method only and that certain acquired intangible assets in a business combination be

recognized as assets apart from goodwill. SFAS 142 requires that ratable amortization of goodwill be replaced with periodic tests of the goodwill's impairment and that intangible assets other than goodwill be amortized over their useful lives. SFAS 141 is effective for all business combinations initiated after June 30, 2001 and for all business combinations accounted for by the purchase method for which the date of acquisition is after June 30, 2001. The provisions of SFAS 142 will be effective for fiscal years beginning after December 15, 2001, and will thus be adopted by the Company, as required, in fiscal year 2002. We do not expect the adoption of SFAS 141 and SFAS 142 to have a material impact on our financial position or operating results.

In August 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets". SFAS 144 supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of" and provides a single accounting model for long-lived assets to be disposed of. SFAS 144 is effective for fiscal years beginning after December 15, 2001 and will thus be adopted by the Company, as required, on January 1, 2002. We do not expect the adoption of SFAS 144 to have a material impact on our financial position or operating results.

Important Factors That May Affect Future Operations and Results

This Annual Report on Form 10-K contains forward-looking statements. These forward-looking statements appear principally in the sections entitled "Business" and "Management's Discussion and Analysis of Financial Conditions and Results of Operations." Forward-looking statements may appear in other sections of this report as well. Generally, the forward-looking statements in this report use words like "expect," "believe," "continue," "anticipate," "estimate," "may," "will," "could," "opportunity," "future," "project," and similar expressions.

The forward-looking statements include statements about our:

- results of operations;
- research and development programs;
- clinical trials; and
- collaborations.

Statements that are not historical facts are based on our current expectations, beliefs, assumptions, estimates, forecasts and projections for our business and the industry and markets in which we compete. The forward-looking statements contained in this report are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed in such forward-looking statements. We caution investors not to place undue reliance on the forward-looking statements contained in this report. These statements speak only as of the date of this report, and we do not undertake any obligation to update or revise them, except as required by law.

The following factors, among others, create risks and uncertainties that could affect our future or other performance:

- our history of operating losses and our expectation that we will incur significant additional operating losses;
- any inability to raise the capital that we will need to sustain our operations;
- any inability to successfully and expeditiously complete the rigorous clinical trials and regulatory approvals that any biopharmaceutical or diagnostic product candidates that we develop must undergo, which could substantially delay or prevent their development or marketing;
- our dependence on third parties to manufacture biopharmaceuticals, which may adversely affect our ability to commercialize any biopharmaceuticals we may develop;

- our lack of experience in conducting clinical trials, regulatory processes, and conducting sales and marketing activities, any or all of which may adversely impact our ability to commercialize any biopharmaceuticals we may develop;
- our dependence on the expertise, effort, priorities and contractual obligations of our collaborators, any changes in our collaborators' business direction or priorities or defaults in their obligations may have an adverse impact on our research revenues and ultimately our license revenues and expenses;
- any failure by us or our collaborators to gain market acceptance of our biopharmaceuticals;
- competition and technological change that may make our potential products and technologies less attractive or obsolete;
- any inability to obtain and maintain intellectual property protection for our products and technologies;
- time consuming and expensive proceedings to obtain, enforce or defend patents and to defend against charges of infringement that may result in unfavorable outcomes and could limit our patent rights and our activities;
- significant fluctuations in our revenues and operating results, which have occurred in the past and which we expect to continue to fluctuate in the future;
- any loss or inability to hire and retain qualified personnel;
- difficulties in managing our growth;
- our dependence on one supplier for a key component in our separations products;
- risks associated with international sales and operations and collaborations;
- failure to acquire technology and integrate complementary businesses;
- our common stock may continue to have a volatile public trading price and low trading volume; and
- anti-takeover provisions in our governing documents and under Delaware law and our shareholder rights plan that may make an acquisition of us more difficult.

As a result of the foregoing and other factors, we may experience material fluctuations in our future operating results, which could materially affect our business, financial position, and stock price. These risks and uncertainties are discussed in more detail in Exhibit 99.1 "Important Factors That May Affect Future Operations and Results" to this Form 10-K, which is incorporated into this item by this reference.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our exposure to market risk is confined to our cash and cash equivalents. We place our investments in high-quality financial instruments, primarily U.S. Treasury funds, which we believe are subject to limited credit risk. We currently do not hedge interest rate exposure. As of December 31, 2001, we had cash and cash equivalents of $51.0 million consisting of cash and highly liquid, short-term investments. Our short-term investments will decline by an immaterial amount if market interest rates increase, and therefore, our exposure to interest rate changes is immaterial. Declines of interest rates over time will, however, reduce our interest income from our short-term investments. Our outstanding debt obligations are all at fixed interest rates and therefore have minimal exposure to changes in interest rates.

Most of our transactions are conducted in U.S. dollars. We have collaboration, technology license agreements and product sales with parties located outside the United States. Transactions under certain other agreements are conducted in the local foreign currency. If the exchange rate undergoes a change of up to 10%, we do not believe that it would have a material impact on our results of operations or cash flows.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements

Report of Independent Accountants

To the Board of Directors and Stockholders of Dyax Corp.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations and comprehensive loss, changes in stockholders' equity and cash flows present fairly, in all material respects, the financial position of Dyax Corp. and its subsidiaries at December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the accompanying financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
February 11, 2002

Dyax Corp. and Subsidiaries

Consolidated Balance Sheets

	December 31, 2001	December 31, 2000
ASSETS		
Current assets:		
Cash and cash equivalents	$ 51,034,000	$ 74,205,000
Accounts receivable, net of allowances for doubtful accounts of $155,000 and $130,000 at December 31, 2001 and 2000, respectively	7,128,000	6,509,000
Inventories	3,267,000	2,719,000
Current portion of notes receivable, employees	159,000	412,000
Other current assets	541,000	780,000
Total current assets	62,129,000	84,625,000
Fixed assets, net	12,915,000	4,101,000
Notes receivable, employees	1,346,000	1,380,000
Goodwill and other intangibles, net	157,000	1,100,000
Restricted cash	4,365,000	—
Other assets	529,000	199,000
Total assets	$ 81,441,000	$ 91,405,000
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	$ 10,104,000	$ 7,983,000
Current portion of deferred revenue	5,821,000	4,161,000
Current portion of long-term obligations	2,194,000	683,000
Total current liabilities	18,119,000	12,827,000
Deferred revenue	3,618,000	7,141,000
Long-term obligations	4,240,000	1,580,000
Total liabilities	25,977,000	21,548,000
Commitments (Notes 8, 9, 10 and 12)		
Stockholders' equity:		
Preferred stock, $0.01 par value; 1,000,000 shares authorized at December 31, 2001 and 2000; 0 shares issued and outstanding at December 31, 2001 and 2000, respectively	—	—
Common stock, $0.01 par value; 50,000,000 shares authorized at December 31, 2001 and 2000; 19,433,928 shares issued and outstanding at December 31, 2001 and 19,046,771 shares issued at December 31, 2000	194,000	190,000
Additional paid-in capital	141,384,000	140,936,000
Receivable from officer for common stock purchase	—	(418,000)
Accumulated deficit	(84,009,000)	(66,844,000)
Treasury stock (0 and 1,378 common shares at cost at December 31, 2001 and 2000, respectively)	—	—
Deferred compensation	(2,199,000)	(3,980,000)
Accumulated other comprehensive income (loss)	94,000	(27,000)
Total stockholders' equity	55,464,000	69,857,000
Total liabilities and stockholders' equity	$ 81,441,000	$ 91,405,000

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

Dyax Corp. and Subsidiaries

Consolidated Statements of Operations and Comprehensive Loss

	Years Ended December 31,		
	2001	2000	1999
Revenues:			
Product revenues	$ 18,803,000	$ 15,782,000	$ 12,596,000
Product development and license fee revenues	14,237,000	9,434,000	4,237,000
Total revenues	33,040,000	25,216,000	16,833,000
Operating expenses:			
Cost of products sold	8,805,000	7,495,000	5,515,000
Research and development:			
Other research and development	18,745,000	14,391,000	10,618,000
Non-cash compensation	687,000	1,089,000	423,000
Selling, general and administrative:			
Other selling, general and administrative	23,254,000	18,089,000	14,069,000
Non-cash compensation	867,000	1,332,000	516,000
Total operating expenses	52,358,000	42,396,000	31,141,000
Loss from operations	(19,318,000)	(17,180,000)	(14,308,000)
Other income, net	2,153,000	1,991,000	1,121,000
Net loss	(17,165,000)	(15,189,000)	(13,187,000)
Other comprehensive income (loss):			
Foreign currency translation adjustments	121,000	81,000	15,000
Comprehensive loss	$(17,044,000)	$(15,108,000)	$(13,172,000)
Basic and diluted net loss per share	$ (.89)	$ (1.77)	$ (6.81)
Shares used in computing basic and diluted net loss per share	19,244,809	8,577,912	1,936,907

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

Dyax Corp. and Subsidiaries

Consolidated Statements of Changes in Stockholders' Equity
For the years ended December 31, 2001, 2000 and 1999

	Class A Convertible Preferred Stock					Common Stock									
	Series 1 Shares	Series 2 Shares	Series 3 Shares	Series 4 Shares	Series 5 Shares	Amount	Shares	Par Value	Treasury Stock	Additional Paid-in Capital	Receivable For Common Stock Purchase	Accumulated (Deficit)	Deferred Compen-sation	Accumulated Other Comprehensive Income (Loss)	Total
Balance at December 31, 1998	1,942,936	703,970	2,000,000	4,297,137	5,752,944	$ 57,426,000	1,873,851	$ 19,000	—	$ 12,536,000	$(418,000)	$(38,468,000)	$(1,562,000)	$(123,000)	$ 29,410,000
Shares issued for acquisition of Target Quest, LLC							379,152	4,000		1,969,000					1,973,000
Exercise of stock options							53,287	1,000		54,000					55,000
Issuance of restricted stock							47,500			95,000					95,000
Deferred compensation										4,284,000			(4,284,000)		—
Compensation expense associated with stock options													939,000		939,000
Foreign currency translation														15,000	15,000
Net Loss												(13,187,000)			(13,187,000)
Balance at December 31, 1999	1,942,936	703,970	2,000,000	4,297,137	5,752,944	57,426,000	2,353,790	24,000	—	18,938,000	(418,000)	(51,655,000)	(4,907,000)	(108,000)	19,300,000
Net proceeds from initial public offering							4,600,000	46,000		62,304,000					62,350,000
Conversion of preferred stock upon completion of initial public offering	(1,942,936)	(703,970)	(2,000,000)	(4,297,137)	(5,752,944)	(57,426,000)	11,585,454	116,000		57,310,000					—
Exercise of stock options							480,505	4,000		783,000					787,000
Exercise of stock warrants							27,022			107,000					107,000
Deferred compensation										1,494,000			(1,494,000)		—
Compensation expense associated with stock options													2,421,000		2,421,000
Foreign currency translation														81,000	81,000
Net Loss												(15,189,000)			(15,189,000)
Balance at December 31, 2000	—	—	—	—	—	—	19,046,771	190,000	—	140,936,000	(418,000)	(66,844,000)	(3,980,000)	(27,000)	69,857,000
Exercise of stock options							380,132	4,000		496,000					500,000
Issuance of common stock for employee stock purchase plan							7,025			104,000					104,000
Deferred compensation										(152,000)			1,781,000		1,629,000
Repayment of loan to purchase common stock											418,000				418,000
Foreign currency translation														121,000	121,000
Net Loss												(17,165,000)			(17,165,000)
Balance at December 31, 2001	—	—	—	—	—	—	19,433,928	$194,000	—	$141,384,000	—	$(84,009,000)	$(2,199,000)	$ 94,000	$ 55,464,000

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

Dyax Corp. and Subsidiaries

Consolidated Statements of Cash Flows

	Years Ended December 31,		
	2001	2000	1999
Cash flows from operating activities:			
Net loss	$(17,165,000)	$(15,189,000)	$(13,187,000)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization of fixed assets	1,537,000	988,000	629,000
Amortization of goodwill and other intangibles	953,000	890,000	474,000
Compensation expenses associated with stock options	1,554,000	2,421,000	939,000
Inventory valuation adjustments	(67,000)	495,000	(15,000)
Provision for doubtful accounts	25,000	1,000	—
Changes in operating assets and liabilities:			
Accounts receivable	(747,000)	(3,459,000)	(203,000)
Inventories	(503,000)	(208,000)	(598,000)
Notes receivable, employees	287,000	(9,000)	(409,000)
Other assets	(106,000)	(584,000)	(41,000)
Accounts payable and accrued expenses	2,232,000	2,168,000	2,528,000
Deferred revenue	(1,860,000)	8,433,000	2,013,000)
Net cash used in operating activities	(13,860,000)	(4,053,000)	(7,870,000)
Cash flows from investing activities:			
Purchase of fixed assets	(10,400,000)	(2,409,000)	(1,762,000)
Cash flows from financing activities:			
Net proceeds from the issuance of common stock from initial public offering	—	62,350,000	—
Proceeds from the issuance of common stock, exercise of stock options and warrants	604,000	894,000	150,000
Proceeds from long-term obligations	5,010,000	1,217,000	1,077,000
Proceeds from receivable associated with common stock purchase	418,000	—	—
Increase in restricted cash for facility lease	(4,365,000)	—	—
Repayment of long-term obligations	(825,000)	(506,000)	(285,000)
Net cash provided by financing activities	842,000	63,955,000	942,000
Effect of foreign currency translation on cash balances	247,000	(14,000)	(75,000)
Net (decrease) increase in cash and cash equivalents	(23,171,000)	57,479,000	(8,765,000)
Cash and cash equivalents at beginning of the period	74,205,000	16,726,000	25,491,000
Cash and cash equivalents at end of the period	$ 51,034,000	$ 74,205,000	$ 16,726,000
Supplemental disclosure of cash flow information:			
Interest paid	$ 162,000	$ 197,000	$ 81,000
Income taxes paid	—	—	$ 58,000
Supplemental disclosure of non-cash investing and financing activities:			
Acquisition of property and equipment under capital leases	$ 2,080,000	$ 1,217,000	$ 1,077,000
Deferred compensation	—	$ 1,494,000	$ 4,284,000
Fair value of common stock issued in purchase acquisitions	—	—	$ 1,973,000

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

1. Nature of Business

Dyax Corp. ("Dyax" or the "Company") is a biopharmaceutical company principally focused on the discovery, development and commercialization of therapeutic products. The Company uses a proprietary, patented method, known as phage display, to identify a broad range of compounds with the potential for the treatment of various diseases. The Company is using phage display technology to build a broad portfolio of product candidates that it plans to develop and commercialize itself or with others. On behalf of collaborators, the Company also uses phage display technology to identify compounds that can be used in therapeutics, diagnostic imaging, the development of research reagents, and in purifying and manufacturing biopharmaceuticals and chemicals. The Company is further leveraging its phage display technology through collaborations and licenses that are structured to generate revenues through research funding, license fees, technical and clinical milestone payments, and royalties. The Company, through its Biotage subsidiary, develops, manufactures and sells chromatography separations systems and products.

The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, dependence on collaborative arrangements, development by the Company or its competitors of new technological innovations, dependence on key personnel, protection of proprietary technology, and compliance with FDA and other governmental regulations and approval requirements.

2. Accounting Policies

Basis of Consolidation: The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries, Biotage, Inc. including its foreign sales subsidiaries, and Target Quest BV and Dyax s.a., European research subsidiaries. All intercompany accounts and transactions have been eliminated.

Reclassifications: Certain reclassifications have been made to the prior years financial statements to conform to current presentation.

Use of Estimates: The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make certain estimates and assumptions that affect the amounts of assets and liabilities reported and disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenue and expenses during the reporting periods. The significant estimates and assumptions in these financial statements include revenue recognition, receivable collectibility, inventory valuation, useful lives with respect to long lived assets, valuation of common stock and related stock options, accrued expenses and tax valuation reserves. Actual results could differ from those estimates.

Concentration of Credit Risk: Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash, cash equivalents and trade accounts receivable. At December 31, 2001, approximately 85% of the Company's cash and cash equivalents were invested in U.S. Treasury funds held by one financial institution.

The Company provides most of its products to pharmaceutical and biomedical companies worldwide. Concentrations of credit risk with respect to trade receivable balances are limited due to the diverse number of customers comprising the Company's customer base. The Company performs ongoing credit evaluations of its customers' financial conditions and maintains reserves for potential credit loss. Activity for fiscal 2001, 2000 and 1999 included provisions of $25,000, $1,000 and $0, respectively. Receivable write offs in 2001, 2000 and 1999 were nominal. One customer accounted for

2. Accounting Policies (Continued)

approximately 13% of the Company's accounts receivable balance at December 31, 2000. A different customer accounted for approximately 24% of the Company's accounts receivable balance at December 31, 2001.

Cash and Cash Equivalents: All highly liquid investments purchased with an original maturity of three months or less are considered to be cash equivalents. Cash and cash equivalents consist principally of cash and U.S. Treasury funds. The Company currently invests its excess cash in U.S. Treasury funds. The Company maintains balances in various operating accounts in excess of federally insured limits.

Inventories: Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out (FIFO) method. Inventories are reviewed for slow moving, obsolete and excess items on a quarterly basis and, if necessary, a charge is recorded in the results of operations.

Fixed Assets: Property and equipment are recorded at cost and depreciated over the estimated useful lives of the related assets using the straight-line method. Laboratory and production equipment, and furniture and office equipment are depreciated over a three to seven year period. Leasehold improvements are stated at cost and are amortized over the lesser of the non-cancelable term of the related lease or their estimated useful lives. Leased equipment is amortized over the lesser of the life of the lease or their estimated useful lives. Maintenance and repairs are charged to expense as incurred. When assets are retired or otherwise disposed of, the cost of these assets and related accumulated depreciation and amortization are eliminated from the balance sheet and any resulting gains or losses are included in operations in the period of disposal.

Goodwill and Other Intangibles: Goodwill, which represents the excess purchase price over the fair value of net assets acquired, was amortized on a straight-line basis over its useful life, currently 2.5 to 15 years. The Company will adopt Statement of Financial Accounting Standards ("SFAS") No. 142, "Goodwill and Other Intangible Assets", effective January 1, 2002. SFAS 142 requires that ratable amortization of goodwill be replaced with periodic tests of the goodwill's impairment and that intangible assets other than goodwill be amortized over their useful lives. As of December 31, 2001 and 2000, accumulated amortization of goodwill and other intangibles was $2,470,000 and $1,527,000, respectively. The Company does not expect the adoption of SFAS No. 142 to have a material impact on its financial position or results of operations.

Impairment of Long-Lived Assets: The Company reviews long-lived assets, including goodwill, for impairment whenever events or changes in business circumstances indicate that the carrying amount of assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Each impairment test is based on a comparison of the undiscounted cash flow to the recorded value of the asset. If an impairment is indicated, the asset is written down to its estimated fair value on a discounted cash flow basis.

Software Development Costs: The Company capitalizes software development costs for software products in accordance with SFAS No. 86, "Accounting for the Costs of Computer Software to Be Sold, Leased or Otherwise Marketed". Capitalized software costs are amortized to cost of sales over the estimated useful lives of the related software products, currently 5 years. Capitalized software costs included in other assets, net of accumulated amortization of $10,000 and $0, were $131,000 and $0 at December 31, 2001 and 2000, respectively.

2. Accounting Policies (Continued)

Revenue Recognition: The Company has utilized the guidance of Staff Accounting Bulletin 101, "Revenue Recognition in Financial Statements", for all periods presented in these financial statements. Product revenue is derived from sales of Biotage chromatography separations systems and cartridges. The Company generally recognizes revenue on product sales arrangements based on product shipment if no installation obligations exist. For product sale arrangements that require installation services that are not considered essential to the functionality of the product, revenue is recognized upon shipment and a portion of revenue equal to the fair value of the installation service is deferred and recognized upon the completion of the installation. For product sale arrangements that require significant installation services and contain customer acceptance criteria, all revenue is recognized upon the completion of the installation and satisfaction of the customer acceptance criteria. One customer accounted for approximately 12% of product revenues in 2001 and no customer accounted for more than 10% of product revenues in 2000 or 1999.

The Company enters into product development agreements with collaborative partners for the development of therapeutic, diagnostic and separations products. The terms of the agreements may include non-refundable signing fees, funding for research and development, milestone payments and royalties on any product sales derived from collaborations. Non-refundable signing fees are recognized as services are performed over the expected term of the collaboration. Funding for research and development, where the amounts recorded are non-refundable if research efforts are unsuccessful, is recognized as the related expenses are incurred. Upon achievement of milestones, a portion of the milestone payment equal to the percentage of the collaboration completed through that date is recognized. The remainder is recognized as services are performed over the remaining term of the collaboration. Royalties are recognized when earned. The same customer accounted for approximately 26% and 38% of product development and license fee revenues in 2001 and 2000, respectively. Two additional customers accounted for approximately 23% and 11% of product development and license fee revenues in 2001. No customer accounted for more than 10% of product development and license fee revenues in 1999.

The Company evaluates all collaborative agreements on a quarterly basis to determine the appropriate revenue recognition for that period. The evaluation includes all of the potential revenue components from each specific collaborative agreement. Revenue recorded on government grants are consistent with guidelines issued by the governing body issuing the grant.

The Company licenses its patent rights covering phage display on a non-exclusive basis in the fields of therapeutics, antibody-based *in vitro* diagnostics and research products. Standard terms of the license agreements, for which the Company has no future obligations, generally include non-refundable signing fees, non-refundable annual maintenance fees, milestone payments and royalties on product sales. Signing fees and annual maintenance fees are recognized in equal monthly installments over the period to which the payment applies. Perpetual patent licenses are recognized immediately if the Company has no future obligations. Milestone payments under non-exclusive phage display patent licenses are recognized when the milestone is achieved and royalties are recognized when they are earned.

Revenue from National Institute of Standards and Technology grants to conduct research and development is recognized as eligible costs are incurred, up to the funding limit. Eligible grant related costs which have been incurred in advance of cash receipts are recorded as receivables.

Payments received that have not met the appropriate criteria for revenue recognition are recorded as deferred revenue.

2. Accounting Policies (Continued)

Shipping and Handling: Shipping and handling costs are included within cost of products sold, with the related sales value included within product revenues.

Product Warranty: The Company provides customers with a twelve-month warranty on its chromatography systems from the date of shipment. Estimated warranty obligations, which are included in the results of operations as cost of products sold, are evaluated and provided for at the time of sale.

Research and Development: Research and development costs are expensed as incurred.

Advertising: Advertising costs are expensed as incurred. For the years ending December 31, 2001, 2000, and 1999 advertising expense was $611,000, $287,000 and $310,000, respectively.

Income Taxes: The Company utilizes the asset and liability method of accounting for income taxes as set forth in SFAS No. 109, "Accounting for Income Taxes" ("SFAS No. 109"). Under this method, deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the carrying amounts and the tax basis of assets and liabilities using the current statutory tax rates.

Translation of Foreign Currencies: Assets and liabilities of the Company's foreign subsidiaries are translated at period end exchange rates. Amounts included in the statements of operations are translated at the average exchange rate for the period. The resulting currency translation adjustments are made directly to a separate component of stockholders' equity. For the year ending December 31, 2001, 2000 and 1999, losses from transactions in foreign currencies were $278,000, $372,000 and 0, respectively, and are included in selling, general and administrative expenses.

Comprehensive Income (Loss): The Company accounts for comprehensive income (loss) under SFAS No. 130, "Reporting Comprehensive Income." The statement established standards for reporting and displaying comprehensive income and its components in a full set of general purpose financial statements. The statement required that all components of comprehensive income be reported in a financial statement that is displayed with the same prominence as other financial statements.

Net Loss Per Share: The Company accounts for and discloses earnings per share ("EPS") under SFAS No. 128, "Earnings per Share" ("SFAS No. 128"). This statement specifies the computation, presentation and disclosure requirements of EPS to simplify the existing computational guidelines and increased comparability on an international basis.

Under SFAS No. 128, the Company is required to present two EPS amounts, basic and diluted. Basic EPS is calculated based on income available to common stockholders and the weighted-average number of common shares outstanding during the reporting period. Diluted EPS may include additional dilution from potential common stock, such as stock issuable pursuant to the exercise of stock options and warrants outstanding, the conversion of preferred stock and conversion of debt, unless their inclusion would be antidilutive.

Business Segments: The Company discloses business segments under SFAS No. 131, "Disclosures about Segments of an Enterprise and Related Information" ("SFAS No. 131"). The statement established standards for reporting information about operating segments in annual financial statements of public enterprises and in interim financial reports issued to shareholders. It also established standards for related disclosures about products and services, geographic areas and major customers.

2. Accounting Policies (Continued)

Recent Pronouncements: In June 2001, the Financial Accounting Standards Board (FASB) issued SFAS No. 141, Business Combinations and SFAS No. 142, Goodwill and Other Intangible Assets. SFAS 141 requires that all business combinations be accounted for using the purchase method only and that certain acquired intangible assets in a business combination be recognized as assets apart from goodwill. SFAS 142 requires that ratable amortization of goodwill be replaced with periodic tests of the goodwill's impairment and that intangible assets other than goodwill be amortized over their useful lives. SFAS 141 is effective for all business combinations initiated after June 30, 2001 and for all business combinations accounted for by the purchase method for which the date of acquisition is after June 30, 2001. The provisions of SFAS 142 will be effective for fiscal years beginning after December 15, 2001, and will thus be adopted by the Company, as required, in fiscal year 2002. The Company does not expect the adoption of SFAS 141 and SFAS 142 to have a material impact on the Company's financial position or operating results.

In August 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets". SFAS 144 supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of" and provides a single accounting model for long-lived assets to be disposed of. SFAS 144 is effective for fiscal years beginning after December 15, 2001 and will thus be adopted by the Company, as required, on January 1, 2002. The Company does not expect the adoption of SFAS 144 to have a material impact on its financial position or operating results.

3. Business Combinations

On July 14, 1999, the Company acquired all of the capital stock of Target Quest, B.V. in exchange for 412,500 shares of Dyax common stock. Management determined that the fair value of these shares at the time of the acquisition was $5.21 per share. The acquisition was accounted for as a pooling of interests. Target Quest, B.V. is a research business specializing in the development of human antibodies. Target Quest, B.V.'s revenues are derived from collaborative agreements and government grants. It is reflected in the Therapeutics/Diagnostics segment. The Company's historical consolidated financial statements have been restated to reflect the combined financial position and results of operations and cash flows of Dyax and Target Quest, B.V. for all periods presented.

The results of operations for Dyax and Target Quest, B.V. and the combined amounts presented for periods preceding the acquisition were as follows:

	Year Ended December 31, 1999
Net Revenue:	
Dyax	$ 16,408,000
Target Quest, B.V	425,000
	$ 16,833,000
Net Income (Loss):	
Dyax	$(13,429,000)
Target Quest, B.V	242,000
	$(13,187,000)

3. Business Combinations (Continued)

For the six month period ended June 30, 1999, Target Quest, B.V. had revenues of $490,000 and net income of $206,000, before elimination of intercompany activity.

Also on July 14, 1999, the Company acquired the 33% share of Target Quest, LLC, that was not owned by Target Quest, B.V., in exchange for 379,152 shares of Dyax common stock. The acquisition of the remaining 33% interest of Target Quest, LLC, together with the acquisition of Target Quest, B.V., which owned 67% of Target Quest, LLC, gave the Company 100% ownership of Target Quest, LLC. The acquisition was accounted for as a purchase and accordingly, the results of its operations have been included in the consolidated financial statements commencing on July 1, 1999, the effective accounting date of the acquisition. The entire excess purchase price of approximately $2,078,000 was allocated to a marketing agreement between Target Quest, LLC and Target Quest, B.V. This amount has been amortized over the 2.5 years of the marketing rights on a straight line basis and was included in goodwill and other intangibles on the accompanying balance sheet. At December 31, 2001, the balance was fully amortized. Target Quest, LLC was formed in late 1998, but did not commence operations until 1999. For the six month period ended June 30, 1999, Target Quest, LLC had revenues of $293,000 and a net loss of $310,000.

The following unaudited pro forma results of operations for the year ended December 31, 1999, give effect to the Company's acquisition of Target Quest, LLC, as if the transaction had occurred at the beginning of the year. The pro forma results of operations do not purport to represent (i) what the Company's results of operations actually would have been if the acquisition had occurred at the beginning of the period or (ii) what such results will be for any future periods.

	Unaudited Pro Forma Results for the Year Ended December 31, 1999
Net Revenue	$ 16,930,000
Net Loss	$(13,290,000)

4. Inventories

Inventories consist of the following:

	December 31,	
	2001	2000
Raw materials	$2,396,000	$1,627,000
Work in process	237,000	231,000
Finished products	634,000	861,000
	$3,267,000	$2,719,000

5. Fixed Assets

Fixed assets consist of the following:

	December 31, 2001	December 31, 2000
Land	$ 794,000	$ —
Construction in progress	5,084,000	39,000
Laboratory and production equipment	3,821,000	3,066,000
Furniture and office equipment	1,261,000	1,060,000
Software	1,101,000	—
Leasehold improvements	978,000	1,070,000
Leased assets	4,858,000	2,778,000
Total	17,897,000	8,013,000
Less: accumulated depreciation and amortization	(4,982,000)	(3,912,000)
	$12,915,000	$ 4,101,000

There was $1,734,000 and $864,000 of accumulated amortization on leased assets, which includes laboratory, production and office equipment, at December 31, 2001 and 2000, respectively.

6. Notes Receivable, Employees

During 1998, in connection with the sale of 78,240 shares of restricted common stock and the exercise of options to purchase 37,490 shares of common stock, the Company agreed to loan to an officer an aggregate of $454,000 in a non-cash transaction pursuant to promissory notes, of which $418,000 was used to purchase the related common stock and was included as a reduction to stockholders' equity. The remaining $36,000 balance of the loan, the proceeds of which were to pay certain tax liabilities in connection with the exercise of the options, was included in notes receivable, employees. For the years ended December 31, 2000 and 1999, interest due was forgiven in the amount of $25,000 and $26,000, respectively. During 2001, these notes and the related interest were paid in full (see Note 11).

In October 1998, the Company provided a mortgage loan and pledge agreement in the amount of $1,300,000 to its President and Chief Executive Officer, who is also Chairman of the Company's Board of Directors, to purchase a residence within commuting distance of the Company's headquarters. The loan bears interest at the Prime Rate less 1.5% (3.25% at December 31, 2001) and is collateralized by the real estate acquired with the loan proceeds and shares of common stock owned by this officer. The agreement as amended in 2001, requires that aggregate collateral value of at least 150% of the outstanding loan principal be maintained throughout the life of the loan. Payments in the amount of $8,220 are due monthly to the Company which are applied to interest and then principal. All remaining unpaid principal and accrued interest is payable on October 30, 2003, provided, however that it may be accelerated at any time at the discretion of the Board of Directors, including upon (i) termination of his service as Chairman of the Company and Chief Executive Officer; provided, however that in the case of death or disability payment shall not be due for at least twelve months after termination; or (ii) at any time that the Company's cash and marketable investments total less than $10,000,000. At December 31, 2001 and 2000, the balance outstanding on this note was $1,286,000 and $1,300,000, respectively.

6. Notes Receivable, Employees (Continued)

In June 1999, the Company provided a loan to an officer of the Company in the amount of $100,000. The note, which bears interest at the Prime Rate plus 1.0% (5.75% at December 31, 2001) is payable in June 2004, subject to acceleration, and becomes due immediately if the officer's employment is terminated other than by the Company without cause. As long as the officer remains employed by the Company, the Company will forgive $20,000 and all accrued interest on June 14 annually. Upon the officer's death or permanent disability, the remaining principal of the loan plus all accrued interest will be forgiven. For the years ended December 31, 2001, 2000 and 1999 interest due was forgiven in the amount of $8,000, $9,000 and $0, respectively. For the years ended December 31, 2001, 2000 and 1999 principal was forgiven in the amount of $20,000, $20,000 and $0, respectively. At December 31, 2001 and 2000, the balance outstanding on this note was $60,000 and $80,000, respectively.

In connection with the acquisition of Target Quest, LLC, the Company made loans to other employees that are due in less than one year. The loans are collateralized by common shares of Dyax stock. At December 31, 2001 and 2000, the balance outstanding on these notes were $159,000 and $412,000, respectively.

7. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consist of the following:

	December 31,	
	2001	2000
Accounts payable	$ 6,504,000	$4,489,000
Accrued compensation and related taxes	2,357,000	2,311,000
Accrued warranty costs	296,000	146,000
Other accrued liabilities	947,000	1,037,000
	$10,104,000	$7,983,000

8. Long-term Obligations

During 2001, the Company signed an agreement with a leasing company, providing the Company with a credit facility to fund the purchase of leasehold improvements, other building costs and software. In 2001, the Company borrowed $2,930,000 on this facility, which is collateralized by an irrevocable stand-by letter of credit. The lender has no obligation to fund any further amounts. These obligations bear interest at a rate of 10.33% and are payable in 36 monthly installments beginning on January 1, 2002. If at the end of any quarter, the Company's unrestricted cash is less than the greater of $25.0 million or annualized cash needs, the Company shall provide to the lessor an irrevocable letter of credit in the amount equal to the amount financed. Annualized cash needs are determined by multiplying the cash used in operations on a consolidated basis for the most recently ended quarter by four. If the Company has never been in default, the letter of credit amount may decline annually to an amount equal to the principle due.

During 2001, the Company signed a capital lease agreement, providing the Company with a lease facility for qualified fixed assets. In 2001, the Company sold to the lessor and leased back $1,789,000 of laboratory, production and office equipment under this lease facility. The loans on the lease facility

8. Long-term Obligations (Continued)

bear interest at a rate of 10.14% and are payable in 42 monthly installments. The lessor has no further obligation to fund any further amounts.

The Company had a capital lease agreement providing the Company with a $2,000,000 lease facility for qualified fixed assets. The ability to draw on the lease facility ceased in April 2001. In 2001 and 2000, the Company sold to the lessor and leased back $291,000 and $900,000, respectively, of laboratory, production and office equipment under this lease facility, for which no gain or loss was recognized. The loans on the lease facility bear interest at a rate between 6.3% and 12.0%, and are payable in 28 to 60 monthly installments.

The Company also has a lease facility in The Netherlands. In 2000, the Company sold to the lessor and leased back $278,000 of laboratory equipment under this facility.

In connection with the construction of a new facility in Charlottesville, Virginia, the Company has been approved for a loan of up to $4.25 million, subject to the execution and delivery to the bank of related legal documents. The Company is required to advance the first $1.25 million of construction costs prior to drawing down on the loan. The loan cannot exceed the lower of 70% of the completed appraised value or 70% of actual construction costs. Interest is payable monthly on the amount outstanding until completion of construction, limited to a maximum of 16 months. Upon completion of the construction or 16 months, the loan will be converted to a term loan and will be repaid over 20 years with interest at between 5.83% and 7.00%. The interest rate will be adjusted every five years but may be adjusted earlier if the Company doesn't maintain an average non-interest bearing compensating balance of $750,000 at the lender. As of December 31, 2001, there was no amount outstanding.

Minimum future payments under the Company's long-term obligations as of December 31, 2001 are as follows:

2002	$2,460,000
2003	2,350,000
2004	1,907,000
2005	202,000
2006 and thereafter	—
Total future minimum payments	6,919,000
Less: amount representing interest	(485,000)
Present value of future minimum payments	6,434,000
Less: current portion	(2,194,000)
Long-term obligations	$4,240,000

8. Long-term Obligations (Continued)

Long-term obligations consist of the following:

	December 31, 2001	December 31, 2000
Capital lease obligations	$3,504,000	$2,263,000
Leasehold improvement obligations	2,930,000	—
Present value of future minimum payments	6,434,000	2,263,000
Less: current portion	(2,194,000)	(683,000)
Long-term obligations	$4,240,000	$1,580,000

9. Operating Leases

In June 2001, the Company signed a ten-year lease with the Massachusetts Institute of Technology. The leased property is located in Cambridge, Massachusetts and will serve as the Company's corporate headquarters and main research facility. Under the terms of the lease, the Company will initially lease 67,197 square feet. The Company occupied the corporate headquarters space in the first quarter of 2002 and expects to occupy the research facility portion of the property in the second quarter of 2002. The Company is obligated to lease an additional 24,122 square feet by the sixty-fifth month from the initial occupancy date. The Company has the option to extend the lease for two additional five-year terms. The Company was required to provide the lessor with a letter of credit in the amount of $4,279,000, which may be reduced after the fifth year of the lease term. This amount is included as restricted cash on the balance sheet.

The Company has operating leases for 25,326 square feet of laboratory and office space in Cambridge, Massachusetts under two leases, as well as two leases covering 28,200 square feet of manufacturing, office and storage space in Charlottesville, Virginia. The leases for the Cambridge facilities expire in April 2002 and June 2002. The leases for the Charlottesville facilities were extended to August 2002 and January 2003. The Charlottesville lease has a renewal option with an escalation clause. The Company also leases approximately 4,000 square feet of office space in the United Kingdom under an operating lease which permits the Company to renew after each five-year period; however, should the Company elect not to renew, there is a termination fee equal to one year's rent, which has been included in the following commitment schedule in 2006. The Company also maintains 10,000 square feet of laboratory and office space in Belgium, which expires in December 2004.

Minimum future lease payments under the Company's non-cancelable operating leases as of December 31, 2001 are as follows:

2002	$ 4,541,000
2003	3,959,000
2004	3,827,000
2005	3,710,000
2006 and thereafter	30,670,000

Rent expense for the years ended December 31, 2001, 2000 and 1999 was approximately $1,885,000, $1,634,000 and $1,498,000, respectively.

10. Litigation

The Company's first phage display patent in Europe was opposed by two parties in late 1997. The oppositions primarily relate to whether the written description of the inventions in the Company's European patent is sufficient under European patent law. A hearing on these oppositions was held on April 6, 2000 and the patent was revoked. The Company has appealed this decision to the Technical Board of Appeals. This appeal suspends the Opposition Division's decision and reinstates the Company's patent pending the decision of the Technical Board of Appeals. Although the Company will be able to enforce this patent during the appeal, any infringement action that the Company files will likely be stayed pending the results of the appeal. Oral proceedings are scheduled before the Technical Review Board in the appeal on July 2, 2002. The decision of the Technical Board will be final. The Company also has two other patent applications related to the Company's phage display technology pending in the European Patent Office. During the continued prosecution of these applications, the Examining Division will consider the grounds on which the Opposition Division revoked the Company's first patent taken together with the Technical Board's decision on the appeal. The Company cannot assure that it will prevail in the appeal proceedings or during the prosecution of the two other European patent applications or in any other opposition or litigation contesting the validity or scope of our European patents. The Company will not be able to prevent other parties from using our phage display technology in Europe if we are not successful in the reinstatement of our first European patent or if the European Patent Office does not grant us another patent that the Company can maintain after any opposition.

The Company is engaged in a United States court proceeding relating to patents owned by a third party. The third party sued the Company in New York for patent infringement of three United States patents. The Federal District Court in New York dismissed the complaint for lack of jurisdiction and the decision of the Federal District Court was upheld by the Court of Appeals for the Federal Circuit. Dr. Piecznik has petitioned the United States Supreme Court for permission to appeal the Federal Circuit's decision. The Company intends to oppose that petition. Grant of the petition would not overrule the dismissal of the New York action. Rather it would merely give Dr. Piecznik the right to appeal the dismissal. On July 12, 2000, the plaintiffs filed the complaint against the Company in the United States District Court in Massachusetts alleging infringement of the same three patents that were at issue in the New York case. A claims construction hearing was held on December 12, 2001. The Company is awaiting a decision. After the court construes the claims asserted against the Company by Dr. Piecznik, the court will determine whether or not the Company's activities infringe these claims and if these claims are valid and enforceable. The amount of a loss, if any, is not expected to be material.

11. Stockholders' Equity

Preferred Stock: All of the shares of Class A Series 5 Preferred Stock were converted to common stock coincident with the Company's initial public offering. As of December 31, 2001, there were 1,000,000 shares of $0.01 par value preferred stock authorized but undesignated.

Common Stock: On August 18, 2000, the Company completed its initial public offering of 4,600,000 shares of common stock at $15.00 per share, including 600,000 shares of common stock issued pursuant to the exercise by the underwriters of their over-allotment option. The gross proceeds to the Company from the offering, including the shares sold pursuant to the exercise of the over-allotment option, were $69.0 million. The costs associated with the initial public offering were $6,650,000. Coincident with the initial public offering, 14,696,987 shares of preferred stock automatically converted

11. Stockholders' Equity (Continued)

into 11,585,454 shares of common stock. As of December 31, 2001, there were 50,000,000 shares authorized.

Stock Options: The Company's 1995 Equity Incentive Plan (the "Plan") is an equity plan under which equity awards, including awards of restricted stock and incentive and nonqualified stock options to purchase shares of common stock to employees and consultants of the Company may be granted by action of the Compensation Committee of the Board of Directors. Although in certain circumstances granted below fair market value, options are generally granted at the current fair market value on the date of grant, generally vest ratably over a 48 month period, and expire within ten years from date of grant. In October 2001, the Board of Directors increased the common stock options available for grant under the Plan to 5,500,000. At December 31, 2001, there were 4,082,709 shares of common stock reserved for issuance under the Plan of which 405,079 shares remained available for future grant. Since the Plan's inception, 1,417,291 shares have been issued under the Plan.

Stock option activity for the 1995 Equity Incentive Plan is summarized as follows:

	Option Shares	Weighted-Avg. Exercise Price
Outstanding at December 31, 1998	1,603,143	1.45
Granted	906,220	2.04
Exercised	(53,287)	1.02
Canceled	(120,621)	1.48
Outstanding at December 31, 1999	2,335,455	1.69
Granted	970,379	18.27
Exercised	(480,505)	1.63
Canceled	(62,959)	2.14
Outstanding at December 31, 2000	2,762,370	7.50
Granted	1,572,735	11.17
Exercised	(380,132)	1.31
Canceled	(277,343)	15.80
Outstanding at December 31, 2001	3,677,630	9.08

11. Stockholders' Equity (Continued)

Summarized information about stock options outstanding at December 31, 2001 is as follows:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding	Remaining Contractual Life	Weighted-Average Exercise Price	Number Exercisable	Weighted-Average Exercise Price
$0.30 to $1.53	328,959	5.39	$ 1.13	328,429	$ 1.13
$2.00 to $2.50	1,015,787	7.38	$ 2.04	736,916	$ 2.04
$6.00 to $8.94	409,428	8.92	$ 7.06	111,684	$ 6.69
$9.02 to $13.25	1,171,664	9.77	$ 10.80	75,216	$12.00
$14.00 to $19.58	455,182	9.05	$ 17.38	114,823	$17.45
$21.20 to $27.86	264,506	8.95	$ 23.76	73,154	$24.03
$35.00 to $48.69	32,104	8.76	$ 38.26	19,715	$37.11
	3,677,630	8.47	$ 9.08	1,459,937	$ 5.49

The weighted average fair value of options granted under the Plan during 2001 and 2000, as determined under the Black-Scholes option pricing model was $9.74 and $15.78, respectively. The weighted average fair value of options granted under the Plan during 1999 as determined under the minimum value method was $0.63. Total options exercisable at December 31, 2001, 2000 and 1999 were 1,459,937, 1,163,895 and 1,008,834, respectively.

SFAS No. 123, "Accounting for Stock-Based Compensation" ("SFAS No. 123"), requires that companies either recognize compensation expense for grants of stock, stock options and other equity instruments to employees based on fair value, or provide pro forma disclosure of net income in the notes to the financial statements. The Company has adopted the disclosure provisions of SFAS No. 123 and applies Accounting Principles Board Opinion No. 25 and related interpretations in accounting for its plan. If compensation costs for the Company's employee and director stock-based compensation plan had been determined based on the fair value at the grant dates as calculated in accordance with SFAS No. 123, the Company's net loss and net loss per share for the years ended December 31, 2001, 2000 and 1999 would have increased to the pro forma amounts shown below:

	Year Ended December 31,		
	2001	2000	1999
Net loss as reported	$(17,165,000)	$(15,189,000)	$(13,187,000)
Pro forma net loss	$(22,809,000)	$(16,139,000)	$(13,412,000)
Basic and diluted net loss per share as reported	$ (.89)	$ (1.77)	$ (6.81)
Pro forma basic and diluted net loss per shared	$ (1.19)	$ (1.88)	$ (6.92)

11. Stockholders' Equity (Continued)

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

	Year Ended December 31,		
	2001	2000	1999
Expected option term	6.0	6.0	6.0
Risk-free interest rate	4.79%	5.30%	6.19%
Expected dividend yield	None	None	None
Volatility factor	118%	75%	None

In 2001, 2000 and 1999, the Company recorded $0, $1,494,000 and $4,284,000, respectively, of deferred compensation related to stock option grants to employees. The deferred compensation represents differences between the estimated fair value of common stock on the date of grant and the exercise price. The deferred compensation is being amortized and charged to operations over the vesting period of the related options. Total employee stock option-related compensation expense for 2001, 2000 and 1999 was $1,554,000, $2,421,000 and $939,000, respectively.

Restricted Stock: In March 1997, the Company issued 114,100 shares of common stock at a purchase price of $0.77 per share to an officer under its 1995 Equity Incentive Plan, subject to a stock restriction agreement whereby the Company had the right, but not the obligation, to repurchase the unvested portion of the shares of common stock at the original purchase price per share in the event of termination of the officer's employment with the Company. Shares subject to this agreement vested monthly over a 48-month period. At December 31, 2001, there were no unvested shares.

In February 1998, the Company issued 78,240 shares of its common stock at a purchase price of $4.60 per share to an officer under its 1995 Equity Incentive Plan, subject to a stock restriction agreement whereby the Company had the right, but not the obligation, to repurchase the unvested portion of the shares of common stock at the original purchase price per share upon termination of the officer's employment with the Company. Shares subject to this agreement vested monthly over a 24-month period, beginning in February 2000, except that unvested shares vested in full upon the closing of the Company's initial public offering of common stock in August 2000. The Company recorded $285,000 of deferred compensation during 1998 in connection with the sale of shares of common stock to the officer based upon an estimated fair value at the date of issuance of $8.25 per share. The deferred compensation amount was charged to operations as the restricted stock vested.

During the fourth quarter of 1999, the Company issued 47,500 shares of common stock, under two separate agreements, at a purchase price of $2.00 per share, to an officer under its 1995 Equity Incentive Plan, subject to stock restriction agreements whereby the Company had the right of first refusal with respect to these shares. The first agreement involved 25,000 shares, which vested immediately. The second agreement involved 22,500 shares, which vested monthly over a 24-month period with certain acceleration provisions, and were subject to the Company's right to repurchase the unvested portion of the shares of common stock at the original purchase price per share in the event of termination of the officer's employment with the Company. The Company recorded $248,000 of deferred compensation during 2000 in connection with the sale of shares of common stock to the officer based upon an estimated fair value at the date of issuance of $7.22 per share. The deferred compensation amount was charged to operations over the vesting period and the remaining unvested

11. Stockholders' Equity (Continued)

shares were accelerated upon the closing of the initial public offering of the Company's common stock in August 2000.

Warrants: At December 31, 1999, the Company had outstanding warrants to purchase 27,022 shares of the Company's common stock at $3.97 per share, which were exercised in August 2000. There were no outstanding warrants at December 31, 2001 and 2000.

Employee Stock Purchase Plan: The Company's 1998 Employee Stock Purchase Plan (the "Purchase Plan"), allows employees to purchase shares of common stock at a discount from fair market value. At the Purchase Plan's inception there were 97,800 shares of common stock reserved for issuance under the Purchase Plan. Rights to purchase common stock under the Purchase Plan are granted at the discretion of the Compensation Committee, which determines the frequency and duration of individual offerings under the Purchase Plan and the dates when stock may be purchased. Eligible employees participate voluntarily and may withdraw from any offering before the stock is purchased. The purchase price per share of common stock in an offering is 85% of the lesser of its fair market value at the beginning of the offering period or on the applicable exercise date and may be paid through payroll deductions. As of December 31, 2001, 7,025 shares had been issued under the Purchase Plan.

12. Employee Savings and Retirement Plans

The Company has an employee savings and retirement plan (the "Retirement Plan"), qualified under section 401(k) of the Internal Revenue Code, covering substantially all of the Company's U.S. employees. Employees may elect to contribute a portion of their pretax compensation to the Retirement Plan up to the annual maximum allowed under the Retirement Plan. In 2001, the Company began matching 50% of employee contributions up to 6% of eligible pay. Employees are 100% vested in company matching contributions immediately. For the years ended December 31, 2001, 2000 and 1999, the Company's contributions amounted to $326,000, $0 and $0, respectively.

13. Other Income, Net

Other income, net consists of the following:

	Year Ended December 31,		
	2001	2000	1999
Interest income	$2,315,000	$2,188,000	$ 937,000
Interest expense	(162,000)	(197,000)	(81,000)
Investment income	—	—	265,000
	$2,153,000	$1,991,000	$1,121,000

14. Net Loss Per Share

Net loss per share is computed under SFAS No. 128. Basic net loss per share is computed using the weighted average number of shares of common stock outstanding. Diluted loss per share does not differ from basic loss per share since potential common shares from the conversion of preferred stock and exercise of stock options and warrants are antidilutive for all periods presented and therefore are excluded from the calculation of diluted net loss per share.

The following sets forth the computation of net loss per share:

	Year Ended December 31,		
	2001	2000	1999
Numerator: Net Loss	$(17,165,000)	$(15,189,000)	$(13,187,000)
Denominator: Weighted average common shares, basic and diluted	19,244,809	8,577,912	1,936,907
Net loss per share: Basic and diluted	$ (.89)	$ (1.77)	$ (6.81)

The following potentially dilutive common shares were excluded because their effect was antidiliutive:

	December 31,		
	2001	2000	1999
Convertible preferred stock	—	—	11,585,454
Stock options	3,677,630	2,762,370	2,335,455
Warrants	—	—	27,022
Unvested restricted stock	—	7,134	133,585

15. Income Taxes

For the years ended December 31, 2001, 2000, and 1999, the Company had income tax provisions of $0, $0 and $58,000, respectively.

Temporary differences that give rise to significant deferred tax assets as of December 31, 2001 and 2000 are as follows:

	2001	2000
Deferred Tax Asset:		
Inventory costs	$ 236,000	$ 303,000
Allowance for doubtful accounts	62,000	52,000
Depreciation and amortization	115,000	128,000
Accrued expenses	416,000	182,000
Other	881,000	88,000
Deferred revenue	1,514,000	—
Research credit carryforwards	2,404,000	1,469,000
Net operating loss carryforwards	27,894,000	25,374,000
Valuation allowance	(33,522,000)	(27,596,000)
Net deferred tax asset	$ —	$ —

15. Income Taxes (Continued)

As of December 31, 2001, the Company had federal net operating loss ("NOL") and research and experimentation credit carryforwards of approximately $70.6 million and $1.7 million, respectively, which may be available to offset future federal income tax liabilities and expire at various dates from 2004 through 2021. The Company has recorded a deferred tax asset of approximately $1.4 million reflecting the benefit of deductions from the exercise of stock options. This deferred asset has been fully reserved until it is more likely than not that the benefit from the exercise of stock options will be realized. The benefit from this $1.4 million deferred tax asset will be recorded as a credit to additional paid-in capital when realized. As required by SFAS No. 109, management of the Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets, which are comprised principally of NOL and research and experimentation credit carryforwards. Management has determined at this time that it is more likely than not that the Company will not recognize the benefits of federal and state deferred tax assets and, as a result, a valuation allowance of approximately $33.5 million has been established at December 31, 2001.

Ownership changes, as defined in the Internal Revenue Code, may have limited the amount of NOL carryforwards that can be utilized annually to offset future taxable income. Subsequent ownership changes could further affect the limitation in future years.

As of December 31, 2001, the Company's foreign subsidiaries had NOL carryforwards of approximately $2.2 million, which expire over various periods, for which a full valuation allowance has been provided.

16. Related Party Transactions

The President, Chief Executive Officer and Chairman of the Board of the Company also serves as an outside director of and consultant to Genzyme Corporation ("Genzyme") and as an outside director of Genzyme Transgenics Corporation, a company in which Genzyme owns approximately 26%. In 1996, the Company entered into a sublease agreement with Genzyme for laboratory and office facilities in Cambridge, Massachusetts, which was extended to April 2002. Rent expense of $682,000, $615,000 and $615,000 was recorded in each year ended December 31, 2001, 2000 and 1999, respectively. During 1996, the Company signed two patent license agreements with Genzyme under the Company's standard license terms. The Company recorded license revenues of $50,000, for each year ended December 31, 2001, 2000 and 1999, in connection with the maintenance fees on these two agreements. As of December 31, 2001 and 2000, the related accounts receivable balance was $50,000 and $0, respectively.

In October 1998, the Company and Genzyme also entered into a joint development and commercialization agreement for one of the Company's proprietary therapeutic compounds for the treatment of chronic inflammatory diseases, with initial development to be focused on the treatment of hereditary angioedema. Under the agreement, the Company funded the first $6.0 million dollars of development costs. The parties have agreed to establish a limited liability company, in which the Company will own 50% and Genzyme will own 50%, and fund equally all development and commercialization costs subsequent to the first $6.0 million. Genzyme has extended to the Company a $3.0 million line of credit, which accrues interest on any outstanding balance at the Prime Rate plus 1.0%. The Company may use the line of credit to fund a portion of such development costs or for any of the Company's other research and development programs. At December 31, 2001, the Company had not utilized any of the available line of credit. In addition, the Company will be entitled to receive significant milestone payments and up to 50% of the profits from sales of products developed under

16. Related Party Transactions (Continued)

this collaboration. In addition, in 1998 Genzyme purchased $3.0 million of the Company's Class A Series 5 Preferred Stock at $5.45 per share, which was subsequently converted into 550,458 common shares of the Company, as a result of initial public offering in August 2000. Accordingly, at December 31, 2001, Genzyme owns approximately 2.8% of the Company's common stock outstanding.

See also Note 6, Notes Receivable, Employees.

17. Business Segments

The Company discloses business segments under SFAS No. 131. Segment data does not include allocation of corporate administrative costs to each of its operating segments. The Company evaluates the performance of its segments and allocates resources to them based on losses before corporate administrative costs, interest and taxes.

The Company has two reportable segments: Separations and Therapeutics/Diagnostics. The Separations segment develops, manufactures and sells chromatography separations systems and products through the Company's Biotage subsidiary. The Therapeutics/Diagnostics segment develops therapeutic and diagnostic products using the Company's proprietary phage display technology, licenses this proprietary technology to third parties and licenses affinity ligands developed using the Company's phage display technology to third parties.

The Company's reportable segments are strategic business units that offer different products and services. They are managed separately because each business requires different technologies and marketing strategies.

17. Business Segments (Continued)

The following table presents certain segment financial information and the reconciliation of segment financial information to consolidated totals as of:

Year ended December 31, 2001	Separations	Therapeutics/ Diagnostics	Total
Revenue from external customers	$18,803,000	$14,237,000	$ 33,040,000
Segment loss from operations	$(2,574,000)	$(9,460,000)	$(12,034,000)
Depreciation and amortization	$ (716,000)	$(1,573,000)	$ (2,289,000)
Segment assets	$16,767,000	$ 6,662,000	$ 23,429,000

Year ended December 31, 2000	Separations	Therapeutics/ Diagnostics	Total
Revenue from external customers	$15,782,000	$ 9,434,000	$ 25,216,000
Segment loss from operations	$(3,192,000)	$(7,011,000)	$(10,203,000)
Depreciation and amortization	$ (465,000)	$(1,293,000)	$ (1,758,000)
Segment assets	$ 9,221,000	$ 3,020,000	$ 12,241,000

Year ended December 31, 1999	Separations	Therapeutics/ Diagnostics	Total
Revenue from external customers	$12,596,000	$ 4,237,000	$ 16,833,000
Segment loss from operations	$(2,790,000)	$(7,894,000)	$(10,684,000)
Depreciation and amortization	$ (717,000)	$ (316,000)	$ (1,033,000)
Segment assets	$ 7,010,000	$ 2,257,000	$ 9,267,000

	Year ended December 31,		
	2001	2000	1999
Reconciliations:			
Loss from operations:			
Loss from operations from reportable segments	$(12,034,000)	$(10,203,000)	$(10,684,000)
Unallocated amounts:			
Corporate expenses	(7,284,000)	(6,977,000)	(3,624,000)
Other income, net	2,153,000	1,991,000	1,121,000
Consolidated net loss	$(17,165,000)	$(15,189,000)	$(13,187,000)

	Year ended December 31,		
	2001	2000	1999
Depreciation and amortization:			
Depreciation and amortization for reportable segments	$(2,289,000)	$(1,758,000)	$(1,033,000)
Unallocated amounts:			
Corporate depreciation and amortization	(201,000)	(120,000)	(70,000)
Consolidated depreciation and amortization	$(2,490,000)	$(1,878,000)	$(1,103,000)

17. Business Segments (Continued)

	December 31,		
	2001	2000	1999
Assets:			
Segment assets	$23,429,000	$12,241,000	$ 9,267,000
Unallocated amounts:			
Corporate assets	58,012,000	79,164,000	20,341,000
Consolidated assets	$81,441,000	$91,405,000	$29,608,000

The Company operates in the geographic segments of the United States ("U.S."), Europe and Asia as indicated in the table below. During 2001, the Company began operations in Asia.

	2001 (in 000's)				
	U.S.	Europe	Asia	Elimination	Total
Revenues	$ 31,256	$8,160	$1,003	$(7,379)	$ 33,040
Net loss	(14,201)	103	(406)	(2,661)	(17,165)
Long-lived assets	12,072	1,015	116	—	13,203
Total assets	85,440	3,170	705	(7,874)	81,441

	2000 (in 000's)				
	U.S.	Europe	Asia	Elimination	Total
Revenues	$ 24,837	$3,872	$—	$(3,493)	$ 25,216
Net loss	(13,093)	(979)	—	(1,117)	(15,189)
Long-lived assets	4,451	750	—	—	5,201
Total assets	92,674	2,611	—	(3,880)	91,405

	1999 (in 000's)				
	U.S.	Europe	Asia	Elimination	Total
Revenues	$ 15,372	$4,274	$—	$(2,813)	$ 16,833
Net loss	(12,940)	(342)	—	95	(13,187)
Long-lived assets	4,263	436	—	—	4,699
Total assets	29,064	2,380	—	(1,836)	29,608

18. Comprehensive Income (Loss)

Accumulated other comprehensive income (loss) is calculated as follows:

	Year Ended December 31,		
	2001	2000	1999
Accumulated other comprehensive income (loss):			
Foreign currency translation adjustment:			
Balance at beginning of period	$(27,000)	$(108,000)	$(123,000)
Change during period	121,000	81,000	15,000
Balance at end of period	$ 94,000	$ (27,000)	$(108,000)

19. Collaborative and License Agreements

In March 2000, the Company entered into a collaboration and license agreement with Human Genome Sciences, Inc. ("HGSI"). Under this agreement the Company and HGSI will use the Company's phage display technology to identify and optimize product leads that bind to therapeutic targets selected by HGSI, and also to develop new technologies for purifying targets. The Company granted HGSI a non-exclusive license to our phage display technology and compound libraries to create leads that may be used as peptide drugs, human monoclonal antibody drugs and *in vitro* diagnostic products. With the exception of selected *in vitro* imaging rights, HGSI will retain the rights to all products that result from this collaboration. In exchange, HGSI was originally obligated to pay the Company a minimum of $16.0 million in committed license fees and research funding during the first three years of the five-year agreement, $6.0 million of which was paid to the Company in March 2000. The Company would also be entitled to receive milestone payments on therapeutic products and royalties on all products developed by HGSI under the agreement and would share HGSI's revenues on any of those products it out-licenses. The $6.0 million cash payment was originally being recognized as revenue over the five-year collaboration term of the agreement. The excess cash received over the revenue recognized is recorded as deferred revenue in the accompanying balance sheet. In October 2001, the Company's collaboration and license agreement with HGSI was modified effective as of July 1, 2001. Under the modified agreement, which provides the Company non-exclusive research access to up to 20 HGSI targets, the Company will fund its own research in connection with such targets through June 2003 using one-half of the research resources previously allocated to HGSI. This modification reduces the overall funding commitment of HGSI by approximately $4.0 million to $12.0 million. The Company has options to obtain exclusive licenses to develop therapeutic product candidates for up to three of the targets for which it funds the research, subject to achieving specified research goals, and HGSI has options to assume development and commercialization of the product candidates upon completion of the first Phase IIa clinical trials. The modified agreement also adds technical milestones that may be payable to the Company in connection with the portion of the research that continues to be funded by HGSI until March 2003. The upfront license fees received in March 2000 will be recognized as revenue over the term of the modified agreement. The Company will receive milestones and royalties on all products developed by HGSI under the collaboration and will share HGSI's revenues on any of those products that it outlicenses and HGSI will receive milestones and royalties on any therapeutic product developed by the Company. The agreement will terminate upon the expiration of the last to expire of the parties' royalty obligations under the agreement. The parties' royalty obligations will expire on a country by country basis on the later of ten years after the first country wide launch of a product or the expiration of the last to expire of the applicable product patents. Either party may terminate this agreement upon the failure to pay amounts due for thirty days upon any material breach if not cured within sixty days. For the years ended December 31, 2001 and 2000, the Company recognized $3.5 million and $3.1 million, respectively, under the collaboration and license agreement.

20. Unaudited Quarterly Operating Results

The following is a summary of unaudited quarterly results of operations for the two years ended December 31, 2001 and 2000:

Year ended December 31, 2001 (in thousands, except per share)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Total revenues	$7,068	$8,209	$9,046	$8,717
Loss from operations	(4,292)	(4,398)	(4,497)	(6,131)
Net loss	(3,426)	(3,789)	(4,017)	(5,933)
Basic and diluted net loss per share	(0.18)	(0.20)	(0.21)	(0.31)

Year ended December 31, 2000 (in thousands, except per share)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Total revenues	$4,807	$5,457	$6,296	$8,656
Loss from operations	(4,649)	(4,394)	(3,086)	(5,051)
Net loss	(4,491)	(4,233)	(2,494)	(3,971)
Basic and diluted net loss per share	(1.97)	(1.77)	(0.24)	(0.21)

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE COMPANY

The response to this item is incorporated herein by reference from the discussion responsive thereto under the captions "Election of Directors", "Section 16(a) Beneficial Reporting Compliance" and "Executive Officers and Key Employees" in the Company's Definitive Proxy Statement relating to the 2001 Annual Meeting of Stockholders (the "Proxy Statement").

ITEM 11. EXECUTIVE COMPENSATION

The response to this item is incorporated herein by reference from the discussion responsive thereto under the following captions in the Proxy Statement: "Election of Directors—Director Compensation," "Executive Compensation" and "Compensation Committee Interlocks and Insider Participation."

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The response to this item is incorporated herein by reference from the discussion responsive thereto under the caption "Share Ownership" in the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The response to this item is incorporated herein by reference from the discussion responsive thereto under the caption "Certain Relationships and Related Transactions" in the Proxy Statement.

PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

(A.) 1. FINANCIAL STATEMENTS

The financial statements are included under Part II, Item 8 of this Report.

2. FINANCIAL STATEMENT SCHEDULE

SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS
For the years ended December 2001, 2000, and 1999
(In Thousands)

	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
Allowance for Doubtful Accounts:				
2001	$130	$25	—	$155
2000	$129	$1	—	$130
1999	$129	—	—	$129

	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
Deferred Tax Asset Valuation Allowance:				
2001	$27,596	$5,926	—	$33,522
2000	$21,916	$5,680	—	$27,596
1999	$16,541	$5,375	—	$21,916

	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
Accrued warranty costs:				
2001	$146	$150	—	$296
2000	$146	—	—	$146
1999	$160	—	$(14)	$146

3. EXHIBITS

The exhibits are listed below under Part IV, Item 14(c) of this Report.

(b.) REPORTS ON FORM 8-K

We did not file any Current Reports on Form 8-K during the quarter ended December 31, 2001.

(c.) EXHIBITS

Exhibit No.	Description
3.1	Restated Certificate of Incorporation of the Company. Filed as Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-24537) for the quarter ended September 30, 2000 and incorporated herein by reference.
3.2	Amended and Restated By-laws of the Company. Filed as Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q (File No. 000-24537) for the quarter ended September 30, 2000 and incorporated herein by reference.
3.3	Certificate of Designations Designating the Series A Junior Participating Preferred Stock of the Company. Filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 000-24537) and incorporated herein by reference.

Exhibit No.	Description
4.1	Specimen Common Stock Certificate. Filed as Exhibit 4.1 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
4.2	Rights Agreement, dated June 27, 2001 between American Stock Transfer & Trust Company, as Rights Agent, and the Company. Filed as Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 000-24537) and incorporated herein by reference.
10.1	Amended and Restated 1995 Equity Incentive Plan, as amended on August 18, 2000. Filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 000-24537) for the quarter ended September 30, 2000 and incorporated herein by reference.
10.2	1998 Employee Stock Purchase Plan. Filed as Exhibit 10.2 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.3	The 1995 Amended and Restated Equity Incentive Plan Inland Revenue Approved Sub-Plan for the United Kingdom, as amended on October 26, 2001. Filed herewith.
10.4*	Employment Letter Agreement, dated September 1, 1999, between Stephen S. Galliker and the Company. Filed as Exhibit 10.3 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.5*	Restricted Stock Purchase Agreement, dated October 1999, between Stephen S. Galliker and the Company. Filed as Exhibit 10.4 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.6*	Restricted Stock Purchase Agreement, dated November 30, 1999, between Stephen S. Galliker and the Company. Filed as Exhibit 10.5 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.7*	Letter Agreement, dated as of September 1, 1998, between Gregory D. Phelps and the Company. Filed as Exhibit 10.6 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.8*	Letter Agreement dated May 21, 1999 between Scott Chappel and the Company. Filed as Exhibit 10.7 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 000-24537) and incorporated herein by reference.
10.9*	Consulting Agreement, dated October 15, 1997, between James W. Fordyce and the Company. Filed as Exhibit 10.9 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.10*	Loan and Pledge Agreement, dated October 30, 1998, between Henry E. Blair and the Company. Filed as Exhibit 10.10 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 000-24537) and incorporated herein by reference.
10.11*	Loan Agreement dated June 14, 1999 between Scott Chappel and the Company. Filed as Exhibit 10.11 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 000-24537) and incorporated herein by reference.
10.12	Lease, dated June 30, 1999, between Alan G. Dillard, Jr., and the Company. Filed as Exhibit 10.13 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.13	Lease Agreement, dated as of February 12, 1998, between AStec Partnership and the Company. Filed as Exhibit 10.14 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.

Exhibit No.	Description
10.14	Lease Agreement, dated as of February 11, 1997, between AStec Partnership and the Company. Filed as Exhibit 10.15 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.15	Lease Agreement, dated April 8, 1991, between Bridge Gate Real Estates Limited, Harforde Court Management Limited and the Company. Filed as Exhibit 10.18 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.16	Master Lease Agreement, dated December 30, 1997, between Transamerica Business Credit Corporation and the Company. Filed as Exhibit 10.21 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.17	Form of Sale and Leaseback Agreement, dated December 30, 1997, between Transamerica Business Credit Corporation and the Company. Filed as Exhibit 10.22 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.18	Form of License Agreement (Therapeutic Field) between the Licensee and the Company. Filed as Exhibit 10.23 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.19	Form of License Agreement (Antibody Diagnostic Field) between the Licensee and the Company. Filed as Exhibit 10.24 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.20	Collaboration Agreement between Genzyme Corporation and the Company, dated October 1, 1998. Filed as Exhibit 10.25 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.21†	License Agreement, dated January 24, 2001, between Debiopharm S.A. and the Company. Filed as Exhibit 10.26 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 000-24537) and incorporated herein by reference.
10.22†	License, Technology Transfer, and Technology Services Agreement, dated February 2, 2000, between Amgen Inc. and the Company. Filed as Exhibit 10.30 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.23†	Collaboration and License Agreement, dated March 17, 2000, between Human Genome Sciences, Inc. and the Company. Filed as Exhibit 10.31 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.24	Amendment to the Collaboration and License Agreement, dated July 1, 2001, between Human Genome Sciences, Inc. and the Company. Filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ending September 30, 2001 (File No. 000-24537) and incorporated by reference herein.
10.25	Form of Indemnification Agreement by and between certain directors and executive officers of the Company and the Company. Filed as Exhibit 10.32 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.26	Amended and Restated Registration Rights Agreement, dated as of February 12, 2001, between holders of the Company's capital stock named therein and the Company. Filed as Exhibit 10.33 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 000-24537) and incorporated herein by reference.

Exhibit No.	Description
10.27	Master Loan and Security Agreement, dated June 30, 2000, between Transamerica Business Credit Corporation and the Company. Filed as Exhibit 10.35 to the Company's Registration Statement on Form S-1 (File No. 333-37394) and incorporated herein by reference.
10.28†	Collaboration and License Agreement, dated October 31, 2000, between Bracco Holding, B.V. and Bracco International, B.V. and the Company. Filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 000-24537) for the quarter ended September 30, 2000 and incorporated herein by reference.
10.29	Lease, dated June 13, 2001, between the Massachusetts Institute of Technology and the Company. Filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-24537) for the quarter ended June 30, 2001 and incorporated herein by reference.
21.1	Subsidiaries of the Company. Filed herewith.
23.1	Consent of PricewaterhouseCoopers LLP, independent accountants. Filed herewith.
99.1	Important Factors That May Affect Future Operations and Results. Filed herewith.

* Indicates a contract with management.

† This Exhibit has been filed separately with the Commission pursuant to an application for confidential treatment. The confidential portions of this Exhibit have been omitted and are marked by an asterisk.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, this 27th day of March, 2002.

DYAX CORP.

By: /s/ HENRY E. BLAIR
Henry E. Blair
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Company in the capacities and on the dates indicated.

Name	Title	Date
/s/ HENRY E. BLAIR Henry E. Blair	President, Chief Executive Officer, and Chairman of the Board of Directors (Principal Executive Officer)	March 27, 2002
/s/ STEPHEN S. GALLIKER Stephen S. Galliker	Executive Vice President, Finance and Administration and Chief Financial Officer (Principal Financial Officer)	March 27, 2002
/s/ GREGORY D. PHELPS Gregory D. Phelps	Director	March 27, 2002
/s/ CONSTANTINE E. ANAGNOSTOPOULOS Constantine E. Anagnostopoulos	Director	March 26, 2002
/s/ JAMES W. FORDYCE James W. Fordyce	Director	March 27, 2002
/s/ THOMAS L. KEMPNER Thomas L. Kempner	Director	March 27, 2002
/s/ HENRY R. LEWIS Henry R. Lewis	Director	March 26, 2002
_____ John W. Littlechild	Director	March , 2002
_____ Alix Marduel	Director	March , 2002
/s/ DAVID J. MCLACHLAN David J. McLachlan	Director	March 27, 2002