



**ADVANCING NOVEL
THERAPEUTIC PRODUCTS**

Dyax Corp.
Annual Report 2003

Dyax Achievements 2003

Advances in Clinical Development

DX-88/Hereditary Angioedema

- Completed 9-patient Phase II trial, met primary endpoints
- Genzyme Corporation joined Dyax as joint venture partner
- Completed 3 of 4 dose cohorts in 48-patient Phase II EDEMA1 trial
- Initiated Phase II EDEMA2 trial
- Orphan Drug designation granted in U.S. and Europe

DX-88/On-Pump Open Heart Surgery (CABG)

- Exercised option to purchase 100% of rights to DX-88 in on-pump open heart surgery and other surgical indications from Genzyme Corporation
- Completed 42-patient Phase I/II trial, met primary endpoints

DX-890/Cystic Fibrosis

- Completed second Phase IIa trial (pediatric)
- Orphan Drug designation granted in U.S. and Europe

Research Collaboration Highlights: Superior Antibody Phage Display Libraries

New Funded Research Collaborations

- Alnis BioSciences – Therapeutic peptides (cancer)
- Baxter Healthcare Corporation – Antibodies to MIF

Positive Results from Existing Research Collaborations

- ImClone Systems – Antibodies to VEGF-R2 plus 2 undisclosed targets (cancer)
- Dendreon Corporation – Antibodies against endothelial serine proteases (cancer)

New Library and Patent Licensing Agreements

- Library License Agreements
 - ImClone Systems (antibodies)
 - MedImmune Inc.(antibodies)
- Cross-licensed antibody phage display technology
 - Cambridge Antibody Technologies
 - Affimed AG

Financing our Future

- Raised over \$50 million through common stock offerings
- Sold Biotage subsidiary for \$35 million

Focus on Biotherapeutics

- All efforts and resources now focused on biotherapeutic product development

Dyax Goals 2004

Clinical Development Milestones

DX-88/Hereditary Angioedema

- Complete Phase II EDEMA1 study
- Periodically observe effects of repeat dosing in Phase II EDEMA2 study
- Meet with FDA and EMEA to determine next steps toward registration

DX-88/On-Pump Open Heart Surgery (CABG)

- Commence Phase II study in Italy

DX-890/Cystic Fibrosis

- Commence next CF study

Expand Research Collaborations

Leverage Antibody Phage Display Libraries and Automation Capabilities

- New Funded Research Collaborations
- New Library and Patent Licensing Agreements
- Results from Existing Research Collaborations

Increase Revenues from Product Development and Licensing Agreements

Advance Research Pipeline to Produce Next Dyax Clinical Candidate

Letter to Shareholders

I AM PLEASED AND PROUD TO REPORT TO YOU ON DYAX'S PROGRESS DURING 2003. IT HAS BEEN A TREMENDOUS YEAR ON MANY FRONTS. WE MADE SUBSTANTIAL ADVANCES IN THE CLINICAL DEVELOPMENT OF OUR NOVEL SMALL PROTEINS, DX-88 AND DX-890. WE ENTERED INTO NEW REVENUE-GENERATING LICENSING AGREEMENTS AND DRUG DEVELOPMENT COLLABORATIONS THAT HIGHLIGHT OUR SUPERIOR ANTIBODY DISCOVERY CAPABILITIES. WE STREAMLINED OPERATIONS AND RAISED CAPITAL, ALLOWING US TO COMMIT FULL ATTENTION AND RESOURCES TO THERAPEUTIC PRODUCT DEVELOPMENT. POSITIVE CLINICAL TRIAL RESULTS, AS WELL AS INTERNAL AND COLLABORATIVE PRECLINICAL RESULTS, VALIDATED DYAX'S THERAPEUTIC APPROACH AND PROPRIETARY DISCOVERY TECHNOLOGY.

Clinical Advances

Driving our progress during the year, we announced positive clinical trial results for both of our recombinant compounds in the clinic, DX-88 and DX-890, in all three inflammatory indications being studied – hereditary angioedema (HAE), cystic fibrosis (CF) and coronary artery bypass grafting (CABG) surgery. More details regarding these results are contained herein. Both compounds were also granted orphan drug designation by regulatory authorities in the United States (U.S.) and the European Union (EU); DX-88 for the treatment of angioedema and DX-890 for the treatment of CF. These designations recognize the importance placed on bringing therapeutic alternatives to market for patients living with conditions that have unmet medical needs.

Collaborations and Discovery Research Advantages

Throughout the year, we established new antibody discovery collaborations and produced positive results for existing collaborators. Today, 80% of the discovery work being done at Dyax is antibody related. We are taking advantage of the market demand for antibodies to generate revenues, and we are producing results that set Dyax apart from other antibody discovery and development companies.

Utilizing our state-of-the art discovery capabilities and automation to rapidly identify fully human antibodies, we are achieving picomolar to nanomolar affinities, prior to affinity maturation. Some of these antibodies will enter into preclinical studies during 2004.

In addition to antibodies, Dyax has made a head start into the future of drug development, where I expect small proteins and peptides to play an increasingly important role. In fact, our two compounds in clinical development (DX-88 and DX-890) are small proteins.

**Dyax Corp's Operating
Committee from
Left to Right; Ivana
Magovčević, Ph.D., J.D.;
Anthony Williams, M.D.;
Stephen Galliker, CPA;
Lynn Baird, Ph.D.;
Henry Blair;
Clive Wood, Ph.D.;
Fayelle Whelihan, Ph.D.**



Focus on Biotherapeutic Product Development

A difficult yet strategically sound and important decision was made during the year to sell our chromatography separations subsidiary, Biotage LLC, to Pyrosequencing AG (Uppsala, Sweden). The biopharmaceutical and separations business segments had become increasingly divergent over the years, and Biotage had successfully made its footprint in the pharmaceutical industry with its unique “razor-razorblade” systems and cartridges for the medicinal chemist. The sale of Biotage, which increased our cash resources by \$28 million, allows us to fully commit our attention and resources to biotherapeutic product development.

Summary of Financial Results

For the year ended December 31, 2003, our revenues from continuing operations (excluding the results of the discontinued Biotage operations) were \$16.9 million, as compared to revenues from continuing operations of \$17.8 million for the year 2002. The decrease was primarily due to the completion of a significant funded research collaboration during 2003, and was partially offset by an increase in revenues from new licensing agreements and funded research collaborations. For the period ended December 31, 2003, we reported a net loss from continuing operations of \$24.5 million or \$1.04 per share as compared to a net loss from continuing operations of \$26.6 million or \$1.36 per share for the year 2002. As a result of the Biotage sale, our net loss for the year ended December 31, 2003 was reduced to \$7.4 million or \$0.31 per share.

Financing our Future

Encouraged by our progress made during the year, and coupled with a rebound in the financial markets that opened windows of opportunity for financing, we advantageously secured our ability to sustain current and planned development programs by raising over \$56 million using shelf registrations. We estimate that our current cash and cash equivalents can support the Company into 2006.

An Exciting Year Ahead – Goals 2004

2004 promises to be another progressive year for Dyax, with clinical program advances and results continuing at an increasing pace, and with collaborations and discovery programs advancing in kind.

We look forward to reporting Phase II results with Genzyme Corp. from our placebo-controlled EDEMA1 trial of DX-88 in HAE. We will also be reporting periodically on results from our EDEMA2 trial. This open label Phase II study is the first to study the effects of repeat dosing with DX-88 in HAE patients. We expect to meet with the U.S. Food and Drug Administration (FDA) and the European Agency for the Evaluation of Medicinal Products (EMA) mid-year, to discuss results from the three Phase II studies of DX-88 in HAE. These discussions will help us to determine our registration strategy. In the meantime, Dyax and Genzyme have joined forces on raising awareness of HAE and its debilitating and life-threatening nature.

We are also advancing DX-88 into a Phase IIb trial for patients at high risk for blood loss and transfusion needs in the CABG indication. This placebo-controlled trial will take place in Italy, where aprotinin, a competitive product which is bovine derived and reserved for high risk surgeries, is no longer on the market. We expect the results from this study to add value to our package of DX-88 data for CABG, as we consider potentially partnering this program or taking it forward on our own.

In addition, plans are underway to design the next trial of DX-890 in the CF indication.

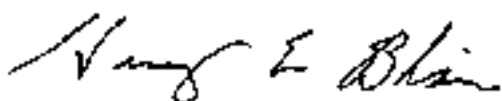
Summary

In summary, I would like to reiterate how pleased I am with where Dyax is today, based on the progress we made in 2003. Today, we are an integrated biopharmaceutical products company focused on opportunities in rare diseases and unmet medical needs, primarily in the areas of oncology and inflammation. We have positive clinical trial results that validate the power of small proteins and the precision of our phage display technology. We have additional clinical trial results to look forward to, and new clinical trials to initiate. Our pipeline of clinical candidates is maturing and we anticipate it will yield valuable leads this year. Our cash resources can support the Company into 2006, and will help Dyax to realize its full potential.

I would like to acknowledge Dyax's superb management team for the leadership each member has demonstrated in moving Dyax forward in 2003 and steering a clear path to success for the Company and its shareholders. I am confident in this team's ability to continue pushing Dyax forward. We have much to be proud of, and, given the skill and integrity of the entire group of Dyax employees that I believe is second to none, we have much more to accomplish.

As we advance into this new year, I would like to acknowledge all Dyax shareholders, both long term friends and new acquaintances, for your support and interest in our Company. I hope you share my enthusiasm for what Dyax has accomplished in 2003, and our aspirations for 2004. I look forward to reporting to you again soon.

Sincerely,



Henry E. Blair
Chairman, President and Chief Executive Officer



DX-88 in Hereditary Angioedema

Age at Symptom Presentation and Diagnosis in 226 Patients with HAE

Age Range (yrs)	Presentation (%)	Diagnosis (%)
0 – 10	→ 50	13
11 – 20	→ 35	19
21 – 30	11	→ 21
> 30	1	→ 47

Research indicates that although HAE symptoms begin at a young age, HAE is typically not diagnosed until much later.¹

1. Agnostini, A. and Cicardi, M. Hereditary and Acquired C1-Inhibitor Deficiency: Biological and Clinical Characteristics in 235 Patients. *MEDICINE*. 1992; 71(4):206-215.

HEREDITARY ANGIOEDEMA IS AN UNCOMMON DISORDER, CAUSED BY THE DEFICIENCY OF C1 ESTERASE INHIBITOR (C1-INH), A NATURALLY OCCURRING MOLECULE THAT INHIBITS PLASMA KALLIKREIN AND OTHER SERINE PROTEASES IN THE BLOOD.

The condition is believed to be significantly underdiagnosed, yet available literature places the prevalence of angioedema between 1 in 10,000 and 1 in 50,000 people worldwide.

Patients with HAE experience acute episodes of swelling, most notably of the hands, feet, face, and abdomen, on a published average of 12 times per year. The duration of a typical attack is in the range of two to five days. This means that on average, patients are unable to participate in normal activities for 24 to 60 days each year. Abdominal attacks, characterized by swelling of the intestinal wall, are extremely painful and often lead to nausea and vomiting. The most serious attacks however, are those that affect the airway passages. Approximately 50% of HAE patients will experience a laryngeal attack at some point in his or her life. Asphyxiation by laryngeal edema is the main cause of death among patients who die of HAE.

In the United States, there is no marketed treatment for acute attacks of HAE and patients most often manage the condition with long term use of anabolic steroids. Patients in certain European countries currently have the treatment option of human plasma derived C1-Inh, but this product carries the potential risk of blood-borne pathogens.

DX-88 in HAE

DX-88 is a novel small protein identified by Dyax, using our proprietary phage display technology. As a potent and highly specific inhibitor of plasma kallikrein, DX-88 has the potential to treat acute attacks of HAE by preventing the formation of bradykinin, the mediator believed to be the cause of swelling in HAE patients.

Positive results from the first Phase II trial of DX-88 in HAE were reported by Dyax early in 2003. The 9-patient open label study met its endpoints, demonstrating onset of relief of symptoms within four hours (1.5 hours average) in all treated patients, as well as safety and a pharmacokinetic profile consistent with expectations. The outcome from this exploratory study formed the basis of Genzyme Corporation's decision to exercise an option to form a joint venture with Dyax for the continued development of DX-88 in the HAE indication.

Currently, Dyax and Genzyme are evaluating DX-88 in two active phase II clinical trials. The Phase II



Three generations of HAE: Sandra Nay with her mother, Peggy, and her two daughters, Jackie (age 15) and Taylor (age 9).

EDEMA1 study, a 48-patient, double-blind placebo-controlled trial, is being conducted at over 25 clinical sites, primarily in the United States. Patients in this single dose, dose ranging study are being treated in the fourth and final dose cohort, and initial results are expected during the second quarter of 2004. We are also treating patients in the Phase II EDEMA2 study, in which patients have the opportunity to receive repeat doses of DX-88. We will study at least 60 HAE attacks in this open label study, and will report periodically on the results.

During 2003, orphan drug designation was granted to DX-88 for the treatment of angioedema by regulatory authorities in both the United States and Europe. Orphan drug status

promotes the development of drugs to treat rare diseases or conditions by conferring numerous benefits to their development, including clinical protocol assistance and advice, reduced registration fees when filing for product approval and, upon marketing authorization, protection from generic competition for a period up to ten years.

Looking ahead, we anticipate Phase II meetings with the U.S. Food and Drug Administration (FDA) and the European Agency for the Evaluation of Medicinal Products (EMA) in mid-year 2004 to review data from the three Phase II studies of DX-88 in HAE. In the meantime, Dyax and Genzyme have joined forces in raising awareness of HAE and advancing DX-88 toward marketing approval.

Portrait of a patient Sandra Nay

- Sandra's mother, her three sisters and both of her daughters have HAE
- She lost over 6 weeks of work last year, unpaid
- Sandra has frequent attacks, even with use of anabolic steroids

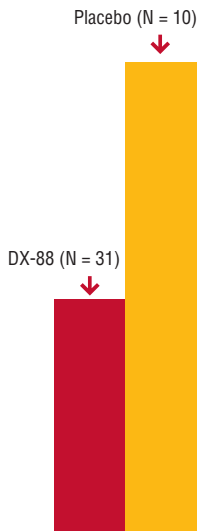
"There's a sort of high that you get just prior to an attack. That's when I know it's going to hit. It's a horrible feeling."

"I've been too proud to take paid Medical Leave, but it's getting worse and I'm too tired to keep fighting the battle."

"More than anything, I hope that there will be an effective drug without horrible side effects for my daughters, so they don't have to live the way that I have."

DX-88 in CABG Surgery

Mean Volume of Blood Transfusions



Results from a Phase I/II placebo-controlled trial of DX-88 in 41 evaluated patients undergoing CABG surgery demonstrated a biological effect on blood transfusion requirements. Patients treated with DX-88 had an approximate 50% reduction in total blood transfusion needs, as compared to patients receiving placebo.

CORONARY ARTERY DISEASE (CAD) IS THE MOST COMMON FORM OF HEART DISEASE AND THE LEADING CAUSE OF DEATH FOR AMERICANS. ABOUT 12.6 MILLION AMERICANS SUFFER FROM CAD, WHICH OFTEN RESULTS IN A HEART ATTACK. CAD OCCURS WHEN ATHEROSCLEROTIC PLAQUE (HARDENING OF THE ARTERIES) BUILDS UP IN THE WALL OF THE ARTERIES THAT SUPPLY THE HEART. THE ACCUMULATION OF PLAQUE CAN BE ACCELERATED BY SMOKING, HIGH BLOOD PRESSURE, ELEVATED CHOLESTEROL, AND DIABETES.

Over 500,000 of these CAD patients undergo an open-heart surgical procedure called coronary artery bypass grafting (CABG) in order to reroute blood around blocked arteries that cannot be opened with stents or other less invasive procedures. One of the inherent risks of this lengthy surgery is contact activation of blood

clotting, where blood interfaces with the artificial surfaces of a cardiopulmonary bypass (CPB) machine that is used to maintain blood flow during the procedure. This process activates the kallikrein system in the blood, leading to increased blood loss and untoward systemic inflammatory responses (SIRS). In addition to blood loss, SIRS can cause myocardial infarction, acute renal failure, and/or neurological deficits that may result in long term disability, leading to increased associated treatment costs.

DX-88 in CABG

As a potent kallikrein inhibitor, DX-88 appears to be useful in mitigating systemic inflammatory responses during CABG surgery, reducing blood transfusion requirements and blood loss.

In 2003, Dyax made positive advances in the development of DX-88 for CABG surgery. We purchased back the rights for DX-88 in CABG and other surgical indications from Genzyme Corporation, our co-development partner for DX-88 in hereditary angioedema. Later, in December, we reported promising results from our first Phase I/II clinical study of DX-88 in patients undergoing cardiopulmonary bypass in the course of on-pump CABG surgery.



This double-blind, placebo-controlled, dose ranging study recruited 42 patients of which 41 were evaluated per protocol. Of these, 31 patients were treated with DX-88 and 10 received placebo. The primary endpoints of the study, safety and pharmacokinetics (PK), were met. The results demonstrated consistent dose related PK, with no drug related serious adverse events in any dose group. DX-88 also demonstrated a biological effect when the secondary endpoint of blood transfusion requirements was examined. Patients treated with DX-88 had an approximate 50% reduction in total blood transfusion needs, as compared to patients receiving placebo.

Based on these positive outcomes, Dyax plans to initiate a Phase II trial of DX-88 in CABG surgery during 2004 in Italy. This placebo-controlled study will allow us to evaluate DX-88 in a population of patients considered at high risk for bleeding and other complications during on-pump CABG surgery, such as patients undergoing re-operations. In this high risk patient population, which accounts for between 10 and 20% of all CABG procedures, the standard of care is aprotinin (Trasylo[®]) to reduce blood loss. However aprotinin is bovine derived and has been removed from the market in Italy. Our Phase II trial there should add value to our growing package of DX-88 data in CABG, as we consider potentially partnering or self-funding further development of DX-88 in this indication.

“As an investigator for the DX-88 clinical trials in CABG surgery, I am encouraged by the phase I/II results and look forward to further study of DX-88 in this indication. DX-88 has a novel mechanism of action in its selective inhibition of human plasma kallikrein; this selective anti inflammatory activity appears to safely mitigate systemic inflammatory responses during CABG surgery. One consequence of this is a reduced need for blood transfusions, which is an important economic factor that is associated with lower transfusion associated morbidity in these procedures.”

Dr. Jerrold H. Levy,
Professor of
Anesthesiology, Emory
University School of
Medicine

DX-890 in Cystic Fibrosis

Human Neutrophil Elastase (hNE): Its role in Cystic Fibrosis

hNE has several functions detrimental to the lungs

- Degrades elastin, fibronectin, and other structural proteins, ultimately leading to bronchieactasis
- hNE is a potent secretagogue, increasing bronchial secretions
- Impairs ciliary function, which leads to a further plugging of airways in the lung
- hNE stimulates release of interleukin-8 (IL8) and leukotriene B4 (LTB4), thus recruiting even more neutrophils into the lung to perpetuate the “vicious circle” of inflammation by further release of hNE



As a highly specific and potent inhibitor of hNE, DX-890 may help to stop the cycle of inflammation, infection and destruction of the lung tissue in patients with CF.

CYSTIC FIBROSIS (CF) IS A DEVASTATING CHRONIC, GENETIC DISEASE THAT PRIMARILY AFFLICTS YOUNG CHILDREN, REDUCING THEIR LIFE TO ONE OF CONSTANT CARE AND MEDICATIONS. MOST CF PATIENTS DO NOT LIVE BEYOND 30 YEARS OLD, AN IMPROVEMENT FROM JUST 25 YEARS AGO WHEN AVERAGE LIFE EXPECTANCY FOR A CF PATIENT WAS ONLY 18 YEARS. CF PATIENTS REGULARLY BATTLE RESPIRATORY INFECTIONS, CHRONIC COUGHING AND MULTIPLE DIGESTIVE PROBLEMS DUE TO MALABSORPTION. AS CF PATIENTS ENTER EARLY ADULTHOOD THEY CAN EXPERIENCE OSTEOPOROSIS, DIGESTIVE DISORDERS, DIABETES, STERILITY AND MANY OTHER DISEASES THAT FURTHER ERODE THEIR QUALITY OF LIFE.

CF afflicts approximately 50,000 children and young adults in the United States and Europe. Mutations in the CF conductance regulator (CFTR) gene causes the body to make defective CFTR protein, which leads to unwanted effects in many of the body systems where the protein is expressed. The CFTR protein is important to cells in the pancreas, sweat glands, salivary glands, intestines, lungs and reproductive organs. The lungs are most affected by the defective CFTR protein, leading to a constant and vicious cycle of mucus build-up, inflammation, infection, and eventual lung failure due to tissue damage.

Inflammation in the airways of CF patients is caused by persistent and excessive infiltration of neutrophils, which release large quantities of destructive oxidases and proteases, including human neutrophil elastase (hNE). A drug that can block hNE during this cycle may control the inflammatory process early in the course of the disease, and may limit the damaging effects of excessive inflammation, potentially delaying the progression of pulmonary deterioration and decreasing mortality.

DX-890 in Cystic Fibrosis

DX-890 (EPI-hNE4) is a novel small protein discovered at Dyax, using our proprietary phage display technology. As a potent and a highly specific inhibitor of hNE, DX-890



Children with CF are unable to engage in many normal activities.

has the potential to reduce target neutrophil related inflammation.

During 2003, a second Phase IIa, open label, dose escalating study was completed by our development partner Debiopharm S.A. in 34 children with CF. The preliminary results of this pediatric study confirm the good tolerability and pharmacological effect of DX-890 when administered as a nebulized formulation, similar to the results from our first collaborative Phase IIa study in adult CF patients. In both studies, there was a pronounced dose effect, and DX-890 was demonstrated to inhibit sputum hNE in the lungs of patients.

During 2003, DX-890 for the treatment of cystic fibrosis was granted orphan drug designation from regulatory authorities in both the United States

and Europe. Orphan drug status promotes the development of drugs to treat rare diseases or conditions by conferring numerous benefits to their development, including clinical protocol assistance and advice, reduced registration fees when filing for product approval and, upon marketing authorization, protection from generic competition for up to ten years.

Looking ahead to 2004, we intend to initiate a new clinical trial of DX-890 for the treatment of CF before year end. We anticipate that this trial will be conducted under a U.S. IND with sites in North America and Europe. Primary endpoints will be focused on clinical efficacy. We look forward to reporting to you on our further progress in this program.

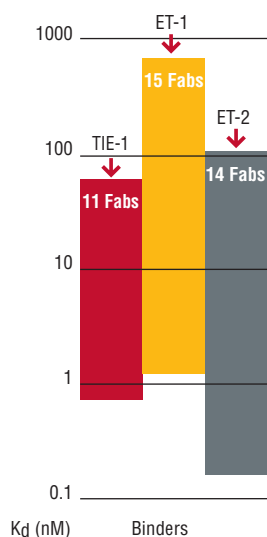
Orphan Drug Facts

- Nearly 50% of all biologics approved in the U.S. are orphan drugs
- 242 orphan drugs have U.S. marketing approval (as of May 2003)
- 50% of approved orphan drugs are for pediatric use
- 80% of approved orphan drugs treat life threatening diseases
- 42% of patients report that their rare disease prevents them from working or attending school
- U.S. sales of orphan products exceeded \$11 billion in 2001

Source: *Regulatory Affairs Focus*, The Monthly Magazine of the Regulatory Affairs Professional Society, August 2003

Dyax Discovery Research and Collaborations

Drug Candidates with Affinities in the Low Nanomolar Ranges



Dyax routinely obtains a panel of antibodies with affinity constants (Kd) in the low nanomolar, and occasionally picomolar range. The data shown were determined by BIACORE analysis for a panel of Fabs to three oncology targets in Dyax's internal discovery pipeline.

DYAX LIBRARIES: FOCUS ON ANTIBODIES

DYAX HAS DEVELOPED A WORLD-CLASS SET OF HUMAN ANTIBODY LIBRARIES IN ADDITION TO CYCLIC AND LINEAR PEPTIDE LIBRARIES AND SMALL PROTEIN LIBRARIES. DURING 2003, ANTIBODIES INCREASINGLY BECAME THE FOCUS OF BIOPHARMACEUTICAL DISCOVERY AT DYAX. TODAY, 80% OF THE DISCOVERY STAGE COMPOUNDS AT DYAX ARE HUMAN ANTIBODIES AND 20% ARE SMALL PROTEINS AND PEPTIDES.

Our antibody libraries are relatively new additions to the industry and incorporate the very latest technology and know-how. We believe they are the best libraries available today to generate fully human monoclonal antibodies. We leverage our capabilities in this area into revenue-generating collaborations that help to support our own clinical development programs and pipeline of clinical candidates.

Dyax Phage Display: From Fabs to Whole IgGs

When the antigen-binding fragment (Fab) portions of antibodies are displayed on the surface of phage (virus infecting bacteria) particles, those Fabs specifically binding a drug target can be readily isolated

via automated or manual selection strategies. Once isolated, the Fab can be converted to a complete IgG drug candidate in a single step using standard molecular biology techniques. Each procedure is carried out *in vitro* and is therefore unrestrained by the mechanisms of antigen presentation and immunologic tolerance that control the antibody response when carried out *in vivo* (e.g. in a mouse). When expedited by Dyax's automation, thousands of antibodies can be isolated and screened in a matter of days. This is a rate and throughput almost inconceivable with mouse hybridoma technology.

A Unique Strategy

Our libraries were created using a unique strategy that combines the antibody genes of 45 human donors with synthetic gene sequences in key antigen binding regions. Routinely, these libraries generate potent antibody drug candidates with affinities in the low nanomolar, and occasionally picomolar ranges, i.e. tight binders capable of inhibiting or activating a drug target.

A Popular Market

Monoclonal antibodies represent the most actively growing family of biopharmaceuticals. The majority of approved antibody drugs are inhibitors, with targets such as cytokines and cell surface receptors. Many of our current projects are designed to isolate inhibitory antibodies from our libraries. However, we have also demonstrated that other mechanistic classes of antibodies are represented in the libraries, including potent and selective receptor agonists, valuable both for target validation and therapeutic development.



Janja Cosic, Associate Scientist I, Lead Discovery, Dyax Corp.

THE AUTOMATION ADVANTAGE

DYAX'S PHAGE DISPLAY TECHNOLOGY GENERATES A WEALTH OF POTENTIAL BIOPHARMACEUTICALS. WHEN FACED WITH PHAGE DISPLAY LIBRARIES CONTAINING BILLIONS OF DIFFERENT HUMAN ANTIBODIES, PEPTIDES, OR SMALL PROTEINS, HOW DOES ONE MOST EFFICIENTLY ISOLATE THE SINGLE BEST CANDIDATE?

Using automation in the discovery process allows the rapid processing of Dyax's phage display libraries to obtain lead candidates with the desired specificity, affinity, and functionality against defined target molecules.

For each target, binding and sequence properties are compiled for literally thousands of individual library members. The power of automated high-throughput screening is especially

important when stringent specificity and functionality profiles are desired. Dyax's automated process adds speed by offering the ability to multiplex numerous targets in parallel through the lead discovery workflow. Using proteins, peptides, or cell lines as antigen, Dyax has identified antibody, peptide, and small protein binders in a matter of weeks.

Success through Automated Screening

Automated, high-throughput screening can succeed where low-throughput, manual approaches fail. For example, in collaboration with Dendreon Corporation, antibody inhibitors of endotheliase-1 and endotheliase-2 were sought for their potential use in oncology. An initial manual selection and screening of 96 antibody binders to endotheliase-2 resulted in potent and selective inhibitors. High affinity binders were identified after manual selection, screening, and sequencing of 200 antibody binders to endotheliase-1. However, the best of these gave maximum enzyme inhibition

Comments from our Collaborators

"Our partnership with Dyax augments BD Biosciences' core capabilities in the development of research reagents. Dyax's phage display technology enables us to generate high affinity antibodies across a range of important proteins to improve research and discovery in areas such as immunology and cell biology."

Kip Miller, VP & GM of BD Biosciences Pharmingen.

"We are impressed with the speed at which Dyax obtained high affinity and selective protease inhibitors from its antibody libraries to Dendreon's two serine protease targets. There is a positive collaborative spirit and we are encouraged by the results thus far with the antibodies that Dendreon and Dyax have chosen to characterize for their potential as therapeutics in an oncology co-development program."

David Urdal, Ph.D., CSO, Dendreon Corporation

“ImClone Systems’ experience using Dyax’s human Fab-antibody libraries has demonstrated their high quality as we have identified and taken into preclinical studies a number of potent and selective human antibodies with therapeutic potential in oncology, e.g., an IgG1 with a 50 pM Kd for VEGF-R2.”¹

Peter Bohlen, Ph.D.,
Sr. VP Research,
ImClone Systems, Inc.

“The AstraZeneca project team is most satisfied with the results of their collaboration with Dyax, which has led to the rapid discovery of potentially very important antibody leads from the high quality Dyax antibody phage display libraries. The work has been carried out in an outstanding and creative collaborative spirit.

“We greatly appreciate the focused yet flexible Dyax program management as an important facilitating factor and look forward to further collaboration.”

Tom Goldschmidt,
Discovery Project
Leader, AstraZeneca
R&D Södertälje

Dendreon Co-development

Anti-Endotheliase-2	K _i , nM
IgG 1	0.044
IgG 2	0.053
IgG 3	0.086
IgG 4	0.095
IgG 5	0.102

Inhibition constants of antibodies to Endotheliase-2. In addition to being potent inhibitors, these antibodies are specific, with no inhibition of 8 other serine proteases tested.

of only 50% with an apparent IC₅₀ of 400 nM. By using automation, screening for endotheliase-1 inhibitors was expanded to more than 1,100 clones. High throughput screening and sequencing of this larger number of clones resulted in over 90 distinct sequence families from which we found antibodies that were active-site inhibitors of endotheliase-1 (IC₅₀ of 30 nM). Where complex specificity/functionality profiles are required, as for enzyme active-site inhibitors or directed ligand-site binders, the advantage of automated screening can be critical.

DYAX RESEARCH COLLABORATIONS 2003 HIGHLIGHTS

In collaboration with Becton Dickinson Biosciences, a division of Becton Dickinson and Company, Dyax set up a five person facility with a fully integrated automation platform at BD Biosciences. This facility, dedicated to identifying antibodies as research reagents, was transitioned to BD Biosciences in December 2003.

During 2003 and into 2004, Dyax entered into: antibody library license agreements with ImClone Systems, Inc. and MedImmune Inc.; antibody funded research agreements with Baxter Healthcare Corporation and two other unannounced collaborators; and a peptide funded research agreement with Alnis BioSciences, Inc. These agreements validate our strategy of the past year to leverage scientifically superior antibody phage display libraries and licenses to key third-party antibody phage display patents. Dyax continues to advance its existing collaborations with AstraZeneca AB, Bracco Group, Dendreon Corporation, Wyeth, and others.

Antibodies from Dyax libraries that are closest to entering the clinic come from our collaboration with ImClone Systems, ImClone exercised a therapeutic product option to license antibodies to VEGF-R2 and to an undisclosed oncology target in March 2003. ImClone has successfully used Dyax libraries to discover high affinity antibodies with therapeutic potential in oncology, as evidenced by several recent publications¹. These publications describe the discovery of antibodies from Dyax libraries that have picomolar affinity constants to oncology targets, and results from *in vitro* and *in vivo* assays that demonstrate potential of these antibodies as cancer therapeutics.

1. Lu et al., 2002. Int J Cancer. 97: 393-399; Burtrum et al., 2003. Cancer Res. 63: 8912-8921; Lu et al., 2003. J. Biol. Chem. 278: 43496-43507; Zhu et al., 2003. Leukemia 17: 604-611; Lu et al., 2004. J. Biol. Chem. 279: 2856-2865.



DYAX CORP. FORM 10-K

**For the fiscal year ended
December 31, 2003**

UNITED STATES
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, 2003

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
(State of Incorporation)

04-3053198
(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) 225-2500**

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.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the Company's common stock held by nonaffiliates of the Company as of the last business day of the Company's most recently completed fiscal second quarter, June 30, 2003, 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 \$99,903,337. The number of shares outstanding of the Company's Common Stock, \$.01 Par Value, as of March 8, 2004, was 31,127,058.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company's Definitive Proxy Statement for its 2004 Annual Meeting of Shareholders to be held on May 20, 2004, 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, 2003, are incorporated by reference into Part III of this Form 10-K.

As used in this Form 10-K, “Dyax,” “Company,” “we,” “ours,” and “us” refer to Dyax Corp., except where the context otherwise requires or as otherwise indicated.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements, including statements regarding our results of operations, financial resources, 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 report by this reference.

ANNUAL REPORT ON FORM 10-K

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PART I

ITEM 1. BUSINESS

Overview

We are a biopharmaceutical company principally focused on the discovery, development and commercialization of antibody, protein and peptide based therapeutic products. We currently have two product candidates in or entering into Phase II clinical trials for three indications. DX-88 is being studied for the treatment of both hereditary angioedema and for the prevention of blood loss and other systemic inflammatory responses in on-pump open-heart surgery, and DX-890 is being studied for the treatment of cystic fibrosis. We also have a number of ongoing discovery programs using our proprietary and patented technology, known as phage display, to identify new compounds, especially antibodies, with potential for the treatment of various diseases. Through the use of our phage display technology, we plan to continue to invest in such programs in order to build a broad portfolio of product candidates that we can develop and commercialize either ourselves or with others. We believe that phage display can have the greatest potential impact on our business through its use in the discovery of proprietary biopharmaceuticals.

We have accumulated losses since inception as we have invested in the development of our therapeutic product candidates and in our ongoing research and discovery programs. We seek to offset some of these research and development costs by generating revenue from the partnering of our portfolio of product candidates and by leveraging our phage display technology. The ways in which we can leverage our phage display technology include (i) performing funded research for collaborators using our 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 (ii) licensing of our phage display patents and libraries. Our funded research collaborations and licensing agreements are structured to generate revenues through research funding, license fees, technical and clinical milestone payments and royalties.

We do not expect to generate 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.

In the fourth quarter of 2003, we completed the sale of our wholly-owned subsidiary Biotage, LLC, formerly known as Biotage, Inc., (“Biotage”) to Pyrosequencing AB of Uppsala, Sweden. The sale of Biotage has allowed us to focus exclusively on biotherapeutics, and the cash generated by the sale of Biotage will help us advance our clinical programs as well as the candidates in our ongoing pipeline. For all periods presented in our financial statements, the assets, liabilities and operations of Biotage that were sold to Pyrosequencing are presented as discontinued operations in our financial statements. Prior period amounts have been reclassified to be consistent with the treatment of Biotage as a discontinued operation.

We incorporated in Delaware in 1989 and merged with Protein Engineering Corporation in August 1995.

Our Business Strategy

Our goal is to become a fully integrated biopharmaceutical company. We use our phage display technology to discover and develop novel product candidates 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 diagnostic imaging, research reagents and separations and through our patent and library licensing program.

The following are the principal elements of our business strategy:

- *Develop Our Proprietary Biopharmaceutical Products Now in the Clinic.* We have two internally discovered and developed proteins now in clinical trials for three indications.
 - *DX-88 for Hereditary Angioedema.* In collaboration with Genzyme Corporation, we are currently evaluating DX-88 as a treatment for hereditary angioedema (HAE) in two Phase II clinical trials, one a dose escalating placebo controlled study and the other an open label repeat dose study.
 - *DX-88 for CABG.* Independent of our collaboration with Genzyme, we have completed a Phase I/II clinical trial of DX-88 for a second indication as a treatment for patients undergoing on-pump open-heart surgery, specifically coronary artery bypass graft surgery (CABG), and plan to initiate a second trial in this indication in 2004 in Italy.
 - *DX-890 for Cystic Fibrosis.* In collaboration with Debiopharm S.A., DX-890 is being developed as a treatment for cystic fibrosis. Debiopharm has completed two Phase IIa clinical trials with DX-890 in Europe, one in adult and one in pediatric cystic fibrosis patients, and is planning to initiate a Phase IIb trial for cystic fibrosis in the second half of 2004.
- *Discover and Develop Additional Proprietary Biopharmaceutical Products.* We are also expanding our pipeline by identifying antibodies, proteins and peptides that may be developed as product candidates, primarily for the treatment of some inflammatory diseases and cancers. We intend to discover new leads for targets that we identify 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 antibody and peptide-based 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 also make our phage display libraries available for licensing in therapeutic and other fields for which we receive technology transfer and licensing fees and the right to receive milestone payments and royalties from the commercialization of products. 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 Bracco Imaging S.p.A, a subsidiary of Bracco S.p.A., a leader in the imaging products market. We are collaborating with BD Biosciences, a division of Becton, Dickinson and Company, in the research products field and have granted a non-exclusive license to Amersham Biosciences, the life sciences business of Amersham plc, in the area of separations. We also have collaborative arrangements with pharmaceutical and biotechnology companies in which we identify compounds from our phage display libraries that purify the collaborator's specific biopharmaceutical product.
- *Continue to Extend Our Intellectual Property and Technology.* We plan to continue to develop our technology internally and may 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.

We have also entered into cross licensing agreements under which we have licensed our phage display patents to third parties and have received in the same agreements rights to practice under the phage display technology patents of these third parties.

Our Biopharmaceutical Programs

Two of the product candidates we discovered and developed using phage display technology are now in clinical trials for three indications. We are using phage display technology internally and through collaborative arrangements to discover and develop additional biopharmaceutical product candidates. Our product development programs are primarily focused on inflammatory diseases and cancer.

Product Candidates in Clinical Trials

DX-88. The enzyme plasma kallikrein is a key component responsible for the regulation of the inflammation and coagulation pathways. Excess plasma kallikrein activity is thought to play a role in a number of inflammatory and autoimmune diseases. Using phage display, we have developed DX-88, which we have shown *in vitro* to be a high affinity, high specificity inhibitor of human plasma kallikrein. In disease states where inhibiting plasma 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 plasma kallikrein.

- ***Treatment of HAE.*** In collaboration with Genzyme, we are currently evaluating DX-88 as a treatment for hereditary angioedema (HAE) in two Phase II clinical trials, one a dose escalating placebo controlled study known as EDEMA1 and the other an open label repeat dose study known as EDEMA2. Both are multi-center trials with investigational sites in the US and worldwide. In March 2003, we successfully completed patient treatment in a nine-patient Phase II, dose ranging clinical trial in Europe. Both the United States Food and Drug Administration (FDA) and the European Agency for the Evaluation of Medicinal Products (EMEA), have granted orphan drug designation to DX-88 for the treatment of acquired and hereditary angioedema.

The prevalence of HAE is believed to be between 1/10,000 and 1/50,000 worldwide. HAE is a genetic disease that can cause 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 are steroids, pain control, restriction of the inciting activity (e.g., repetitive motion such as typing or hammering), 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 plasma kallikrein is a primary mediator of both the pain and swelling in HAE. DX-88, a potent plasma kallikrein inhibitor, may decrease the severity and frequency of symptoms during acute HAE attacks and, therefore, may provide an effective treatment for this disease.

- ***Mitigation of Complications of CABG.*** Independent of our collaboration with Genzyme, we have also completed the evaluation of DX-88 in a Phase I/II trial in the United States in patients undergoing coronary artery bypass graft surgery (CABG) and plan to initiate a second Phase II trial in this indication in Italy in the first half of 2004.

In the United States there are over 500,000 cardiac surgeries annually that use cardiopulmonary bypass, the majority of which involve CABG procedures. On-pump open-heart surgery elicits a systemic inflammatory response, which adversely affects the patient post-operatively. Many patients undergoing CABG experience significant intraoperative blood loss, requiring transfusion. In addition, an estimated 25% of patients have post-operative cardiac, pulmonary,

hematologic or renal dysfunction. Kallikrein has been implicated in the body's response to on-pump open-heart surgery 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 for sale in the U.S. under the label Trasylo[®] for use to reduce transfusion requirements in patients undergoing CABG. DX-88 may have benefits over this existing therapy, because the DX-88 compound is recombinant rather than bovine sourced, and its sequence is based on that of a human protein, which may make it appear less foreign to the patient's immune system. DX-88 has also been shown *in vitro* to be 1,000 times more potent than aprotinin as an inhibitor of plasma kallikrein.

DX-890. In a number of inflammatory diseases, the body secretes an excess of the enzyme known as neutrophil elastase, or elastase. In several diseases, excess elastase activity destroys normal 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 diseases mediated by elastase. Based on its biological activity, DX-890 may be effective in stopping the destruction of normal tissue due to excess elastase activity.

- *Treatment of Cystic Fibrosis.* Our collaborator for DX-890, Debiopharm, has completed two Phase IIa clinical trials with DX-890 in Europe, one in adult and one in pediatric cystic fibrosis patients and is planning to initiate a Phase IIb trial for cystic fibrosis in the second half of 2004.

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 lung tissue and contributes to recurrent pulmonary 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.

- *Other Indications.* In addition to the treatment of cystic fibrosis, DX-890 may be an effective therapy for other inflammatory diseases or disorders, including Chronic Obstructive Pulmonary Disease, Alpha1 Anti-Trypsin Deficiency and Ulcerative Colitis.

Collaborations For Clinical Development

Genzyme. We have a collaboration agreement with Genzyme Corporation for the development and commercialization of DX-88. Under this agreement, which was amended on May 31, 2002, and again effective as of September 30, 2003, we were responsible for all expenses incurred in connection with the development of DX-88 for the treatment of HAE through the completion of the first Phase II clinical trial for HAE, which occurred during the second quarter of 2003. In June 2003, Genzyme exercised its option to create Kallikrein LLC, a jointly owned limited liability company, to manage the development and commercialization of DX-88. Through the creation of Kallikrein LLC, Genzyme acquired a 49.99% financial interest in the DX-88 program and is now responsible for 49.99% of all costs incurred in connection with the development of DX-88 subsequent to completion of the first Phase II clinical trial. Upon dosing the first patient in a pivotal clinical trial of DX-88 for HAE, Genzyme will also be obligated to pay us a milestone payment anticipated to be approximately \$3.0 million. In addition, 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 developed under the collaboration, as well as approximately 50% of the profits from sales of such products. The term of this collaboration is perpetual unless terminated by either party with prior written notice, 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.

Under the collaboration agreement, as amended, we had the option to purchase Genzyme's interest in the application of DX-88 for the prevention of blood loss and other systemic inflammatory responses in on-pump open-heart surgery and other surgical indications for \$1.0 million. We exercised this option in the first quarter of 2003.

When we first amended the collaboration agreement in May 2002, we also executed a senior secured promissory note and security agreement under which Genzyme agreed to loan us up to \$7.0 million and we agreed to grant Genzyme a continuing security interest in certain tangible and intangible personal property arising out of the DX-88 program. In addition, under the terms of the security agreement, once we exercised our option to purchase Genzyme's interest in the application of DX-88 in on-pump open-heart surgery and other surgical indications, we were required to pledge to Genzyme a percentage interest in our wholly owned subsidiary, Biotage. Under an amendment to the security agreement executed on October 15, 2003, Genzyme agreed to release the interest in Biotage pledged to it in exchange for a continuing security interest in Dyax's rights to revenues from licenses of its fundamental phage display patent portfolio known as the Ladner patents. The security agreement, as amended, contains certain financial covenants under which the Company must maintain (i) at least \$20.0 million in cash or cash equivalents based on the Company's quarterly consolidated financial statements and (ii) at least one continued listing standard for the Nasdaq National Market. As of December 31, 2003, we had borrowed the full \$7.0 million available under the note.

Debiopharm. We have 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 right of first 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 has 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.

Other Biopharmaceutical Discovery and Development Programs.

We are pursuing biopharmaceutical discovery and development programs in the fields of immunology, tumor angiogenesis, tumor biology and inflammation using optimized phage libraries that express proteins, peptides 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 or circulating proteins. 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 protein, peptide or antibody with the desired biochemical and biological characteristics. While our discovery research efforts are focused primarily on monoclonal antibodies, we are also testing the *in vitro* and *in vivo* efficacy of several of our peptide and small protein compounds.

We have a total of seven discovery and development programs underway in the oncology area, three of which are in collaboration with other companies. The seven programs are focused on the discovery and development of therapies that fight cancer primarily in three ways: inhibiting angiogenesis, inhibiting proteases believed to be associated with tumor growth and proliferation, and targeting cell surface proteins believed to be over expressed by certain tumors. We also have three discovery and development programs focused on targets that are believed to be important mediators of inflammation.

We are also engaged in a collaborative discovery program to identify, characterize and optimize antibodies that have potential to efficiently control the progression of AIDS in HIV-infected patients.

Leveraging Phage Display

In the late 1980s, our scientists invented phage display, a novel method to individually display up to tens of billions of proteins, peptides and human antibodies 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 antibodies, proteins and peptides 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 Phage Display Technology” located in this Item 1.

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 to improve, other drug discovery technologies which are currently employed to identify binding proteins, such as combinatorial chemistry, single target high throughput screening and conventional hybridome technology. 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.

Over the past few years, we have brought on-line high-throughput automated capacity, developed state-of-the-art antibody phage display libraries, and successfully implemented a strategy under which we have obtained freedom to operate in the antibody phage display area through cross-licenses with Affimed Therapeutics AG, Biosite Incorporated, Genentech, Inc. and XOMA Ireland Limited. In addition to these cross-licenses, we recently amended our existing cross-license agreement with Cambridge Antibody Technology Limited (CAT), a subsidiary of Cambridge Antibody Technology Group plc. As a result of the amended CAT agreement, we have a worldwide research license under all the CAT antibody phage display patents and now have more options to obtain product licenses from CAT to develop and commercialize therapeutic and diagnostic antibody products, for which CAT will

receive milestones and royalties. We also have given CAT an option to develop with us our own therapeutic antibody products and further agreed to pay CAT a portion of the revenues that we generate from certain other applications of antibody phage display. Under the terms of the amended CAT agreement, we agreed that CAT will no longer have any royalty obligations to us with regard to any products covered by our phage display patents, including the product Humira™, for which Abbott Laboratories received marketing approval from the FDA at the end of 2002.

With our phage display technology, we have established the capability to identify fully human antibodies with high specificity and high affinity. We also have proprietary high-throughput technologies available to increase the affinity and specificity of antibody panels and for batch reformatting and protein expression. Our technologies allow us to move product candidates rapidly into both *in vitro* testing and optimization. We continue to use our increased capabilities to support our discovery and development programs for antibody-based therapeutics and to expand our revenue-generating collaborations.

Phage Display 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:

- Under our collaboration agreement with AstraZeneca AB, AstraZeneca is funding us to use our phage display technology to identify, characterize and optimize antibodies that bind specifically to AstraZeneca's neurological and metabolic disease target. AstraZeneca has the right to develop and commercialize the antibodies as therapeutic and *in vitro* diagnostic products.
- In collaboration with Dendreon Corporation we are identifying antibody, protein and peptide compounds that bind to two serine proteases that were isolated and characterized by Dendreon. With Dendreon we will evaluate the leads that we generated during the research phase of our collaboration to determine if we wish to jointly develop any of them for the potential treatment of cancer.
- Under a co-development agreement with URRMA Biopharma Inc. we are using our phage display technology to identify, characterize and optimize antibodies that bind specifically to the R7V antigen, a specific epitope found on all types and clades of the human immunodeficiency virus (HIV). Anti-R7V neutralizing antibodies may have the potential to efficiently control the progression of AIDS in HIV-infected patients.

We also seek to gain access to targets by in-licensing them from academic institutions:

- In March 2002, we licensed exclusive rights from The Center for Blood Research to develop and commercialize therapeutic products aimed at the activated form of LFA-1, a cell surface adhesion protein, that is considered an essential mediator of inflammation. We also have the option to license additional adhesion molecules discovered in the laboratory of Dr. Timothy Springer at the Center for Blood Research.
- In July 2002, we obtained exclusive rights from the University of Arizona to commercialize therapeutics and diagnostics to a cancer target that is a form of alpha 6 intergrin that was discovered by Dr. Anne Cress of the University of Arizona Cancer Center.
- We have an exclusive license in the therapeutics and diagnostics fields to Tie-1, an angiogenesis target that was developed by Dr. Kari Alitalo of the University of Helsinki.

Phage Display Collaborations in Non-Core Areas. While our focus is on therapeutic programs, we are able to leverage our phage display technology in a number of other ways. For example, often the binding compounds that we discover for biopharmaceutical targets can be used in diagnostic or imaging

formats to assess therapeutic effectiveness and monitor disease progression. Binding compounds are also active components of many research products used for drug discovery and development, specifically to detect and analyze proteins. In the diagnostic imaging and research product fields, we have formed collaborations, and we also license others to practice our phage display technology in other fields. 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.

Collaboration with Bracco. In November 2000, we entered into a collaboration with Bracco 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. Effective December 31, 2003, the collaboration agreement with Bracco was amended. Under the amended agreement, Bracco's license to our phage display technology for the development of diagnostic imaging products became non-exclusive and the collaboration term was extended for three additional years through December 31, 2006. During the extended collaboration term, we will receive a minimum of \$1.3 million per year in research funding in connection with the performance of research projects aimed at the discovery of product leads for Bracco. We will also receive development milestones and royalties on any product sales. Furthermore, because Bracco's license has become non-exclusive, we are now able to enter into additional licensing and collaborative relationships in the field of *in vivo* diagnostic imaging.

Collaboration with BD Biosciences. In June 2001, we entered into a collaboration and license agreement with BD Biosciences, a division of Becton, Dickinson and Company, under which we use our phage display technology to discover antibodies for use as research reagents. 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 sciences market. BD Biosciences also has the option to extend its rights to *in vitro* diagnostic products on an antibody-by-antibody basis. We have retained all rights to use these antibodies in the therapeutic field. Under the agreement, we performed research for BD Biosciences using our antibody phage display technology until December 29, 2003, at which point they exercised their right to bring our phage display technology in-house and to continue to use us to provide them with technical support. In addition to the license fee we receive under the agreement, we will receive royalties on all of BD Bioscience's phage display antibody 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 for making 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 have also granted licenses to others, e.g., Amgen Inc., ImClone Systems, Inc., Human Genome Sciences, Inc. and MedImmune, Inc., to use our phage display libraries and other technology to research and develop therapeutic, *in vitro* diagnostic, and other products. We have granted over 75 companies and institutions patent and/or library 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. We have also entered into cross licensing agreements with third parties under which we have granted rights to our phage display patents and have received rights to practice under the phage display related patents of such third parties.

Affinity Separations. 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 can be used to generate small, stable binding compounds, known as ligands that have high affinity and high specificity for desired biological compounds that bind and release targets in predetermined conditions that can be used for the purification of biopharmaceuticals. We have successfully completed funded affinity separations discovery projects for Wyeth and Human Genome Sciences. Wyeth and Human Genome Sciences have a license with us to use the ligand that we developed for them in their discovery project. Wyeth is using the ligand for purification of its recombinant blood factor product, ReFacto AF, for treating hemophilia and Human Genome Sciences is using the ligand to purify its 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. We have granted our first phage display patent license in the separations field to Amersham Biosciences, the life sciences business of Amersham plc. The non-exclusive license permits Amersham Biosciences, a market leader in the separations media field, to practice our phage display patents to discover ligands from libraries for use as affinity-based media for chromatography separations.

Dyax Phage Display 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.

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 contains 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 tens of 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, research reagent 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.

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 an antibody, protein or peptide 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. Optimization of humanized mouse or human-mouse antibodies is more difficult and cannot progress as rapidly.

Competition

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 effective 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. Some of these organizations have greater financial resources and experience than we do.

For DX-88 as a treatment for hereditary angioedema, our competitors include Aventis Behring, which currently markets plasma-derived C1 esterase inhibitor products that are approved for the treatment of this disease in some European countries. In addition, other competitors include Jerini AG, which is developing a bradykinin receptor antagonist for the treatment of angioedema in Europe, companies developing recombinant or plasma-derived C1 inhibitors, such as Pharming Group N.V., as well as companies that market and develop corticosteroid drugs or other anti-inflammatory compounds.

For DX-88 as a treatment for patients undergoing on-pump open-heart surgery, specifically coronary artery bypass grafting surgery (CABG), our competitors include Bayer AG, which currently markets aprotinin under the name Trasylo[®] for reduction of blood loss in CABG patients. A number of companies, including Alexion Pharmaceuticals, Inc., Avant Immunotherapeutics, Inc. and Zymogenetics, Inc., are developing additional products to reduce the complications associated with cardiopulmonary bypass procedures.

For our DX-890 product candidate, companies with marketed products for the treatment of cystic fibrosis include Genentech, Inc. and Chiron Corporation. In addition, a number of companies are developing products for the treatment of cystic fibrosis, including Inspire Pharmaceuticals Inc., Genaera Corporation, Targeted Genetics Corporation and BCY LifeSciences, Inc. A number of other companies are also developing neutrophil elastase inhibitors for broader indications. These include Ono Pharmaceuticals, Teijin Institute for Bio-medical Research, Arriva Pharmaceuticals, Inc., and Ivax Corporation.

For potential oncology product candidates coming out of our biopharmaceutical discovery and development programs, our potential competitors include numerous pharmaceutical and biotechnology companies, most of which have substantially greater financial resources and experience than we do.

In addition, most large pharmaceutical companies seek to develop orally available small molecule compounds against many of the targets for which others and we 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 A/S, 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 BioInvent International AB, 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 Incorporated, which is also a patent licensee of ours, has partnered with Medarex, Inc. to combine phage display technology with transgenic mouse technology to create antibody libraries derived from the RNA of immunized mice. Other companies are attempting to develop new antibody engineering technology. These include Phyllos, Inc. and CAT, which are each developing ribosomal display technology and antibody mimics, Diversa Corp., which is developing combinatorial arrays for large-scale screening of antibodies, our patent licensee Domantis Limited, which makes single domain antibody libraries, and Novagen, Inc., which is developing cDNA display technology.

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 and on biopharmaceutical, diagnostic and separation product candidates.

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, known as the Ladner patents, 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, 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 and European Patent No. 573,603, which expires February 28, 2012, 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.

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, known as the 597 Patent was ultimately revoked in 2002 in a proceeding in the European Patent Office. We have two divisional patent applications of the 597 Patent pending in the European Patent Office. We will not be able to prevent other parties from using our phage display technology in Europe if the European Patent Office does not grant us another patent. We cannot be assured that we will prevail in the prosecution of either of these patent applications.

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, *in vitro* diagnostics and other select fields. 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.

George Pieczenik and I.C. Technologies America, Inc. sued us in 1999 for patent infringement of three United States patents. The complaint was initially filed against us in New York, dismissed for lack of jurisdiction and then refiled in the United States District Court in Massachusetts. On February 25, 2003, the District Court granted summary judgment of non-infringement in our favor with respect to the three asserted patents. On March 5, 2003, the plaintiff filed a Notice of Appeal to the United States Court of Appeals for the Federal Circuit (CAFC). On September 23, 2003 the CAFC affirmed the decision of the United States District Court granting summary judgment that we do not infringe the patents asserted by the plaintiff. The plaintiff has filed a petition for *certiorari* with the United States Supreme Court for the review of the decision by the CAFC. The petition is still pending. On December 21, 2003, the plaintiff asked the District Court to reconsider its decision that we did not infringe plaintiff's patents. The Massachusetts Court denied plaintiff's request on January 7, 2004. On January 19, 2004, plaintiff appealed that decision to the CAFC.

George Pieczenik also recently filed an action in the United States District Court for the Southern District of New York, alleging, among other things, that we (and each of several other defendants) infringe a newly issued patent, which issued on August 12, 2003. We challenged the new lawsuit on several grounds (including jurisdictional and venue grounds) and on October 9, 2003 the District Court dismissed the action as to us. The Court subsequently dismissed the action as to one of our directors and one of our former officers. As a result, Dyax, its directors and officers are no longer parties to the New York proceeding.

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 have sought and obtained affirmative rights of license or ownership under certain patent rights relating to phage display technology owned by other parties. For example, in addition to our amended license agreement with CAT, we have entered into licensing agreements with Affimed, Biosite and Genentech under which we granted each of those companies rights to practice our phage display patents and in return received rights to practice under their phage display related patents. These types of agreements in which each party license technology to the other are referred to as cross-licensing agreements. We have also entered into a cross-licensing agreement with XOMA under which we received a license to use XOMA's antibody expression technology to develop antibody products for ourselves and our collaborators. We also received a license from XOMA to produce antibodies. In

exchange we agreed to pay XOMA a license fee and a royalty in connection with the sale of any of our antibody products. We also granted XOMA a license to our phage display patents and agreed to provide them with one of our antibody phage display libraries.

The issues relating to the validity, enforceability and possible infringement of such patents present complex factual and legal issues that we periodically reevaluate. Third parties have patent rights related to phage display, particularly in the area of antibodies. While we have gained access to key patents in the antibody area through our cross-licensing agreement with Affimed, Biosite, Genentech, XOMA and CAT, other 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. In addition, we may choose to license patent rights from third parties. 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. Moreover, if we are unable to maintain the covenants with regard to phage display improvements that we obtain from our licensees through our patent licensing program and the licenses that we have obtained to third party phage display patent rights it could have a material adverse effect on our business.

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 (FDA) rigorously regulates products intended for diagnostic or therapeutic use in humans. In addition, products intended for use in the manufacturing of these products, such as separations media and equipment, are subject to certain FDA manufacturing and quality standards.

The steps required before a new pharmaceutical 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 that are frequently time consuming and costly to establish safety and effectiveness of the product, which normally occurs in three phases each monitored by the FDA;
- submission to FDA of a New Drug or Biologics License Application containing the safety and effectiveness data developed by the company, followed by FDA review and, if warranted, approval of the application; and

- compliance with the FDA's Good Manufacturing Practices regulations in the manufacture, processing and packing of regulated products and facility and equipment validations and inspection.

The requirements for testing and approval for *in vitro* diagnostic products, which are usually regulated as medical devices, can be somewhat less onerous than for pharmaceutical products, but similar steps are usually 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 our collaborators or we can gain the necessary approvals. Failure to do so would have a material adverse effect on our ability to achieve our business goals and implement our business strategy. In addition, following approval, manufacturers are required to report adverse events that occur during use to the FDA of which they become aware. On occasion such events may be sufficiently serious to warrant changes in the approved uses of products, or in especially serious cases, removal from the market. This, should it occur, could also produce material adverse effects on future business.

Foreign Regulatory Approval. In many countries outside the United States, especially within the European Union (EU), governmental regulatory authorities similar to the FDA must approve the investigational program and/or marketing application for pharmaceutical and diagnostic products. New legislation for investigative medicinal product is being implemented by all EU member states on May 1, 2004. Some delays in the time required to initiate a clinical trial in the EU are expected until processes become established. Following the conclusion of the clinical evaluation of a medicinal product, a marketing authorization is prepared and submitted. The format of the required documentation has been harmonized in the United States, the European Union, and Japan. However, some variations continue to exist. In addition, the national laws governing manufacturing requirements, advertising and promotion, and pricing and reimbursement may vary widely. Therefore, the time to market can vary widely among different regions and countries. In addition, the export to foreign countries for investigation 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 one or more regulatory authorizations. There is no assurance that we will be able to gain the necessary authorizations in a timely fashion or at all. Failure to do so would have a material adverse effect on our ability to achieve our business goals and implement our business strategy.

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

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, the Company, 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 those 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 contractors will have the capacity to manufacture or test our products at the required scale and within the required time frame. 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.

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 established sales representatives. These arrangements will generally be worldwide on a product-by-product basis.

Other Product Areas. For areas other than therapeutic 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.

Segment Information

We provide financial information by geographical area in Note 15 to our Consolidated Financial Statements included in Item 8 of this report. We are incorporating that information into this section by this reference.

Employees

As of December 31, 2003, worldwide we had 109 employees, including 29 with Ph.D.s and/or M.D.s. Approximately 75 of our employees are in research and development, 3 in sales and marketing and 31 in administration. Our workforce is non-unionized, and we believe that our relations with employees are good.

Additional Information

We make our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 available without charge through our website, www.dyax.com, as

soon as reasonably practicable after filing them with or furnishing them to the Securities and Exchange Commission. Information contained on the website is not part of this report.

ITEM 2. PROPERTIES

In June of 2001, we signed a ten-year lease with the Massachusetts Institute of Technology. The leased property is located in Cambridge, Massachusetts and serves as our corporate headquarters and main research facility. Under the terms of the lease, we have initially leased 67,197 square feet. Of the space we initially leased, we have subleased a total of approximately 24,000 square feet to two different biotechnology companies under subleases, one expires on April 30, 2004 and the other is on a month-to-month basis. We are obligated to lease an additional 24,122 square feet on November 1, 2007. 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 \$4.3 million, which may be reduced after the fifth year of the lease term. Through our subsidiary, Dyax S.A., we maintain 10,000 square feet of laboratory and office space in Liege, Belgium to support our research efforts.

ITEM 3. LEGAL PROCEEDINGS

Except for the proceedings described in Item 1, “Business—Patents and Proprietary Rights”, which description 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, 2003, 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. As of March 8, 2004, there were 31,127,058 shares of our common stock outstanding, which were held by approximately 307 common stockholders of record, and approximately 1,800 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:

	<u>High</u>	<u>Low</u>
Fiscal year ended December 31, 2003:		
First Quarter	\$2.25	\$1.52
Second Quarter	\$4.90	\$1.67
Third Quarter	\$7.50	\$2.58
Fourth Quarter	\$9.05	\$4.45
	<u>High</u>	<u>Low</u>
Fiscal year ended December 31, 2002:		
First Quarter	\$11.38	\$3.10
Second Quarter	\$ 4.68	\$3.20
Third Quarter	\$ 4.20	\$1.65
Fourth Quarter	\$ 2.68	\$1.05

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.

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 our consolidated financial statements and related notes included elsewhere in this Form 10-K. The selected consolidated financial data for the years ended December 31, 2003, 2002 and 2001 have been prepared from our audited financial statements and the selected consolidated financial data for the years ended December 31, 2000 and 1999 have been prepared from our accounting records. On October 29, 2003, we completed the sale of our wholly owned separations product subsidiary Biotage, LLC, formerly operated as Biotage, Inc., (Biotage) to Pyrosequencing AB. The following data includes all activities of Biotage presented as discontinued operations.

	December 31,				
	2003	2002	2001	2000	1999
	(In thousands, except per share data)				
Consolidated Statement of Operations Data:					
Product development and license fee revenues	\$ 16,853	\$ 17,750	\$ 14,237	\$ 9,434	\$ 4,237
Research and development:					
Net research and development	24,787	28,713	16,795	12,104	7,941
Equity loss in joint venture (Kallikrein LLC)	2,243	—	—	—	—
General and administrative	13,205	14,882	14,186	11,307	7,814
Total operating expenses	40,235	43,595	30,981	23,411	15,755
Loss from operations	(23,382)	(25,845)	(16,744)	(13,977)	(11,518)
Other (expense) income, net	(1,112)	(795)	2,136	1,981	1,122
Loss from continuing operations	(24,494)	(26,640)	(14,608)	(11,996)	(10,396)
Gain on sale of Biotage, net of tax	18,959	—	—	—	—
Loss from discontinued operations of Biotage, net of tax	(1,880)	(178)	(2,557)	(3,193)	(2,791)
Net Loss	<u>\$ (7,415)</u>	<u>\$ (26,818)</u>	<u>\$ (17,165)</u>	<u>\$ (15,189)</u>	<u>\$ (13,187)</u>
Basic and diluted loss per share:					
Loss from continuing operations	\$ (1.04)	\$ (1.35)	\$ (0.76)	\$ (1.40)	\$ (5.37)
Gain on sale of Biotage	0.81	—	—	—	—
Loss from discontinued operations of Biotage	(0.08)	(0.01)	(0.13)	(0.37)	(1.44)
Net loss	<u>\$ (0.31)</u>	<u>\$ (1.36)</u>	<u>\$ (0.89)</u>	<u>\$ (1.77)</u>	<u>\$ (6.81)</u>
Shares used in computing basic and diluted net loss per share	<u>23,546,524</u>	<u>19,652,474</u>	<u>19,244,809</u>	<u>8,577,912</u>	<u>1,936,907</u>
	December 31,				
	2003	2002	2001	2000	1999
	In thousands:				
Consolidated Balance Sheet Data:					
Cash and cash equivalents	\$ 36,508	\$ 28,199	\$ 51,034	\$ 74,205	\$ 16,726
Working capital	27,454	14,330	39,984	68,380	13,181
Total assets	69,286	73,906	81,441	91,405	29,608
Long-term obligations, less current portion	10,648	13,809	3,756	1,190	905
Accumulated deficit	(118,242)	(110,827)	(84,009)	(66,844)	(51,655)
Total stockholders’ equity	33,945	30,843	55,464	69,857	19,300

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

Overview

We are a biopharmaceutical company principally focused on the discovery, development and commercialization of antibody, protein and peptide based therapeutic products. We currently have two product candidates in or entering into Phase II clinical trials for three indications. DX-88 is being studied for the treatment of both hereditary angioedema (HAE) and for the prevention of blood loss and other systemic inflammatory responses in on-pump open-heart surgery and other surgical indications, and DX-890 is being studied for the treatment of cystic fibrosis. In collaboration with Genzyme, we are currently conducting two Phase II trials of DX-88 for the treatment of patients with HAE: one a dose escalating placebo controlled study and the other an open label repeat dose study. Both are multi-center trials with investigational sites in the US and worldwide. Independent of our collaboration with Genzyme, we have completed a Phase I/II study of DX-88 in the United States in patients undergoing coronary artery bypass grafting surgery (CABG) and plan to initiate a second Phase II trial in this indication in Italy in the first half of 2004. Our collaborator for DX-890, Debiopharm, has completed two Phase IIa trials, one in adults and one in pediatric cystic fibrosis patients, and is planning to initiate a Phase IIb trial in this indication in the second half of 2004.

On October 29, 2003, we completed the sale of our wholly owned separations product subsidiary Biotage, LLC, formerly operated as Biotage, Inc., to Pyrosequencing AB, see "Sale of Separations Business" below.

We use our proprietary, patented technology, known as phage display, to identify a range of compounds consisting of monoclonal antibodies, small proteins and peptides, 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 agents and to purify biopharmaceuticals. 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 continued to incur losses in 2003 and expect to incur significant operating losses over at least the next several years as we continue our current and anticipated development projects, particularly our clinical trial programs for DX-88 and DX-890, and as we develop our discovery, research, marketing, sales and manufacturing capabilities.

Clinical Development Programs

DX-88 for HAE. In collaboration with Genzyme, we are currently developing DX-88 as a treatment for HAE in two Phase II clinical trials, one a dose escalating placebo controlled study known as EDEMA1 and the other an open label repeat dose study known as EDEMA2. Both are multi-center trials with investigational sites in the US and worldwide. In March 2003, we successfully completed patient treatment in a nine-patient Phase II, dose ranging clinical trial in Europe.

The following table illustrates the activity associated with DX-88 for HAE included in our consolidated statements of operations and comprehensive loss:

	Years Ended December 31,		
	2003	2002	2001
DX-88 for HAE costs included within research and development expenses in the consolidated statements of operations and comprehensive loss	\$7,067,000	\$4,444,000	\$2,923,000
Less research and development expenses reimbursed by joint venture (Kallikrein LLC) per the consolidated statements of operations and comprehensive loss	(5,203,000)	—	—
Net research and development expenses for DX-88 for HAE . . .	1,864,000	4,444,000	2,923,000
Equity loss in joint venture (Kallikrein LLC) separately classified within the consolidated statements of operations and comprehensive loss	<u>2,243,000</u>	<u>—</u>	<u>—</u>
Net loss on DX-88 for HAE program	<u>\$4,107,000</u>	<u>\$4,444,000</u>	<u>\$2,923,000</u>

During 2003, research and development expenses on this program totaled \$7.1 million compared with \$4.4 million in 2002 and \$2.9 in 2001. Research and development expenses increased from 2002 to 2003 principally due to the initiation both of the EDEMA trials in 2003 and the cost of drug manufacture to support these trials. Research and development expenses increased from 2001 to 2002 principally due to an increase in drug manufacture to support the European Phase II trial, despite a decrease in costs associated with preclinical studies.

In June 2003, Genzyme exercised its option under our collaboration agreement to create Kallikrein LLC. Through the creation of Kallikrein LLC, Genzyme acquired a 49.99% financial interest in the DX-88 program. Kallikrein LLC is responsible for the reimbursement of all development expenses related to the HAE program incurred after the completion of the first Phase II clinical trial for HAE. During 2003, Kallikrein LLC reimbursed us for \$5.2 million of our expenses. This reimbursement is recorded as research and development expenses reimbursed by joint venture (Kallikrein LLC) in our consolidated statements of operations and comprehensive loss because it includes funding we provided to Kallikrein LLC. The resulting net \$1.9 million of research and development expenses for DX-88 for HAE represent costs incurred prior to the completion of the first Phase II clinical trial for HAE and therefore were not reimbursed. All future costs will be reimbursed by Kallikrein LLC.

From its formation to December 31, 2003, Kallikrein LLC had a net loss of \$4.4 million. This loss represents the total research and development expenses incurred by Dyax and Genzyme on DX-88 for HAE. Our portion of the loss, accounted for under the equity method, of \$2.2 million is proportional to our 50.01% financial interest in the program and is separately classified within the consolidated statements of operations and comprehensive loss.

We currently anticipate filing the Biologic License Application (BLA) for DX-88 for the treatment of HAE in 2005. Based upon this timeline, we estimate the total remaining costs to commercialization to be in the range of \$52 million to \$60 million. We will be responsible for funding one half of these costs, or \$26 million to \$30 million. These costs exclude costs associated with the development of an alternative method for delivering the drug subcutaneously.

DX-88 for CABG. Independent of our collaboration with Genzyme, we are developing DX-88 as a treatment for patients undergoing on-pump open-heart surgery, specifically coronary artery bypass graft surgery (CABG). During the first quarter of 2003, we exercised an option to purchase full rights to

DX-88 for this and other surgical indications from Genzyme. The cost for exercising the option was \$1.0 million and was expensed in the first quarter of 2003.

During 2003, research and development expenses on this program totaled \$2.6 million, including the \$1.0 million paid to Genzyme when we exercised an option to purchase full rights to DX-88 for surgical indications. In 2003, we completed a Phase I/II clinical trial of DX-88 for patients undergoing CABG and we plan to initiate a second Phase II clinical trial in the first half of 2004 in Italy. We expect this trial to cost approximately \$1.5 to \$2.5 million. Due to the fact that Bayer AG currently markets aprotinin under the name Trasylo[®] for reduction of blood loss in CABG patients, further development work on this indication may require Phase III clinical trials (anticipated to be approximately 1,000 patient) comparing DX-88 to Trasylo. Any such trial would entail significant additional costs. Before we proceed with such trials, we plan to partner with another company or obtain additional financing that will allow us to develop the product independently.

DX-890 for Cystic Fibrosis. In collaboration with Debiopharm S.A., DX-890 is being developed as a treatment for cystic fibrosis. Debiopharm has completed two Phase IIa clinical trials with DX-890 in Europe, one in adult and one in pediatric cystic fibrosis patients, and is planning to initiate a Phase IIb trial for cystic fibrosis in the second half of 2004. In addition, we are currently considering alternatives to accelerate the clinical development of DX-890, including conducting independent clinical trials in the United States and elsewhere.

During 2003, we incurred research, development and manufacturing expenses on this program of \$3.2 million compared with \$4.2 million in 2002 and \$450,000 in 2001. Research and development expenses on this program decreased from 2002 to 2003 principally due to a decrease in manufacturing costs due to the timing of cost recognition. The increase from 2001 to 2002 was principally due to additional manufacturing and process development costs, and an increase in internal program support costs due to having a complete year of activity under this program. These costs were fully funded by Debiopharm. Under our existing collaboration agreement, Debiopharm is responsible for the management of all non-clinical and clinical trials and all costs associated with such clinical trials, and any costs incurred by Dyax in connection with the manufacture of the active pharmaceutical ingredient for DX-890 are fully funded by Debiopharm. This financial structure could be altered if we were to amend our collaboration agreement with Debiopharm and assume responsibility for the clinical development of DX-890.

Goals for Clinical Development Programs. Our goal for each of our three ongoing clinical development programs is to obtain marketing approval from the FDA and analogous international regulatory agencies. Because of uncertainties associated with our ongoing clinical trials, our ability to locate a development partner or obtain the additional funding needed to complete clinical trials in the CABG and cystic fibrosis programs, the preparation and filing of the BLA, and the regulatory review process, and the risks associated with the clinical approval process, including the risk that we may have to repeat, revise or expand the scope of trials or conduct additional clinical trials not presently planned to secure marketing approvals, we are unable to accurately predict the costs to complete any of these programs, the completion dates, or whether these projects will be successfully completed at all. Material cash inflows for any of these programs will not commence until after marketing approvals are obtained, and then only if the product candidate finds acceptance in the marketplace as a treatment for its disease indication. Because of the many risks and uncertainties relating to the completion of clinical trials, receipt of marketing approvals and acceptance in the marketplace, we cannot predict when material cash inflows from these programs will commence, if ever.

Discovery Programs

Through internal discovery activities, and through business relationships with academic institutions and private genomics companies, we use our proprietary phage display technology to identify

compounds with therapeutic potential. Furthermore, once we have identified a compound, we utilize various *in vitro* and *in vivo* animal models to determine the most promising therapeutic leads to move forward in development. At present, we have a total of eleven discovery programs underway:

- 7 in the oncology area, three of which we are developing in collaboration with other companies;
- 3 focused on targets that are believed to be important mediators of inflammation; and
- 1 collaborative discovery program for antibodies that have potential to efficiently control the progression of AIDS in HIV-infected patients.

Currently all compounds identified under these programs are in various stages of discovery, although it is anticipated that one or more such compounds will enter into formal pre-clinical development in 2004. The goal of these programs is to discover, develop, manufacture and obtain marketing approval for product candidates. Material cash inflows may not commence until after marketing approvals are obtained, and then only if an approved product finds acceptance in the marketplace.

In order to obtain marketing approval for any compounds identified under these programs, we will need to initiate and complete pre-clinical development and Phase I, Phase II and/or Phase III clinical trials with satisfactory results and submit a BLA to the FDA. Because of this, and the many risks and uncertainties relating to the completion of clinical trials, receipt of marketing approvals and acceptance in the marketplace, we cannot predict when material cash inflows from these projects will commence, if ever.

Licensing and Funded Research Activities

We have granted over 75 companies and institutions licenses to use our proprietary phage display technology and phage display libraries. These licenses allow others to exploit our technology in therapeutic discovery and in non-core areas such as diagnostic imaging, research reagents and separations. In addition, we perform funded research for collaborators within the biopharmaceutical industry. We believe that these programs provide support for our patent position in phage display and for the usefulness of phage display as an enabling discovery technology. Additionally, these programs generate short term and long term value for us through licensing fees, milestones and royalties.

Sale of Separations Business

On October 29, 2003, we completed the sale of our wholly owned separations product subsidiary Biotage, LLC, formerly operated as Biotage, Inc., (Biotage) to Pyrosequencing AB for a gross purchase price of \$35.0 million. The sale of Biotage has allowed us to focus exclusively on biotherapeutics, and the cash generated by the sale of Biotage will help us advance our clinical programs as well as the pre-clinical candidates in our pipeline. The purchase price was \$35.0 million before transaction expenses and deduction for approximately \$4.6 million of Biotage debt. We received approximately \$25.4 million in cash at closing and paid approximately \$2.5 million in transaction expenses. An additional \$5.0 million is being held in an indemnity escrow to cover the representations, warranties and covenants of Dyax contained in the agreement, which will be payable to us within one year to the extent that there are no claims against the escrow. As of March 1, 2004, there have been no claims made against the escrow. For the year ended December 31, 2003, we have recognized a \$19.0 million gain on this sale. As of December 31, 2003, the assets, liabilities and operations of Biotage that were sold to Pyrosequencing are presented as discontinued operations in our financial statements. Prior period amounts have been reclassified to be consistent with the treatment of Biotage as a discontinued operation.

Recent Developments

In January 2004, we sold 6,000,000 shares of our common stock (including 780,000 shares pursuant to the exercise by the underwriters of their over-allotment option) at a price of \$7.93 per share in a registered underwritten public offering, which resulted in net proceeds to us of approximately \$44.8 million.

Results of Operations

Revenues. Substantially all our revenues have come from licensing, funded research and development activities, including; milestone payments from our licensees and collaborators. These revenues fluctuate from year to year. Total revenues for 2003 were \$16.9 million, compared with \$17.8 million in 2002 and \$14.2 million in 2001. The decrease from 2002 to 2003 was primarily due to a \$2.2 million decrease in revenues from a funded research agreement with Human Genome Sciences, Inc., which was completed in June 2003. This decrease was partially offset by a \$377,000 increase in other licensing and funded research agreements. The increase from 2001 to 2002 was primarily due to a \$3.7 million increase in revenues under our collaboration agreement for the development of DX-890 with Debiopharm due to the increased funding for internal and external manufacturing costs.

Research and Development. Our research and development expenses for the years ended December 31, 2003, 2002 and 2001, are summarized as follows:

	Year Ended December 31,		
	2003	2002	2001
Net, research and development expenses per consolidated statements of operations and comprehensive loss	\$24,787,000	\$28,713,000	\$16,795,000
Equity loss in joint venture (Kallikrein LLC) separately classified within the consolidated statements of operations and comprehensive loss	2,243,000	—	—
Pro forma research and development expenses	<u>\$27,030,000</u>	<u>\$28,713,000</u>	<u>\$16,795,000</u>

Our research and development expenses arise primarily from compensation and other related costs, including personnel dedicated to research and development activities and from the fees paid and costs reimbursed to outside professionals to conduct research, clinical studies and trials, and to manufacture drug compounds and related supplies prior to FDA approval. Our pro forma research and development expenses for 2003 were \$27.0 million, compared with pro forma research and development expenses of \$28.7 million in 2002 and \$16.8 million in 2001. The decrease from 2002 to 2003 was primarily due to the reimbursement by Kallikrein LLC of \$5.2 million of our costs associated with the development of DX-88 for the treatment of HAE, which was partially offset by the \$2.2 million loss representing our pro rata portion of Kallikrein LLC's net loss. All development expenses incurred by the related parties on behalf of Kallikrein LLC are billed to and reimbursed by Kallikrein LLC. Because the reimbursement we received includes funding that we provided to the LLC, we recorded the reimbursement as a reduction of research and development expenses so that we present net research and development expenses. The 2003 research and development expenses also reflect an \$881,000 reduction in lab supplies, and the cost of exercising a \$1.0 million option to purchase the rights to DX-88 for on-pump open-heart surgery and other surgical indications from Genzyme. The increase from 2001 to 2002 was primarily due to increased compound manufacturing and related external research and development expenditures for clinical trials, partially offset by a decrease in personnel costs associated with our September 2002 staff reduction.

Our management believes that the above presentation of pro forma research and development expenses provides investors a better understanding of how total research and development efforts affect our consolidated statements of operations and comprehensive loss. Our presentation of this measure, however, may not be comparable to similarly titled measures used by other companies.

General and Administrative. Our general and administrative expenses consist primarily of the costs of our management and administrative staff, as well as expenses related to business development, protecting our intellectual property, administrative occupancy, professional fees, market research and promotion activities and the reporting requirements of a public company. Total general and administrative expenses were \$13.2 million in 2003 compared to \$14.9 million in 2002 and \$14.2 million for 2001. The decrease of \$1.7 million from 2002 to 2003 was primarily due to a \$1.1 million decrease in employment costs, partially attributable to the effects of our September 2002 staff reduction in our Cambridge facility and a \$699,000 decrease in legal costs. These decreases were partially offset by increases in the cost of directors' and officers' insurance. The increase from 2001 to 2002 was primarily due a \$588,000 increase in professional fees related to expanding and protecting our intellectual property, a \$257,000 increase in salaries and fringe expenses in business development and corporate administrative functions.

Discontinued Operations. Our activities from discontinued operations are the operations of Biotage, which were sold to Pyrosequencing on October 29, 2003 including the gain on the sale of Biotage. The gain was comprised of a \$19.0 million gain on sale and a loss of \$1.9 million on Biotage's operations for the year-to-date period ended October 29, 2003, compared to a loss on operations of \$178,000 for 2002 and \$2.6 million for 2001. The \$1.7 million increase in loss on operations from 2002 to the 2003 period were primarily due to a decrease in revenues in non-core product lines, specifically Biotage's Kiloprep® and Flex Systems. The \$2.4 million decrease in loss on operations from 2001 to 2002 were primarily due to increased unit sales in Biotage's drug discovery purification systems and consumable business.

Liquidity and Capital Resources

We require cash to fund our operating expenses, to make capital expenditures, acquisitions and investments, and to pay debt service. Through December 31, 2003, we have funded our operations principally through the sale of equity securities, which have provided aggregate net cash proceeds since inception of approximately \$141.6 million, including net proceeds of \$62.4 million from our August 2000 initial public offering and net proceeds of \$8.3 million from our March 2003 registered directed offering. We have also generated funds from biopharmaceutical product development and license fee revenues, separations product revenues of our former Biotage division, interest income, long term obligations and other sources. As of December 31, 2003, we had cash and cash equivalents of approximately \$36.5 million, an increase of \$8.3 million from December 31, 2002. This amount does not include the \$44.8 million in net proceeds that we received in early January 2004 from our sale of 6,000,000 shares of our common stock at a price of \$7.93 per share in a registered underwritten public offering. Our excess funds are currently invested in U.S. Treasury obligations and certificates of deposit.

Our operating activities used cash of \$14.9 million in 2003, compared with \$24.3 million in 2002 and \$12.8 million in 2001. Our cash used in operating activities for 2003 consisted primarily of our net loss from continuing operations of \$24.5 million, an increase in accounts receivable of \$1.6 million due to the timing of billings to Debiopharm under our collaboration agreement, and an increase in prepaid expense and other assets of \$1.3 million, partially offset by an increase in accounts payable and accrued expenses of \$4.6 million due primarily to the timing of payments made to our contract manufacturer. The activities for 2002 included a decrease in deferred revenue of \$1.7 million due primarily to the timing of revenue recognition on our collaboration with Debiopharm, and an increase in prepaid expense and other assets of \$1.4 million, partially offset by depreciation and amortization costs totaling

\$2.9 million. The activities for 2001 included a \$1.1 million increase in accounts receivable due primarily to billing under our research agreement with Bracco.

Our investing activities provided cash of \$21.8 million in 2003, and used cash totaling \$5.4 million and \$9.8 million for 2002 and 2001, respectively. Our investing activities for the 2003 included the \$25.4 million received on the sale of Biotage LLC, repayments on employee notes receivable of \$1.3 million, including approximately \$1.2 million received from our Chief Executive Officer as full payment on the related note partially offset by \$3.1 million paid to Kallikrein LLC and payment of \$2.0 million for licensed technology purchased in 2002. Fixed asset purchases in 2003 decreased to \$444,000 due to the fact that the substantial purchases for our Cambridge, Massachusetts facility were completed in 2002. The investing activities for 2002 included the purchases of fixed asset assets relating to our move to a new corporate and research facility in Cambridge totaling \$2.9 million, \$1.5 million spent on a purchase of licensed technology and a \$1.2 million increase in restricted cash to secure long term obligations. The investing activities for 2001 included an increase of restricted cash of \$4.4 million to secure the lease on our facility in Cambridge, Massachusetts and \$5.7 million used to purchase of fixed assets and leasehold improvements to outfit this facility.

The following table summarizes our cash contribution to and investment in our joint venture, Kallikrein LLC.

	<u>Year Ended December 31, 2003</u>
Investment in joint venture (Kallikrein LLC) per the consolidated statement of cash flows	\$3,060,000
Equity loss in joint venture (Kallikrein LLC) separately classified within the consolidated statements of operations and comprehensive loss	<u>(2,243,000)</u>
Investment in joint venture (Kallikrein LLC) per the consolidated balance sheets	<u>\$ 817,000</u>

Our financing activities provided cash of \$6.0 million, \$7.8 million and \$3.4 million for the years ended December 31, 2003, 2002 and 2001, respectively. Our financing activities for 2003 included net proceeds of \$8.3 million from the registered directed offering, completed in March 2003. These proceeds were partly offset by repayments of long-term obligations of \$3.4 million. Our financing activities for 2002 included a \$7.0 million loan from Genzyme under the terms of our collaboration agreement, as well as proceeds of \$2.4 million from our Cambridge landlord for leasehold improvements. These proceeds were partially offset by \$2.2 million in repayments of long-term obligations. Our financing activities for 2001 consisted primarily of \$2.9 million in proceeds from long-term obligations, \$604,000 from the issuance of common stock to employees and \$418,000 in proceeds from a receivable associated with common stock purchases, partially offset by \$601,000 in repayments of long-term obligations.

We have financed fixed asset purchases through capital leases and debt. Capital lease obligations are collateralized by the assets under lease. Certain debt obligations, as amended, are collateralized by a stand-by letter of credit for the amount financed, of which none is outstanding at December 31, 2003. As of December 31, 2003, these debt obligations totaled \$1.1 million and will be fully paid by December 31, 2004.

In conjunction with our collaboration agreement for the development of DX-88 with Genzyme Corporation, Genzyme agreed to loan us up to \$7.0 million pursuant to a senior secured promissory note and security agreement, and we agreed to grant Genzyme a continuing security interest in certain tangible and intangible personal property arising out of the DX-88 program. In addition, under the terms of the security agreement, once we exercised our option to purchase Genzyme's interest in the application of DX-88 in on-pump open-heart surgery and other surgical indications, we were required to pledge to Genzyme a percentage interest in our wholly owned subsidiary, Biotage. On October 15,

2003, as part of the sale of Biotage, the security agreement was amended to release the interest in Biotage pledged to Genzyme in exchange for a continuing security interest in our rights to revenues from our Ladner phage-display patent portfolio license agreements. The security agreement, as amended, contains certain financial covenants under which we must maintain at least \$20.0 million in cash or cash equivalents based on our quarterly consolidated financial statements and we must maintain at least one continued listing standard for the Nasdaq National Market. As of December 31, 2003, we had borrowed the full \$7.0 million available under the note, the terms of which are discussed in Note 8 to the consolidated financial statements.

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 development, license fees and collaborations will be sufficient to support our current operating plans into 2006. We expect to use approximately \$25 million in cash during 2004, net of the anticipated release of the \$5.0 million escrow from the sale of Biotage. If our existing resources and cash flows from product development and license fees are insufficient to satisfy our liquidity requirements or if market conditions are favorable, 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.

We have no off-balance sheet arrangements.

Contractual Obligations

Contractual obligations represent future cash commitments and liabilities under agreements with third parties, and exclude contingent liabilities which we cannot reasonably predict future payment. The following chart represents our total contractual obligations, including principal and interest, at December 31, 2003, aggregated by type (in thousands):

Contractual obligations	Payments due by period				
	Total	Less than 1 year	2-3 years	3-5 years	More than 5 years
Obligation to related party	\$ 8,083	\$ 908	\$ 7,175	\$ —	\$ —
Capital leases	4,183	2,422	1,626	135	—
Leasehold improvement arrangements	3,370	413	826	825	1,306
Promissory notes	1,130	1,130	—	—	—
Operating lease obligations	38,233	3,457	7,344	10,595	16,837
Patent and product license obligations(1)	2,261	177	354	350	1,380
Total contractual obligations	<u>\$57,260</u>	<u>\$8,507</u>	<u>\$17,325</u>	<u>\$11,905</u>	<u>\$19,523</u>

(1) These amounts exclude any royalties and milestones that we may owe in connection with the development or commercialization of any of our product candidates. Since the prospect of development and commercialization of any particular product candidate is uncertain, we believe the timing and amounts of any potential royalties and other milestones are not currently calculable in any manner that would fairly present purchase obligations.

In addition, we have received a grant from the Walloon region of Belgium. This grant includes specific criteria regarding employment and investment levels that need to be met through 2005. If we do not meet the criteria, we will be required to refund all or a portion of amounts received under this grant. As of December 31, 2003, we have received \$777,000 under this grant.

Critical Accounting Estimates

Our discussion and analysis of our results of operations and liquidity and capital resources are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, receivable collectibility, useful lives with respect to long-lived and intangible assets and valuation of common stock, related stock options, and deferred tax assets. We base our estimates on historical and anticipated results and trends and on various other assumptions that we believe are reasonable under the circumstances, including assumptions as to future events. These estimates form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. By their nature, estimates are subject to an inherent degree of uncertainty. Actual results may differ from our estimates. We believe that our judgment and assumptions with respect to the following significant accounting policies are most critical to the accounting estimates used in the preparation of our consolidated financial statements.

Revenue Recognition

We enter into biopharmaceutical product development agreements with collaborators for the research and development of therapeutic, diagnostic and other products. The terms of the agreements may include non-refundable signing fees, funding for research and development, licensing fees, milestone payments and royalties on any product sales derived from the 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, is recognized as the related expenses are incurred. We evaluate 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. 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.

We license our patent rights covering phage display on a non-exclusive basis in the fields of therapeutics, antibody-based *in vitro* diagnostics, research products and others. Standard terms of the license agreements, for which we have no future obligations, generally include non-refundable signing fees, non-refundable annual license maintenance fees, development 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 we have no future obligations. Milestone payments under non-exclusive phage display patent licenses are recognized when the milestone is achieved if the Company has no future obligations under the license and royalties are recognized when they are earned.

Payments received that have not met the appropriate criteria for revenue recognition are recorded as deferred revenue. At December 31, 2003 and 2002, our deferred revenue related to product development agreements was \$7.7 million and \$7.2 million, respectively.

Significant assumptions and estimates include the expected term of the agreement and total expected cost. 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 revenues and our results of operations.

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 \$4.7 million and \$3.1 million at December 31, 2003 and 2002, respectively. At December 31, 2003 and 2002 the provision for doubtful accounts was \$75,000.

Valuation of Long-Lived and Intangible Assets

We review long-lived assets, including capitalized license rights, 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 and long-lived assets 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. Our intangible assets at the end of 2003 consisted of a license for antibody technology from a third party. The balance of our other intangible assets net of accumulated amortization was \$2.9 million and \$3.4 million at December 31, 2003 and 2002, respectively. No impairment losses have been recognized in any of the periods presented in our consolidated financial statements.

Related Party Transactions

Our Chief Executive Officer also serves as an outside director of Genzyme Corporation and was a consultant to Genzyme until 2001. One of our directors is a director of Genzyme and another is a senior advisor to the Chief Executive Officer of Genzyme and a former officer.

We have a collaboration agreement with Genzyme for the development and commercialization of DX-88 for the treatment of hereditary angioedema (HAE). Under this agreement, which was amended on May 31, 2002, and again effective as of September 30, 2003, we were responsible for all expenses incurred in connection with the development of DX-88 for the treatment of HAE through the completion of the first Phase II clinical trial for HAE, which occurred during the second quarter of 2003. In June 2003, Genzyme exercised its option to create Kallikrein LLC, a jointly owned limited liability company, to manage the development and commercialization of DX-88. Through the creation of Kallikrein LLC, Genzyme acquired a 49.99% financial interest in the DX-88 program and is now responsible for 49.99% of all costs incurred in connection with the development of DX-88 subsequent to completion of the first Phase II clinical trial. Upon dosing the first patient in a pivotal clinical trial of DX-88 for HAE, Genzyme will also be obligated to pay us a milestone payment of approximately \$3.0 million. In addition, 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 developed under the collaboration, as well as approximately 50% of the profits from sales of such products.

Under this collaboration agreement, we had the option to purchase Genzyme's interest in the application of DX-88 for the prevention of blood loss and other systemic inflammatory responses in on-pump open-heart surgery and other surgical indications for \$1.0 million. We exercised this option in the first quarter of 2003.

In conjunction with the first amendment of the collaboration agreement in May 2002, we also executed a senior secured promissory note and security agreement under which Genzyme agreed to loan us up to \$7.0 million and we agreed to grant Genzyme a continuing security interest in tangible and intangible personal property arising out of the DX-88 program. The principal and all unpaid interest will be due on the maturity date of May 31, 2005. We may extend the maturity date to May 31, 2007 if the Amended Collaboration Agreement is in effect, no default or event of default exists and we satisfy the financial covenants as of the initial maturity date. In addition, under the terms of the security agreement, once we exercised our option to purchase Genzyme's interest in the application of DX-88 in on-pump open-heart surgery and other surgical indications, we were required to pledge to Genzyme a percentage interest in our wholly owned subsidiary, Biotage. Under an amendment to the security agreement executed on October 15, 2003, Genzyme agreed to release the interest in Biotage pledged to it in exchange for a continuing security interest in Dyax's rights to revenues from licenses of its fundamental phage display patent portfolio. The security agreement, as amended, contains certain financial covenants under which we must maintain (i) at least \$20.0 million in cash or cash equivalents based on our quarterly consolidated financial statements and (ii) at least one continued listing standard for the Nasdaq National Market. As of December 31, 2003, we had borrowed the full \$7.0 million available under the note. In addition, as of December 31, 2003, Genzyme owned approximately 2.2% of our common stock outstanding.

In 1996, we entered into a sublease agreement with Genzyme for laboratory and office facilities in Cambridge, Massachusetts, which was extended to and terminated in April 2002. Rent expense in connection with this sublease of \$162,000, and \$682,000 was recorded in each year ended December 31, 2002, and 2001, respectively. During 1996, we signed two patent license agreements with Genzyme under our standard license terms. We recorded license revenues of \$50,000, for each year ended December 31, 2003, 2002 and 2001, in connection with the maintenance fees on these two agreements. As of December 31, 2003 and 2002, there were no outstanding accounts receivable due from Genzyme related to the patent license agreements.

In October 1998, we provided a mortgage loan and pledge agreement in the amount of \$1.3 million to our Chief Executive Officer to purchase a residence within commuting distance of our headquarters. The remaining \$1.2 million balance on the note was paid off in full in June 2003.

Tax Loss Carryforwards

As of December 31, 2003, we had federal net operating loss (NOL) and research and experimentation credit carryforwards of approximately \$92 million and \$5 million, respectively, which may be available to offset future federal income tax liabilities and expire at various dates from 2004 through 2023. We have recorded a deferred tax asset of approximately \$1.6 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 \$1.6 million deferred tax asset will be recorded as a credit to additional paid-in capital when realized. As required by SFAS No. 109, our management 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 we will not recognize the benefits of federal and state deferred tax assets and, as a result, a valuation allowance of approximately \$43.4 million has been established at December 31, 2003.

Recent Pronouncements

In November 2002, the Emerging Issues Task Force (EITF) reached a consensus on EITF Issue 00-21, “*Accounting for Revenue Arrangements with Multiple Deliverables.*” EITF Issue 00-21 provides guidance on how to determine when an arrangement that involves multiple revenue-generating activities or deliverables should be divided into separate units of accounting for revenue recognition purposes, and if this division is required, how the arrangement consideration should be allocated among the separate units of accounting. The guidance in the consensus is effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003. The adoption of EITF Issue 00-21 did not have a material effect on the Company’s financial statements.

In January 2003, the FASB issued FASB Interpretation No. 46, “*Consolidation of Variable Interest Entities*” (FIN 46), which is effective for the Company on July 1, 2003. In October 2003, the FASB deferred the effective date for applying the provisions of FIN 46 to December 31, 2003 for interests held by public companies in variable interest entities or potential variable interest entities created before February 1, 2003. FIN 46 requires a variable interest entity to be consolidated by a company if that company is subject to a majority of the risk of loss from the variable interest entity’s activities or entitled to receive a majority of the entity’s residual returns or both. The adoption of FIN 46 did not have a material effect on the Company’s financial statements.

In April 2003, the FASB issued SFAS 149, “*Amendment of Statement 133 on Derivative Instruments and Hedging Activities.*” SFAS 149 amends and clarifies financial accounting and reporting for derivative instruments, including certain derivative instruments embedded in other contracts (collectively referred to as derivatives) and for hedging activities under FASB Statement No. 133, “*Accounting for Derivative Instruments and Hedging Activities*”. The adoption of SFAS 149 did not have a material effect on the Company’s financial statements.

In May 2003, the FASB issued SFAS 150, “*Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity.*” SFAS 150 establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability (or an asset in some circumstances). Many of those instruments were previously classified as equity. This Statement is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003, except for mandatorily redeemable noncontrolling interests. For mandatorily redeemable noncontrolling interests, the FASB has deferred certain provisions of SFAS 150. The adoption of SFAS 150 did not have a material effect on the Company’s financial statements.

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 Condition 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:

- expected future revenues, operations and expenditures;
- research and development programs;
- results of clinical trials and projected timetables for the preclinical and clinical development of, regulatory submissions and approvals for, and market introduction of, our product candidates;

- income tax benefits;
- projected cash needs;
- assessments of competitors and potential competitors;
- credit facilities; 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 processes that any biopharmaceutical 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 sales and marketing activities, any or all of which may adversely impact our ability to commercialize any biopharmaceuticals we may develop;
- our dependence on our collaborator to successfully and timely complete clinical trials for our DX-890 product candidate;
- any inability to establish and maintain successful license and collaborative relationships could adversely affect our ability to generate revenues;
- any failure by us or our collaborators to gain market acceptance of biopharmaceuticals we own or develop;
- competition and technological change that may make our products candidates and technologies less attractive or obsolete;
- any inability to obtain and maintain intellectual property protection for our product candidates 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;
- the scope, validity and enforceability of patents and other proprietary rights held by third parties and their impact on our ability to commercialize our product candidates and technology;

- 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;
- our handling, storage or disposal of hazardous materials used and generated in our business may be time-consuming and expensive;
- our exposure to product liability;
- risks associated with international operations and collaborations;
- any inability to obtain continued funding of clinical development product candidates by our development partners;
- 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 and certificates of deposit, which we believe are subject to limited credit risk. We currently do not hedge interest rate exposure. As of December 31, 2003, we had cash and cash equivalents of \$36.5 million (without including the \$44.8 million net proceeds from our January 2004 common stock financing) 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.

As of December 31, 2003, we had \$10.6 million outstanding under long-term obligations. Interest rates on \$3.6 million of these obligations are fixed and therefore are not subject to interest rate fluctuations. The interest rate on the remaining \$7 million under the Genzyme promissory note is variable based on the prime interest rate and is therefore subject to interest rate fluctuations. A 2% increase in the prime rate would result in an additional \$140,000 in annual interest expense.

Most of our transactions are conducted in U.S. dollars. We have collaboration and technology license agreements with parties located outside of the United States. We also have a research facility located in Europe. Transactions under certain of the agreements between us and parties located outside of the United States, as well as transactions conducted by our foreign facility are conducted in local foreign currencies. If exchange rates undergo 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

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Report of Independent Auditors

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

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of Dyax Corp. and its subsidiaries at December 31, 2003 and 2002, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule listed in the accompanying index 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.

As discussed in Note 2 to the consolidated financial statements the company changed its method of accounting for goodwill to conform with Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets" in 2002.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
March 2, 2004

Dyax Corp. and Subsidiaries
Consolidated Balance Sheets

	December 31, 2003	December 31, 2002
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 36,508,000	\$ 28,199,000
Accounts receivable, net of allowances for doubtful accounts of \$75,000 at December 31, 2003 and 2002	4,683,000	3,072,000
Cash in escrow	5,000,000	—
Current portion of notes receivable, employees	—	1,300,000
Prepaid research and development	2,568,000	1,275,000
Other current assets	586,000	512,000
Total current assets	49,345,000	34,358,000
Assets of discontinued operations	—	17,504,000
Fixed assets, net	10,793,000	12,767,000
Intangibles, net	2,917,000	3,417,000
Restricted cash	5,213,000	5,635,000
Notes receivable, employees	—	20,000
Investment in joint venture (Kallikrein LLC)	817,000	—
Other assets	201,000	205,000
Total assets	\$ 69,286,000	\$ 73,906,000
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	\$ 12,329,000	\$ 9,664,000
Current portion of deferred revenue	6,149,000	6,934,000
Current portion of long-term obligations	3,413,000	3,430,000
Total current liabilities	21,891,000	20,028,000
Liabilities of discontinued operations	—	8,205,000
Deferred revenue	1,524,000	233,000
Obligation to related party	7,000,000	7,000,000
Long-term obligations	3,648,000	6,809,000
Other long-term liabilities	1,278,000	788,000
Total liabilities	35,341,000	43,063,000
Commitments and Contingencies (Notes 8, 9, 10, 12 and 17)		
Stockholders' equity:		
Preferred stock, \$0.01 par value; 1,000,000 shares authorized at December 31, 2003 and 2002; 0 shares issued and outstanding at December 31, 2003 and 2002, respectively	—	—
Common stock, \$0.01 par value; 50,000,000 shares authorized at December 31, 2003 and 2002; 24,887,757 and 19,705,040 shares issued and outstanding at December 31, 2003 and 2002, respectively	249,000	197,000
Additional paid-in capital	151,445,000	141,637,000
Accumulated deficit	(118,242,000)	(110,827,000)
Deferred compensation	(47,000)	(668,000)
Accumulated other comprehensive income	540,000	504,000
Total stockholders' equity	33,945,000	30,843,000
Total liabilities and stockholders' equity	\$ 69,286,000	\$ 73,906,000

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,		
	2003	2002	2001
Product development and license fee revenues	\$16,853,000	\$ 17,750,000	\$ 14,237,000
Research and development:			
Research and development	29,990,000	28,713,000	16,795,000
Less research and development expenses reimbursed by joint venture (Kallikrein LLC)	(5,203,000)	—	—
Net research and development	24,787,000	28,713,000	16,795,000
Equity loss in joint venture (Kallikrein LLC)	2,243,000	—	—
General and administrative	13,205,000	14,882,000	14,186,000
Total operating expenses	40,235,000	43,595,000	30,981,000
Loss from operations	(23,382,000)	(25,845,000)	(16,744,000)
Other income (expense):			
Interest income	208,000	457,000	2,298,000
Interest expense	(1,320,000)	(1,252,000)	(162,000)
Total other expense	(1,112,000)	(795,000)	2,136,000
Loss from continuing operations	(24,494,000)	(26,640,000)	(14,608,000)
Gain on sale of Biotage, net of tax	18,959,000	—	—
Loss from discontinued operations of Biotage, net of tax . .	(1,880,000)	(178,000)	(2,557,000)
Net loss	(7,415,000)	(26,818,000)	(17,165,000)
Other comprehensive income:			
Foreign currency translation adjustments	36,000	410,000	121,000
Comprehensive loss	\$(7,379,000)	\$(26,408,000)	\$(17,044,000)
Basic and diluted loss per share:			
Loss from continuing operations	\$ (1.04)	\$ (1.35)	\$ (0.76)
Gain on sale of Biotage	0.81	—	—
Loss from discontinued operations of Biotage	(0.08)	(0.01)	(0.13)
Net loss	\$ (0.31)	\$ (1.36)	\$ (0.89)
Shares used in computing basic and diluted net loss per share	23,546,524	19,652,474	19,244,809

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,		
	2003	2002	2001
Cash flows from operating activities:			
Loss from continuing operations	\$(24,494,000)	\$(26,640,000)	\$(14,608,000)
Adjustments to reconcile net loss from continuing operations to net cash used in operating activities:			
Depreciation and amortization of fixed assets	3,042,000	2,830,000	942,000
Amortization of intangibles	500,000	83,000	831,000
Loss on disposal of fixed assets	24,000	—	—
Compensation expenses associated with stock options	1,267,000	1,140,000	1,554,000
Equity loss in joint venture (Kallikrein LLC)	2,243,000	—	—
Changes in operating assets and liabilities, net of divestiture			
Accounts receivable	(1,611,000)	169,000	(1,085,000)
Prepaid research and development, and other assets	(1,342,000)	(1,370,000)	80,000
Accounts payable and accrued expenses	4,567,000	356,000	1,453,000
Deferred revenue	506,000	(1,694,000)	(1,942,000)
Other long-term liabilities	378,000	788,000	—
Net cash used in operating activities	(14,920,000)	(24,338,000)	(12,775,000)
Cash flows from investing activities:			
Purchase of fixed assets	(444,000)	(2,889,000)	(5,653,000)
Cash received for sale of Biotage	25,427,000	—	—
Restricted cash	507,000	(1,220,000)	(4,365,000)
Notes receivable, employees	1,320,000	182,000	259,000
Licensed patent technology	(2,000,000)	(1,500,000)	—
Investment in joint venture (Kallikrein LLC)	(3,060,000)	—	—
Net cash provided by (used in) investing activities	21,750,000	(5,427,000)	(9,759,000)
Cash flows from financing activities:			
Proceeds from the issuance of common stock under employee stock purchase plan and exercise of stock options	953,000	647,000	604,000
Net proceeds from registered directed offering	8,261,000	—	—
Proceeds from receivable associated with common stock purchase	—	—	418,000
Proceeds from landlord for leasehold improvements	—	2,352,000	—
Proceeds from long-term obligations	171,000	7,000,000	2,930,000
Repayment of long-term obligations	(3,431,000)	(2,212,000)	(601,000)
Net cash provided by financing activities	5,954,000	7,787,000	3,351,000
Effect of foreign currency translation on cash balances	30,000	65,000	247,000
Net cash used in discontinued operations	(4,505,000)	(922,000)	(4,235,000)
Net increase (decrease) in cash and cash equivalents	8,309,000	(22,835,000)	(23,171,000)
Cash and cash equivalents at beginning of the period	28,199,000	51,034,000	74,205,000
Cash and cash equivalents at end of the period	\$ 36,508,000	\$ 28,199,000	\$ 51,034,000
Supplemental disclosure of cash flow information:			
Interest paid	\$ 1,104,000	\$ 981,000	\$ 162,000
Supplemental disclosure of non cash investing and financing activities:			
Acquisition of property and equipment under long-term obligations	\$ 306,000	\$ 3,581,000	\$ 1,615,000
Fair value of license patent technology		\$ 3,500,000	
Less: license fee obligation		(2,000,000)	
Cash paid for licensed patent technology	\$ 2,000,000	\$ 1,500,000	\$ —

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

Dyax Corp. and Subsidiaries
Notes to 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 antibody, protein and peptide based therapeutic products. The Company has two product candidates in or entering into Phase II clinical trials for three indications. DX-88 is being studied for the treatment of both hereditary angioedema (HAE) and for the prevention of blood loss and other systemic inflammatory responses in on-pump open-heart surgery, and DX-890 is being studied for the treatment of cystic fibrosis. The Company is currently conducting two Phase II trials of DX-88 for the treatment of HAE: one a dose escalating placebo controlled study and the other an open label repeat dose study. Both are multi-center trials with investigational sites in the United States and worldwide. The Company has also completed the evaluation of DX-88 in a Phase I/II trial in the United States in patients undergoing coronary artery bypass grafting surgery (CABG) and plans to initiate a second Phase II trial in this indication in Italy in 2004. The Company's collaborator for DX-890 has completed two Phase IIa trials in Europe, one in adult and one in pediatric cystic fibrosis patients, and is planning to initiate a Phase IIb trial in the second half of 2004.

The Company uses its proprietary patented technology, known as phage display, to identify compounds with the potential for the treatment of various conditions and diseases. The Company is using phage display technology to build a broad portfolio of product candidates that it plans to develop and commercialize on its own 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. 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.

On October 29, 2003, the Company completed the sale of its wholly owned subsidiary, Biotage LLC, formerly operated as Biotage, Inc. (Biotage) to Pyrosequencing AB of Uppsala, Sweden. As of December 31, 2002, the assets and liabilities of Biotage that were sold to Pyrosequencing are presented as discontinued operations in the consolidated balance sheets. The operations of Biotage for the period ended October 29, 2003 and for the years ended December 31, 2002 and 2001 are presented as discontinued operations in the consolidated statements of operations and comprehensive loss, and the statements of cash flows.

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 European research subsidiaries Dyax S.A. and Dyax BV (formerly known as TargetQuest BV), and Biotage and its foreign sales subsidiaries through October 29, 2003, the date of disposal. 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.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Accounting Policies (Continued)

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 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, 2003, approximately 99% of the Company's cash and cash equivalents were invested in U.S. Treasury funds held by one financial institution. The Company maintains balances in various operating accounts in excess of federally insured limits.

The Company provides most of its services and licenses its technology 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. Receivable write offs in 2003, 2002 and 2001 were nominal. One customer accounted for approximately 60% and 20% of the Company's accounts receivable balance at December 31, 2003 and 2002. Another customer accounted for approximately 13% and 30% of the Company's accounts receivable balance at December 31, 2003 and 2002. One other customer accounted for approximately 12% of the Company's accounts receivable balance at December 31, 2002.

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 and certificates of deposit.

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: Prior to January 1, 2002, the Company amortized goodwill on a straight line basis over its useful life, periods not exceeding 15 years. Goodwill had previously been tested for impairment under the provisions of Statement of Financial Accounting Standards (SFAS) No. 121, "Accounting for the Impairment of Long-lived Assets and Long-lived Assets to be Disposed of." Effective January 1, 2002, the Company adopted SFAS No. 142, "Goodwill and Other Intangible Assets." SFAS No. 142 requires cessation of goodwill amortization and a fair value approach to testing the impairment of goodwill and other intangibles. As a part of the disposition of the Biotage operations, the Company has no goodwill requiring assessment for impairment at December 31, 2003.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Accounting Policies (Continued)

Impairment of Long-Lived Assets: The Company reviews its long-lived assets 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.

Revenue Recognition: The Company has utilized the guidance of Staff Accounting Bulletin 104, "Revenue Recognition", for all periods presented in these financial statements. The Company enters into biopharmaceutical product development agreements with collaborative partners for the research and development of therapeutic, diagnostic and separations products. The terms of the agreements may include non-refundable signing fees, funding for research and development, licensing fees, 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 is recognized as revenue as the related expenses are incurred. 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. 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. Costs of revenues related to product development and license fees are classified as research and development in the consolidated statements of operations and comprehensive loss. Human Genome Sciences, Inc. accounted for approximately 9%, 21% and 26% of product development and license fee revenues in 2003, 2002 and 2001, respectively, Debiopharm S.A. accounted for approximately 25% and 23% of product development and license fee revenues in 2003 and 2002, respectively and Bracco Imaging S.p.A accounted for approximately 21%, 20% and 27% of product development and license fee revenues in 2003, 2002 and 2001, respectively.

The Company licenses its patent rights covering phage display on a non-exclusive basis in the fields of therapeutics, antibody-based *in vitro* diagnostics, research products and others. Standard terms of the license agreements, for which the Company has no future obligations, generally include non-refundable signing fees, non-refundable annual license maintenance fees, development 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 if the Company has no future obligations under the license and royalties are recognized when they are earned.

The Company has received a grant from the Walloon region of Belgium, which is included in long term liabilities on the consolidated balance sheet. This grant includes specific criteria regarding employment and corporate investment that need to be met through 2006. If the Company does not meet the criteria, it will be required to refund all or a portion of amounts received under this grant. As of December 31, 2003, the Company has received \$777,000 under this grant. The Company will recognize the grant as the criteria are met.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Accounting Policies (Continued)

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

Guarantees: In November 2002, the FASB issued FIN No. 45 “*Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others.*” The following is a summary of our agreements that the Company has determined are within the scope of FIN No. 45.

The Company generally does not provide indemnification to licensees of its phage display technology. The Company does generally provide indemnifications for claims of third parties that arise out of activities that the Company performs under its collaboration, product development and cross-licensing agreements. The maximum potential amount of future payments the Company could be required to make under the indemnification provisions in some instances may be unlimited. The Company has not incurred any costs to defend lawsuits or settle claims related to any indemnification obligations under its license agreements. As a result, the Company believes the estimated fair value of these obligations is minimal. The Company has no liabilities recorded for any of its indemnification obligations recorded as of December 31, 2003 and 2002.

Investment in Joint Venture (Kallikrein LLC): In September 2003, Genzyme and Dyax formed a joint venture, Kallikrein LLC (LLC) to manage the DX-88 program for HAE. Dyax and Genzyme hold a 50.01% and 49.99% interest in the LLC, respectively. All research and development expenses incurred by each party related to the HAE program are billed to and reimbursed by the LLC. The Company presents this reimbursement as a reduction in research and development expenses because it includes funding that the Company provided to the LLC. The Company has evaluated this agreement to determine if the related joint venture qualifies as a variable interest entity under FASB Interpretation No. 46, “Consolidation of Variable Interest Entities” (FIN 46) and whether or not the LLC should be consolidated. Under the scope of FIN 46, the joint venture qualifies as a variable interest entity. The Company has a financial interest in the LLC, however it does not have a controlling interest and is not the primary beneficiary of the LLC. Accordingly, the Company has not consolidated the LLC. The Company has accounted for its interest in the LLC using the equity method of accounting. Dyax’s 50.01% share of the joint venture’s loss is recorded as an Equity Loss in Joint Venture (Kallikrein LLC).

Research and Development: Research and development costs include all direct costs, including salaries and benefits for research and development personnel, outside consultants, costs of clinical trials, sponsored research, clinical trials insurance, other outside costs, depreciation and facility costs related to the development of drug candidates. These costs are partially offset by the reimbursement of expenses by Kallikrein LLC. These costs have been charged to research and development expense as incurred. Prepaid research and development on the consolidated balance sheets represents external drug manufacturing costs, and research and development service costs that have been paid for in absence of the related product being received or the services being performed.

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.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Accounting Policies (Continued)

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 in the consolidated balance sheets. For the year ending December 31, 2003 2002 and 2001, gains from transactions in foreign currencies were \$36,000, \$410,000 and \$121,000 are included in net loss in the consolidated statements of operations and comprehensive loss.

Stock Options: At December 31, 2003, the Company had a stock-based employee compensation plan, which is described more fully in Note 11. The Company accounts for the plan using the intrinsic value method prescribed under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees", and related Interpretations in accounting for its plans. Stock-based employee compensation cost is reflected as an operating expense, as the difference between the exercise price and the market value of the underlying common stock on the date of grant. The following table illustrates the effect on net income and earnings per share if the Company had applied the fair value recognition provisions of FASB Statement No. 123, "Accounting for Stock-Based Compensation", to stock-based employee compensation.

	Year Ended December 31,		
	2003	2002	2001
Net loss as reported	\$ (7,415,000)	\$(26,818,000)	\$(17,165,000)
Stock-based employee compensation included in net loss as reported	1,267,000	1,140,000	1,554,000
Less: Total stock-based employee compensation expense determined under fair value based method for all awards	<u>(10,178,000)</u>	<u>(9,409,000)</u>	<u>(7,198,000)</u>
Pro forma net loss	<u>\$ (16,326,000)</u>	<u>\$(35,087,000)</u>	<u>\$(22,809,000)</u>
Basic and diluted net loss per share as reported	<u>\$ (0.31)</u>	<u>\$ (1.36)</u>	<u>\$ (0.89)</u>
Pro forma basic and diluted net loss per share	<u>\$ (0.69)</u>	<u>\$ (1.79)</u>	<u>\$ (1.19)</u>

Net Loss Per Share: The Company accounts for and discloses earnings per share (EPS) under SFAS No. 128, "Earnings per Share" (SFAS No. 128). Under SFAS No. 128, the Company is required to present two EPS amounts, basic and diluted. Basic net loss per share is computed using the weighted average number of shares of common stock outstanding. Diluted net loss per share does not differ from basic net loss per share since potential common shares from the exercise of stock options are antidilutive for all periods presented and, therefore, are excluded from the calculation of diluted net loss per share. Stock options, which are potentially dilutive, totaling 3,711,114, 4,306,313 and 3,677,630 were outstanding at December 31, 2003, 2002 and 2001, respectively.

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.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Accounting Policies (Continued)

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. The Company operates as one business segment in two geographic areas.

Recent Pronouncements: In November 2002, the Emerging Issues Task Force (EITF) reached a consensus on EITF Issue 00-21, “Accounting for Revenue Arrangements with Multiple Deliverables.” EITF Issue 00-21 provides guidance on how to determine when an arrangement that involves multiple revenue-generating activities or deliverables should be divided into separate units of accounting for revenue recognition purposes, and if this division is required, how the arrangement consideration should be allocated among the separate units of accounting. The guidance in the consensus is effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003. The adoption of EITF Issue 00-21 did not have a material effect on the Company’s financial statements.

In January 2003, the FASB issued FIN 46, which is effective for the Company on July 1, 2003. In October 2003, the FASB deferred the effective date for applying the provisions of FIN 46 to December 31, 2003 for interests held by public companies in variable interest entities or potential variable interest entities created before February 1, 2003. FIN 46 requires a variable interest entity to be consolidated by a company if that company is considered the primary beneficiary and is subject to a majority of the risk of loss from the variable interest entity’s activities or entitled to receive a majority of the entity’s residual returns or both. The adoption of FIN 46 did not have a material effect on the Company’s financial statements.

In April 2003, the FASB issued SFAS 149, “Amendment of Statement 133 on Derivative Instruments and Hedging Activities.” SFAS 149 amends and clarifies financial accounting and reporting for derivative instruments, including certain derivative instruments embedded in other contracts (collectively referred to as derivatives) and for hedging activities under FASB Statement No. 133, “Accounting for Derivative Instruments and Hedging Activities.” The adoption of SFAS 149 did not have a material effect on the Company’s financial statements.

In May 2003, the FASB issued SFAS 150, “Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity.” SFAS 150 establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability (or an asset in some circumstances). Many of those instruments were previously classified as equity. This Statement is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003, except for mandatorily redeemable noncontrolling interests. For mandatorily redeemable noncontrolling interests, the FASB has deferred certain provisions of SFAS 150. The adoption of SFAS 150 did not have a material effect on the Company’s financial statements.

3. Discontinued Operations of Biotage

On October 29, 2003, the Company sold its wholly owned subsidiary, Biotage, LLC, formerly operated as Biotage Inc. (Biotage) to Pyrosequencing AB of Uppsala, Sweden. The purchase price was

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

3. Discontinued Operations of Biotage (Continued)

\$35.0 million before transaction expenses of approximately \$3.0 million and a reduction of approximately \$4.6 million of Biotage debt. Dyax received \$25.4 million in cash at closing and paid approximately \$2.5 million in transaction expenses. An additional \$5.0 million is being held in an indemnity escrow to cover the representations, warranties and covenants of Dyax contained in the agreement, which will be released from escrow to Dyax within one year of the closing, to the extent that there are no claims against the escrow. For the year ended December 31, 2003, the Company has recognized a \$19.0 million gain on this sale in the consolidated statements of operations and comprehensive loss. As of December 31, 2002, the assets, liabilities and operations of Biotage that were sold to Pyrosequencing are presented as discontinued operations in the financial statements. Prior period amounts have been reclassified to be consistent with the treatment of Biotage as a discontinued operation.

Accounting Policies of Discontinued Operations of Biotage

Inventories: Inventories were 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 was recorded in the results of operations.

Other Intangibles: 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, net of accumulated amortization of \$85,000, were \$197,000 at December 31, 2002.

Revenue Recognition: Biotage has utilized the guidance of Staff Accounting Bulletin 104, "Revenue Recognition", for all periods presented in these financial statements. Product revenue is derived from sales of chromatography separations systems and cartridges. Revenue was generally recognizes on product sales arrangements based on product shipment if no installation obligations exist. For product sale arrangements that required installation services that are not considered essential to the functionality of the product, revenue was 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 required significant installation services and contain customer acceptance criteria, all revenue was recognized upon the completion of the installation and satisfaction of the customer acceptance criteria.

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: Biotage provided 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.

Advertising: Advertising costs were expensed as incurred and are included in selling, general and administrative in the results of discontinued operations. Advertising costs for the period ended October 29, 2003, and the years ended December 31, 2002 and 2001 were \$396,000, \$556,000 and \$611,000, respectively.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

3. Discontinued Operations of Biotage (Continued)

The following table presents summary balance sheet information for the discontinued operations of Biotage at December 31, 2002:

	December 31, 2002
ASSETS	
Current assets:	
Accounts receivable, net	\$ 3,757,000
Inventories	3,389,000
Other current assets	284,000
Total current assets	7,430,000
Fixed assets, net	9,688,000
Goodwill, net	111,000
Other intangibles, net	222,000
Other assets	53,000
Assets of discontinued operations	\$17,504,000
LIABILITIES AND STOCKHOLDERS' EQUITY	
Current liabilities:	
Accounts payable and accrued expenses	\$ 3,315,000
Deferred revenue	631,000
Current portion of long-term obligations	122,000
Total current liabilities	4,068,000
Long-term obligations	4,137,000
Liabilities of discontinued operations	8,205,000
Net assets of discontinued operations	\$ 9,299,000

The following table presents operating results for the discontinued operations of Biotage for the period ended October 29, 2003, and the years ended December 31, 2002 and 2001:

	Period Ended October 29, 2003	Year Ended December 31,	
		2002	2001
Separations product revenues	\$16,527,000	\$23,158,000	\$18,803,000
Costs and expenses:			
Cost of products sold	7,468,000	10,038,000	8,805,000
Research and development	2,251,000	3,088,000	2,637,000
Selling, general and administrative	8,701,000	10,252,000	9,935,000
Total costs and expenses	18,420,000	23,378,000	21,377,000
Loss from operations	(1,893,000)	(220,000)	(2,574,000)
Other income (expense), net	13,000	42,000	17,000
Loss from discontinued operations	\$(1,880,000)	\$ (178,000)	\$(2,557,000)

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

3. Discontinued Operations of Biotage (Continued)

The following table reconciles the purchase price to the gain on sale of Biotage as presented in the consolidated statements of operations and comprehensive loss:

Unadjusted purchase price	\$35,000,000
Less debt assumed by the buyer	(4,573,000)
Professional fees	(1,821,000)
Stock based compensation and bonuses	(1,162,000)
Net assets disposed on October 29, 2003	<u>(8,485,000)</u>
Gain on sale of Biotage, net of tax	<u>\$18,959,000</u>

4. Fixed Assets

Fixed assets consist of the following:

	December 31,	
	2003	2002
Laboratory equipment	\$ 7,233,000	\$ 6,483,000
Furniture and office equipment	984,000	911,000
Software and computers	2,130,000	1,813,000
Leasehold improvements	7,767,000	7,761,000
Total	<u>18,114,000</u>	<u>16,968,000</u>
Less: accumulated depreciation and amortization	<u>(7,321,000)</u>	<u>(4,201,000)</u>
	<u>\$10,793,000</u>	<u>\$12,767,000</u>

There was \$8,255,000 and \$7,352,000 of assets under capital leases, which includes laboratory and office equipment, with related accumulated amortization of \$4,748,000 and \$2,909,000, at December 31, 2003 and 2002, respectively.

5. Notes Receivable, Employees

In June 1999, the Company provided a loan to an officer of the Company in the amount of \$100,000. Prior to 2003, the Company forgave \$20,000 and all accrued interest on June 14 annually. At December 31, 2002, the balance outstanding on this note was \$40,000. During March 2003, the Company received payment of the remaining \$40,000 outstanding principal on the loan to an officer.

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. Payments in the amount of \$8,220 were due monthly to the Company which are applied to interest and then principal. During June 2003, the Company's Chief Executive Officer paid the Company the remaining balance on his mortgage loan agreement, totaling \$1,198,000. At December 31, 2002, the balance outstanding on this note was \$1,229,000.

At December 31, 2002, the Company had additional notes to employees of \$51,000, recorded in notes receivable, employees on the consolidated balance sheets. At December 31, 2003, the Company

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

5. Notes Receivable, Employees (Continued)

had additional advances to current employees of \$33,000, recorded in other assets on the consolidated balance sheets.

6. Intangible Assets

In June 2001, FASB issued SFAS No. 142, "Goodwill and Other Intangible Assets" (SFAS 142). 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. The provisions of SFAS 142 are effective for fiscal years beginning after December 15, 2001. Intangible assets other than goodwill, including capitalized license rights are to be amortized using a systematic method over their remaining estimated useful lives. Useful lives are based on management's estimate of the period that the capitalized license will generate revenues directly or indirectly, currently seven years. As of December 31, 2003, the gross carrying amount of the licensed patent technology was \$3.5 million and the related accumulated amortization was \$583,000.

Estimated five year future amortization expense for other intangible assets as of December 31, 2003 are as follows:

2004	.....	\$500,000
2005	.....	500,000
2006	.....	500,000
2007	.....	500,000
2008	.....	500,000

See also, Note 17, Collaborative and License Agreements.

7. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consist of the following:

	December 31,	
	2003	2002
Accounts payable	\$ 5,426,000	\$1,829,000
Accrued employee compensation and related taxes	1,855,000	2,020,000
Accrued external research and development and contract manufacturing	861,000	2,398,000
Licensed patent technology payable	—	2,000,000
Advance from joint venture	1,437,000	—
Other accrued liabilities	2,750,000	1,417,000
	<u>\$12,329,000</u>	<u>\$9,664,000</u>

During the third quarter of 2002, the Company severed 21 employees and recorded a charge of approximately \$650,000 related to employee severance costs. At December 31, 2002, all remaining unpaid employee severance costs equaled \$180,000 and are included in accrued employee compensation and related taxes, these costs were paid in 2003.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

8. Long-term Obligations

Long-term obligations consist of the following:

	December 31,	
	2003	2002
Obligations under capital lease arrangements	\$3,849,000	\$5,853,000
Obligation under leasehold improvement arrangements . . .	2,142,000	2,351,000
Obligations under promissory notes	1,070,000	2,035,000
Present value of future minimum payments	7,061,000	10,239,000
Less: current portion	(3,413,000)	(3,430,000)
Long-term obligations	\$3,648,000	\$6,809,000

Obligations under capital lease arrangements and promissory notes:

During 2001, Dyax S.A., the Company's research subsidiary located in Belgium, signed a capital lease for the purchase of qualified fixed assets. During the years ended December 31, 2003 and 2002, Dyax S.A. sold to and leased back from the lender a total of \$176,000 and \$1.7 million, respectively of laboratory and office equipment. No gain or loss was recorded as part of these transactions. Interest pursuant to this capital lease ranges between 4.38% and 11.18%. Principal and interest are payable quarterly over 60 months. Dyax S.A. was required to provide cash collateral in the amount of \$441,000, which is included in restricted cash on the Company's consolidated balance sheets. As of December 31, 2003 and 2002, there was \$1.4 million and \$1.5 million (included in obligations under capital lease arrangements) outstanding under the loan, which is included in long-term obligations on the Company's consolidated balance sheets.

During 2001, the Company signed a capital lease and debt agreement for the purchase of qualified fixed assets and leasehold improvements. Interest pursuant to this agreement ranges between 10.01% and 10.33%. Principal and interest are payable ratably over 36 months or 42 months. Capital lease obligations are collateralized by the assets under lease. Other debt obligations are collateralized by a stand-by letter of credit for the amount financed. If at the end of any fiscal quarter the Company's unrestricted cash is less than the greater of \$25.0 million or the Company's annualized cash needs, the Company must provide an irrevocable letter of credit in the amount equal to the amount of debt financed, which was \$2.3 million at December 31, 2003. Annualized cash needs are determined by multiplying cash used in operations for the most recently ended quarter by four. The lender has no obligation to fund any further amounts. During the years ended December 31, 2003 and 2002, the Company sold to and leased back from the lender \$306,000 and \$2.0 million, respectively, of leasehold improvements, laboratory, production and office equipment. No gain or loss was recorded as part of these transactions. As of December 31, 2003 and 2002, there was \$2.1 million and \$3.2 million (included in obligations under capital lease arrangements) outstanding related to capital leases and \$1.1 million and \$2.0 million (included in obligations under promissory notes) outstanding related to the leasehold improvements debt agreement, totaling \$3.2 million and \$5.2 million outstanding under the loan, which is included in long-term obligations on the Company's consolidated balance sheets.

During 1997, the Company signed a capital lease agreement for the purchase of qualified fixed assets from a lender for a total of \$2.9 million of laboratory and office equipment. Interest pursuant to this agreement ranges between 10.42% and 14.02%. Principal and interest are payable ratably over

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

8. Long-term Obligations (Continued)

60 months. The capital lease obligations are collateralized by the assets under the lease. As of December 31, 2003 and 2002, there was \$288,000 and \$1.1 million (included in obligations under capital lease arrangements) outstanding under the loan, which is included in long-term obligations on the Company's consolidated balance sheets.

The Company also has a capital lease for equipment in Belgium. In 2000, the Company sold to the lessor and leased back \$287,000 of laboratory equipment under this facility. No gain or loss was recorded as part of this transaction. Interest pursuant to this agreement is at 5.60%. Principal and interest is payable monthly over 60 months. As of December 31, 2003 and 2002, there was \$100,000 and \$145,000 (included in obligations under capital lease arrangements) outstanding under the loan, which is included in long-term obligations on the Company's consolidated balance sheets.

Obligation under leasehold improvement arrangements:

In June 2001, the Company entered into an agreement to initially lease approximately 67,000 square feet of laboratory and office space in Cambridge, Massachusetts. Under the terms of the agreement, the landlord loaned the Company approximately \$2.4 million to be used towards the cost of leasehold improvements. The loan bears interest at a rate of 12.00% and is payable in 98 equal monthly installments through February 2012. As of December 31, 2003, and 2002, there was \$2.1 million and \$2.4 million outstanding under the loan, which is included in long-term obligations on the Company's consolidated balance sheets.

Minimum future payments under the Company's long-term obligations as of December 31, 2003 are as follows:

2004	\$3,965,000
2005	1,733,000
2006	719,000
2007	541,000
2008	419,000
Thereafter	<u>1,306,000</u>
Total future minimum payments	8,683,000
Less: amount representing interest	<u>(1,622,000)</u>
Present value of future minimum payments	7,061,000
Less: current portion	<u>(3,413,000)</u>
Long-term obligations	<u><u>\$3,648,000</u></u>

9. Operating Leases

In June 2001, the Company entered into an agreement to initially lease approximately 67,000 square feet of laboratory and office space in Cambridge, Massachusetts. Of the space initially leased, the Company has subleased a total of approximately 24,000 square feet to two different biotechnology companies under subleases, one expires on April 30, 2004 and the other is on a month-to-month basis. The lease commenced in the first quarter of 2002 and has an initial term of ten years, expiring February 2012. The Company was required to provide a cash-collateralized letter of credit in the

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

9. Operating Leases (Continued)

amount of \$4.3 million, which may be reduced after the fifth year of the lease term. The cash collateral is included in restricted cash on the Company's consolidated balance sheets. Under the terms of the lease agreement, the Company is obligated to lease an additional 24,122 square feet of space on November 1, 2007 and has the option to extend the entire lease for two additional five-year terms.

Minimum future lease payments under the Company's non-cancelable operating leases as of December 31, 2003 are as follows:

2004	\$3,831,000
2005	3,672,000
2006	3,672,000
2007	5,195,000
2008	5,400,000
Thereafter	16,837,000

In addition, the Company subleases a portion of its Cambridge facility, for which minimum future receipts under the non-cancelable subleasing agreement as of December 31, 2003 are \$374,000, which will all be received in 2004.

Rent expense for the years ended December 31, 2003, 2002 and 2001 was approximately \$3,142,000, \$2,776,000 and \$1,355,000, respectively. Rent expense for December 31, 2003 and 2002 was net of sublease payments of \$1,565,000 and \$719,000 respectively, there was no sublease payments during 2001.

10. Litigation

The Company's first phage display patent in Europe, European Patent No. 436,597, known as the 597 Patent was ultimately revoked in 2002 in a proceeding in the European Patent Office. The Company has two divisional patent applications of the 597 Patent pending in the European Patent Office. The Company will not be able to prevent other parties from using its phage display technology in Europe if the European Patent Office does not grant the Company another patent. The Company cannot be assured that it will prevail in the prosecution of either of these patent applications.

George Pieczenik and I.C. Technologies America, Inc. sued the Company in 1999 for patent infringement of three United States patents. The complaint was initially filed against the Company in New York, dismissed for lack of jurisdiction and then refiled in the United States District Court in Massachusetts. On February 25, 2003, the District Court granted summary judgment of noninfringement in the Company's favor with respect to the three asserted patents. On March 5, 2003, the plaintiff filed a Notice of Appeal to the United States Court of Appeals for the Federal Circuit (CAFC). On September 23, 2003 the CAFC affirmed the decision of the United States District Court granting summary judgment that the Company does not infringe the patents asserted by the plaintiff. The plaintiff has filed a petition for *certiorari* with the United States Supreme Court for the review of the decision by the CAFC. The petition is still pending. On December 21, 2003, the plaintiff asked the District Court to reconsider its decision that the Company did not infringe plaintiff's patents. The Massachusetts Court denied plaintiff's request on January 7, 2004. On January 19, 2004, plaintiff appealed that decision to the CAFC.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

10. Litigation (Continued)

George Pieczenik also recently filed an action in the United States District Court for the Southern District of New York, alleging, among other things, that the Company (and each of several other defendants) infringes a newly issued patent, which issued on August 12, 2003. The Company challenged the new lawsuit on several grounds (including jurisdictional and venue grounds) and on October 9, 2003 the District Court dismissed the action as to the Company. The Court subsequently dismissed the action as to one of the Company's directors and one of its former officers. As a result, Dyax, its directors and officers are no longer parties to the New York Court action.

As of December 31, 2003, we were not engaged in any active court proceedings, although possible appeals are pending in the Pieczenik litigation. 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, 2003, we have no reserves for litigation settlements. The Company does not expect the outcome of any of the above matters to have a material impact on its financial position or results of operations.

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 in August 2000. As of December 31, 2003, there were 950,000 shares of \$0.01 par value preferred stock authorized but undesignated and 50,000 shares of previously undesignated preferred stock designated as Series A Junior Participating Preferred Stock.

Common Stock: On March 19, 2003, the Company completed the sale of 4,721,625 shares of our common stock at a price of \$1.85 per share in a registered directed offering covered by our shelf registration on Form S-3, which had been declared effective on May 3, 2002, which resulted in proceeds of \$8.3 million, net of expenses of \$521,000.

In January 2004, the Company sold 6,000,000 shares of our common stock (including 780,000 shares pursuant to the exercise by the underwriters of their over-allotment option at a price of \$7.93 per share in a registered underwritten public offering, which resulted in aggregate proceeds to us of approximately \$47.6 million, not including underwriter discount of \$2.6 million and expenses of approximately \$165,000.

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

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

11. Stockholders' Equity (Continued)

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. At the May 16, 2002 Annual Meeting of Shareholders the Plan was amended by a shareholder vote to increase the number of shares reserved for issuance under the plan from 4.5 million to 6.5 million shares and to provide for automatic annual increases up to an aggregate amount of not more than 10.25 million shares. At December 31, 2003, there were 4,506,784 shares of common stock reserved for issuance under the Plan of which 795,670 shares remained available for future grant. Since the Plan's inception, 1,993,216 shares have been issued under the Plan.

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

	<u>Option Shares</u>	<u>Weighted-Avg. Exercise Price</u>
Outstanding at December 31, 2000	2,762,370	\$ 7.50
Granted at fair market value	1,572,735	\$11.17
Exercised	(380,132)	\$ 1.31
Canceled	<u>(277,343)</u>	<u>\$15.80</u>
Outstanding at December 31, 2001	3,677,630	\$ 9.08
Granted at fair market value	1,366,506	\$ 2.42
Exercised	(224,222)	\$ 1.77
Canceled	<u>(513,601)</u>	<u>\$12.38</u>
Outstanding at December 31, 2002	4,306,313	\$ 6.94
Granted at fair market value	1,020,135	\$ 3.39
Exercised	(351,703)	\$ 2.25
Canceled	<u>(1,263,631)</u>	<u>\$ 7.18</u>
Outstanding at December 31, 2003	<u>3,711,114</u>	<u>\$ 6.33</u>

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

11. Stockholders' Equity (Continued)

Summarized information about stock options outstanding at December 31, 2003 is as follows:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding	Weighted-Average Remaining Contractual Life-Years	Weighted-Average Exercise Price	Number Exercisable	Weighted-Average Exercise Price
\$0.30 to \$1.24	104,909	3.08	0.56	99,410	0.53
\$1.32 to \$1.36	556,709	8.45	1.36	193,239	1.36
\$1.49 to \$1.94	214,324	6.80	1.68	117,945	1.59
\$1.95 to \$2.70	765,442	5.87	2.03	659,952	2.02
\$2.95 to \$4.25	587,305	8.61	3.49	134,780	3.56
\$4.93 to \$8.94	237,441	7.66	6.64	128,449	6.27
\$9.02 to \$10.97	616,725	7.86	10.26	362,130	10.28
\$11.06 to \$14.11	227,904	7.33	12.36	170,705	12.32
\$16.95 to \$19.50	262,904	6.93	17.58	194,759	17.58
\$21.20 to \$27.50	130,743	6.91	23.82	112,210	23.87
\$35.00 to \$48.69	6,708	6.82	42.21	5,979	42.28
	<u>3,711,114</u>	<u>7.31</u>	<u>6.33</u>	<u>2,179,558</u>	<u>7.02</u>

The weighted average fair value of options granted under the Plan during 2003, 2002 and 2001, as determined under the Black-Scholes option pricing model was \$3.36, \$2.19 and \$9.74, respectively. Total options exercisable at December 31, 2003, 2002 and 2001 were 2,179,558, 1,860,791 and 1,459,937 respectively.

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,		
	2003	2002	2001
Expected option term	6.0	6.0	6.0
Risk-free interest rate	3.35%	4.23%	4.79%
Expected dividend yield	None	None	None
Volatility factor	208%	140%	118%

In 2003, 2002, and 2001, the Company did not record any additional deferred compensation related to stock option grants to employees.

In 2003, the Company modified certain stock options grants. In accordance with FASB Interpretation 44 "Accounting for Certain Transactions Involving Stock Compensation an interpretation of APB Opinion No. 25" the Company recorded compensation expense associated with stock options totaling \$712,000. Of this amount, \$519,000, related to the modification of stock options granted to Biotage employees due to the triggering of change of control provisions in employment agreements, is included in gain on sale of Biotage in the consolidated statements of operations and comprehensive loss as the related expense is a direct and incremental cost associated with the disposition. The remaining \$193,000, which does not relate to Biotage employees, is included in general and administrative expenses in the consolidated statements of operations and comprehensive loss.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

11. Stockholders' Equity (Continued)

Employee Stock Purchase Plan: The Company's 1998 Employee Stock Purchase Plan (the "Purchase Plan"), as amended in May 2002, allows employees to purchase shares of common stock at a discount from fair market value. As of December 31, 2003, there were 236,696 shares of common stock reserved for issuance under the amended 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. At the May 16, 2002 Annual Meeting of Shareholders the Purchase Plan was amended by a shareholder vote to increase the number of shares reserved for issuance under the plan from 200,000 to 400,000 shares. For the years ended December 31, 2003 and 2002, 109,389 and 46,890 shares, respectively, 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, 2003, 2002 and 2001, the Company's contributions amounted to \$339,000, \$363,000 and \$326,000, respectively.

13. Income Taxes

For the years ended December 31, 2003, 2002, and 2001, the Company had income tax provisions of \$0.

Temporary differences that give rise to significant deferred tax assets as of December 31, 2003 and 2002 are as follows:

	<u>2003</u>	<u>2002</u>
Deferred Tax Asset:		
Allowance for doubtful accounts	\$ 30,000	\$ 73,000
Depreciation and amortization	294,000	129,000
Accrued expenses	168,000	352,000
Other	71,000	306,000
Deferred revenue	442,000	2,602,000
Research credit carryforwards	5,664,000	5,439,000
Net operating loss carryforwards	36,750,000	36,165,000
Valuation allowance	<u>(43,419,000)</u>	<u>(45,066,000)</u>
Net deferred tax asset	<u>\$ —</u>	<u>\$ —</u>

As of December 31, 2003, the Company had federal net operating loss (NOL) and research and experimentation credit carryforwards of approximately \$92 million and \$5 million, respectively, which

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

13. Income Taxes (Continued)

may be available to offset future federal income tax liabilities and expire at various dates from 2004 through 2023. The Company has recorded a deferred tax asset of approximately \$1.6 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 \$1.6 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 \$43.4 million has been established at December 31, 2003. During 2003, the Company recognized a gain for US income tax purposes on the sale of Biotage of \$19.2 million. This gain was fully offset by losses generated by the Company in the current year.

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, 2003, the Company's foreign subsidiaries had NOL carryforwards of approximately \$5.9 million, which expire over various periods, for which a full valuation allowance has been provided.

14. Related Party Transactions

Our Chief Executive Officer also serves as an outside director of Genzyme Corporation and was a consultant to Genzyme until 2001. One of our directors is a director of Genzyme and another is a senior advisor to the Chief Executive Officer of Genzyme and a former officer.

At December 31, 2003 and 2002, Genzyme owned approximately 2.2% and 2.7%, respectively of the Company's common stock outstanding.

The Company has a collaboration agreement with Genzyme for the development and commercialization of DX-88. Under this agreement, which was amended on May 31, 2002, and again effective as of September 30, 2003, the Company was initially responsible for all expenses incurred in connection with the development of DX-88 for the treatment of HAE through the completion of the first Phase II clinical trial for HAE, which occurred in the second quarter of 2003. In June 2003, Genzyme exercised its option to create Kallikrein LLC, a jointly owned limited liability company, to manage the development and commercialization of DX-88. Through the creation of Kallikrein LLC, Genzyme acquired a 49.99% financial interest in the DX-88 program and is now responsible for 49.99% of all costs incurred in connection with the development of DX-88 subsequent to completion of the first Phase II clinical trial. Upon dosing the first patient in a pivotal clinical trial of DX-88 for HAE, Genzyme will also be obligated to pay us a milestone payment anticipated to be approximately \$3.0 million. In addition, 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 developed under the collaboration, as well as approximately 50% of the profits from sales of such products.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

14. Related Party Transactions (Continued)

All research and development expenses incurred by each party related to the HAE program are billed to and reimbursed by Kallikrein LLC. The Company has accounted for its interest in the LLC using the equity method of accounting. Under this method, the reimbursement of expenses to Dyax is recorded as a reduction to research and development expenses because it includes funding that the Company provided to Kallikrein LLC. Dyax's 50.01% share of the LLC loss is recorded as an Equity Loss in Joint Venture (Kallikrein LLC). At December 31, 2003, the Company's investment in the joint venture was \$817,000, which is recorded as an Investment in Joint Venture (Kallikrein LLC) in the consolidated balance sheets.

When the Company and Genzyme first amended the collaboration agreement in May 2002, the Company and Genzyme also executed a senior secured promissory note and security agreement under which Genzyme agreed to loan the Company up to \$7.0 million and the Company agreed to grant Genzyme a continuing security interest in certain tangible and intangible personal property arising out of the DX-88 program. In addition, under the terms of the security agreement, once the Company exercised its option to purchase Genzyme's interest in the application of DX-88 in on-pump open-heart surgery and other surgical indications, the Company was required to pledge to Genzyme a percentage interest in its wholly owned subsidiary, Biotage. Under an amendment to the security agreement executed on October 15, 2003, Genzyme agreed to release the interest in Biotage pledged to it in exchange for a continuing security interest in the Company's rights to revenues from licenses of its fundamental phage-display patent portfolio. The security agreement, as amended, contains certain financial covenants state that under which the Company must maintain at least \$20.0 million in cash or cash equivalents based on the Company's quarterly consolidated financial statements and that the Company maintains at least one continued listing standard for the Nasdaq National Market.

On October 18, 2002, the Company received the \$7.0 million under this Genzyme note, which is included in long-term obligations on the Company's balance sheet. The note bears interest at the prime rate (4.0% at December 31, 2003) plus 2%. Interest is payable quarterly. The principal and all unpaid interest will be due on the maturity date of May 31, 2005. The Company may extend the maturity date to May 31, 2007 if the Amended Collaboration Agreement is in effect, no default or event of default exists and the Company satisfies the financial covenants as of the initial maturity date. As of December 31, 2003 and 2002, there was \$7.0 million outstanding under the loan, which is presented as an obligation to related party on the Company's consolidated balance sheets. At December 31, 2003 and 2002, the Company owed \$488,000 and \$109,000, respectively, of interest on this note, which is included in accounts payable and accrued expenses due to current nature of this liability.

In 1996, we entered into a sublease agreement with Genzyme for laboratory and office facilities in Cambridge, Massachusetts, which was extended to and terminated in April 2002. Rent expense in connection with this sublease of \$162,000, and \$682,000 was recorded in each year ended December 31, 2002, and 2001, respectively. During 1996, the Company signed two patent license agreements with Genzyme under our standard license terms. The Company recorded license revenues of \$50,000, for each year ended December 31, 2003, 2002 and 2001, in connection with the maintenance fees on these two agreements. As of December 31, 2003 and 2002, there was no accounts receivable balance related to the patent license agreement.

See also Note 5, Notes Receivable, Employees.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

15. Business Segments

The Company discloses business segments under SFAS 131, "Disclosures about Segments of an Enterprise and Related Information," which established standards for reporting information about operating segments in annual financial statements of public business enterprises. It also establishes standards for related disclosures about products and service, geographic areas and major customers. On October 29, 2003, the Company sold its separations products business known as Biotage, which was previously disclosed as the Separations segment. The Company has reevaluated its business activities that are regularly reviewed by the Chief Executive Officer for which discrete financial information is available. As a result of this evaluation, the Company determined that it has one segment with operations in two geographic locations and prior period segment information has been restated to reflect this change. As of December 31, 2003 and 2002, the Company had approximately \$1.9 million of long-lived assets located in Europe, with the remainder held in the United States. For the years ended December 31, 2003, 2002 and 2001, the Company did not have any external revenues outside the United States.

16. Comprehensive Income (Loss)

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

	Year Ended December 31,		
	2003	2002	2001
Accumulated other comprehensive income (loss):			
Foreign currency translation adjustment:			
Balance at beginning of period	\$504,000	\$ 94,000	\$(27,000)
Change during period	36,000	410,000	121,000
Balance at end of period	\$540,000	\$504,000	\$ 94,000

17. Collaborative and License Agreements

On January 3, 2003, the Company and Cambridge Antibody Technology Limited (CAT) amended a licensing agreement between the parties dated December 31, 1997. Under the expanded terms of the amended agreement, CAT granted the Company worldwide licenses for research and certain other purposes for all CAT antibody phage display patents (the CAT patents). The Company also received options for licenses to develop therapeutic and diagnostic antibody products under the CAT patents. CAT will receive milestone and royalty payments in connection with antibody products advanced into clinical trials by the Company, its collaborators or its customers, which will be recorded as cost of revenues within research and development expenses when incurred. CAT will have the option to co-fund and co-develop antibodies developed by the Company and to share the Company's revenues from certain other applications of antibody phage display technology. Additionally, CAT was no longer required to pay the Company royalties related to the Company's Ladner patents on antibody products developed by CAT, except in relationship to Humira™. On September 22, 2003, the Companies further amended the licensing agreement. This amendment extends the January 3, 2003 amendment by granting Dyax an increased number of options for licenses to develop therapeutic and diagnostic antibody products under CAT's patents for Dyax's own use and on behalf of its partners. CAT and Dyax have further agreed that, as a result of this agreement, royalties will not be due to Dyax in respect of the Humira™ product.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

17. Collaborative and License Agreements (Continued)

On October 16, 2002, the Company entered into a cross-licensing agreement with XOMA Ireland Limited under which the Company received a license to use XOMA's patents and bacterial expression technology to discover antibody products using phage display. The Company also received a license from XOMA to produce antibodies under the XOMA patents. In exchange for the rights to XOMA's technology, the Company agreed to pay a technology license fee of \$3.5 million due over six installments through December 15, 2003, and to pay a 0.5% royalty on net sales of any antibody product commercialized by the Company or any development partner. This fee was capitalized and is being expensed ratably over 7 years, see also, Note 6 Intangible Assets. The Company also granted XOMA a license to its phage display patents and agreed to provide XOMA one of the Company's antibody phage display libraries. The technology license fee due to XOMA was fully paid off in 2003.

See also Note 14, Related Party Transactions.

Dyax Corp. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

18. Unaudited Quarterly Operating Results

The following is a summary of unaudited quarterly results of operations, restated to show the effect of discontinued operations on prior periods, for the years ended December 31, 2003 and 2002 (all adjustments relate to discontinued operations):

<u>Year ended December 31, 2003</u>	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
	(in thousands, except per share)			
Revenue as previously reported	\$ 9,275	\$ 8,382	\$ 5,927	\$ 3,722
Adjustments	(5,419)	(5,034)	—	—
Restated revenue	<u>\$ 3,856</u>	<u>\$ 3,348</u>	<u>\$ 5,927</u>	<u>\$ 3,722</u>
Loss from continuing operations as previously reported	\$(6,379)	\$(6,069)	\$(6,048)	\$(7,008)
Adjustments	584	426	—	—
Restated loss from continuing operations	<u>\$(5,795)</u>	<u>\$(5,643)</u>	<u>\$(6,048)</u>	<u>\$(7,008)</u>
Net income (loss)	<u>\$(6,379)</u>	<u>\$(6,069)</u>	<u>\$(6,170)</u>	<u>\$11,203</u>
Basic and diluted net loss per share:				
Loss from continuing operations as previously reported	\$ (0.31)	\$ (0.25)	\$ (0.25)	\$ (0.28)
Adjustments	0.03	0.02	—	—
Restated loss from continuing operations	(0.28)	(0.23)	(0.25)	(0.28)
Discontinued operations	(0.03)	(0.02)	—	0.73
Net income (loss)	<u>\$ (0.31)</u>	<u>\$ (0.25)</u>	<u>\$ (0.25)</u>	<u>\$ 0.45</u>
<u>Year ended December 31, 2002</u>	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
	(in thousands, except per share)			
Revenue as previously reported	\$ 8,886	\$10,622	\$10,536	\$10,864
Adjustments	(4,982)	(5,845)	(6,051)	(6,280)
Restated revenue	<u>\$ 3,904</u>	<u>\$ 4,777</u>	<u>\$ 4,485</u>	<u>\$ 4,584</u>
Loss from continuing operation as previously reported	\$(7,064)	\$(7,702)	\$(5,675)	\$(6,377)
Adjustments	331	108	(216)	(45)
Restated loss from continuing operations	<u>\$(6,733)</u>	<u>\$(7,594)</u>	<u>\$(5,891)</u>	<u>\$(6,422)</u>
Net loss	<u>\$(7,064)</u>	<u>\$(7,702)</u>	<u>\$(5,675)</u>	<u>\$(6,377)</u>
Basic and diluted net income (loss) per share:				
Loss from continuing operations as previously reported	\$ (0.36)	\$ (0.39)	\$ (0.29)	\$ (0.32)
Adjustments	0.02	—	(0.01)	(0.01)
Restated loss from continuing operations	\$ (0.34)	\$ (0.39)	\$ (0.30)	\$ (0.33)
Discontinued operations	(0.02)	—	0.01	0.01
Net loss from continuing operations as previously reported . . .	<u>\$ (0.36)</u>	<u>\$ (0.39)</u>	<u>\$ (0.29)</u>	<u>\$ (0.32)</u>

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, the “Exchange Act”) as of the end of the period covered by this annual report. Based on this evaluation, our principal executive officer and principal financial officer concluded that these disclosure controls and procedures are effective and designed to ensure that the information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the requisite time periods.

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) identified in connection with the evaluation of our internal control that occurred during our fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE COMPANY

Portions of the response to this item are incorporated herein by reference from the discussion responsive thereto under the captions “Election of Directors—Nominees for Director”, “Section 16(a) Beneficial Ownership Reporting Compliance”, “Executive Officers and Key Employees” and “Election of Directors—Board and Committee Matters” in the Company’s Definitive Proxy Statement relating to the 2004 Annual Meeting of Stockholders (the “2004 Proxy Statement”).

We have adopted a Code of Business Conduct and Ethics (the “code of ethics”) that applies to all of our directors, officers and employees. The code of ethics is filed as an exhibit to this Report. In addition, if we make any substantive amendments to the code of ethics or grant any waiver, including any implicit waiver, from a provision of the code to any of our executive officers or directors, we will disclose the nature of such amendment or waiver as required by applicable law.

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 2004 Proxy Statement: “Election of Directors—Director Compensation,” “Executive Compensation” and “Election of Directors—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 in part from the discussion responsive thereto under the caption “Share Ownership” in the 2004 Proxy Statement.

The following table provides information about the securities authorized for issuance under the Company's equity compensation plans as of December 31, 2003:

Equity Compensation Plan Information

<u>Plan Category</u>	<u>Number of securities to be issued upon exercise of outstanding options, warrants and rights</u>	<u>Weighted-average exercise price of outstanding options, warrants and rights</u>	<u>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))</u>
	(a)	(b)	(c)
Equity compensation plans approved by security holders(1):	3,711,114	\$6.325	2,282,366(3)
Equity compensation plans not approved by security holders:	<u>—</u>	<u>—</u>	<u>—</u>
Totals:	<u>3,711,114(2)</u>	<u>\$6.325</u>	<u>2,282,366(3)</u>

- (1) Consists of the Amended and Restated 1995 Equity Incentive Plan and the 1998 Employee Stock Purchase Plan.
- (2) Does not include purchase rights currently accruing under the 1998 Employee Stock Purchase Plan, because the purchase price (and therefore the number of shares to be purchased) will not be determined until the end of the purchase period, which is June 30, 2004.
- (3) Includes 236,696 shares issuable under the 1998 Employee Stock Purchase Plan, of which up to 50,000 are issuable in connection with the current offering period which ends on June 30, 2004. The remaining shares consist of 2,045,670 under the 1995 Amended and Restated Equity Incentive Plan, which amount reflects the automatic increase of 1,250,000 shares that occurred on January 1, 2004 under the terms of the Plan. Under the 1995 Amended and Restated Equity Incentive Plan, the number of shares issuable is automatically increased every January 1 by an amount equal to the lesser of (i) 1,250,000 shares, (ii) 5% of the fully diluted outstanding shares of Common Stock of the Company on such date or (iii) such lesser amount as may be determined by resolution of the board of directors at any date before or within 90 days after January 1 of the respective year; provided, however, that the maximum aggregate number of shares received since inception under the plan shall not exceed 10,250,000 shares. No incentive stock options may be granted under the plan more than ten years after the plan's July 13, 1995 effective date. The plan may be amended, suspended, or terminated by the Compensation Committee of the Board of Directors at any time, subject to any required stockholder approval.

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 "Election of Directors—Certain Relationships and Related Transactions" in the 2004 Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The response to this item is incorporated herein by reference from the discussion responsive thereto under the captions "Election of Directors—Board and Committee Matters" and "Information Concerning Our Auditors" in the 2004 Proxy Statement.

PART IV

ITEM 15. 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 STATEMENTS SCHEDULE

SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS

For the years ended December 2003, 2002 and 2001

(In Thousands)

	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
Allowance for Doubtful Accounts:				
2003	\$ 75	\$ 25	\$ 25	\$ 75
2002	\$ 75	\$ 20	\$ 20	\$ 75
2001	\$ 50	\$ 25	\$ 0	\$ 75
	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
Deferred Tax Asset Valuation Allowance:				
2003	\$45,066	\$ 975	\$2,622	\$43,419
2002	\$33,522	\$11,544	—	\$45,066
2001	\$27,596	\$ 5,926	—	\$33,522

3. EXHIBITS

The exhibits are listed below under Part IV, Item 15(c) of this Report.

(b) REPORTS ON FORM 8-K

On November 7, 2003, we filed a Current Report on Form 8-K to announce the completion of the sale of our wholly-owned subsidiary Biotage LLC, formerly known as Biotage, Inc., to Pyrosequencing AB.

On December 29, 2003, we filed a Current Report on Form 8-K to announce:

- the reporting of positive initial results from our Phase I/II clinical trial to evaluate the use of the recombinant small protein DX-88 in patients undergoing cardiopulmonary bypass in the course of coronary artery bypass grafting surgery (CABG); and
- the execution of a Second Amendment Agreement between Cambridge Antibody Technology Limited and Dyax, dated September 18, 2003.

On December 31, 2003, we filed a Current Report on Form 8-K to:

- furnish certain exhibits for incorporation by reference into our effective registration statements; and
- announce the pricing of our offering of 6,000,000 shares of our common stock (including 780,000 shares subject to the exercise by the underwriters of their over-allotment option) in a registered underwritten public offering.

(c) EXHIBITS

<u>Exhibit No.</u>	<u>Description</u>
2.1	Purchase Agreement dated October 13, 2003 by and among Pyrosequencing AB, Dyax Corp. and Biotage, LLC. Filed as Exhibit 2.1 to the Company's Current Report on Form 8-K (File No. 000-24537) filed on November 7, 2003 and incorporated herein by reference.
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.
3.4	Certificate of Correction to the Restated Certificate of Incorporation of the Company. Filed as Exhibit 3.4 to the Company's Amended Annual Report on Form 10-K/A (File No. 000-24537) for the year ended December 31, 2001 and incorporated herein by reference.
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 February 7, 2002. Filed as Appendix B to the Company's Definitive Proxy Statement on Schedule 14A (File No. 000-24537) filed with the Commission on April 22, 2002 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*	Form of Change of Control Agreement between the Company and Lynn G. Baird, Ph.D., Clive R. Wood, Ph.D. and Ivana Magovcevic, Ph.D., J.D. 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	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.
10.6	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.
10.7†	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.

Exhibit No.	Description
10.8	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.
10.9	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.
10.10†	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.
10.11†	First Amendment to the Collaboration and License Agreement, by and between Bracco Imaging S.p.A. and the Company, effective as of December 31, 2003. Filed herewith.
10.12	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.
10.13	Master Lease Agreement and related documents between the Company and General Electric Capital Corporation dated as of May 1, 2001. Filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-24537) for the quarter ended March 31, 2002 and incorporated herein by reference.
10.14	Amended and Restated Collaboration Agreement between Genzyme Corporation and the Company dated May 31, 2002. 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, 2002 and incorporated herein by reference.
10.15	Senior Secured Promissory Note between Genzyme Corporation and the Company dated May 31, 2002. Filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 000-24537) for the quarter ended June 30, 2002 and incorporated herein by reference.
10.16	Security Agreement between Genzyme Corporation and the Company dated May 31, 2002. Filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 000-24537) for the quarter ended June 30, 2002 and incorporated herein by reference.
10.17	Amendment No. 1 to Amended and Restated Collaboration Agreement between Genzyme Corporation and the Company, dated as of September 30, 2003. Filed herewith.
10.18	First Amendment to Security Agreement between Genzyme Corporation and the Company dated as of October 15, 2003. Filed herewith.
10.19	License Agreement between XOMA Ireland Limited and the Company dated October 16, 2002. Filed as Exhibit 10.22 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 000-24537) and incorporated herein by reference.
10.20†	Amendment Agreement between Cambridge Antibody Technology Limited and the Company dated January 6, 2003. Filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-24537) for the quarter ended March 31, 2003 and incorporated herein by reference.
10.21†	Second Amendment Agreement between Cambridge Antibody Technology Limited and the Company dated September 18, 2003. Filed as Exhibit 99.2 to the Company's Current Report on Form 8-K (File No. 000-24537) filed on December 29, 2003 and incorporated herein by reference.

Exhibit No.	Description
14.1	Code of Business Conduct and Ethics of the Company. Filed herewith.
21.1	Subsidiaries of the Company. Filed herewith.
23.1	Consent of PricewaterhouseCoopers LLP, independent accountants. Filed herewith.
31.1	Certification of Chief Executive Officer Pursuant to §240.13a-14 or §240.15d-14 of the Securities Exchange Act of 1934, as amended. Filed herewith.
31.2	Certification of Chief Financial Officer Pursuant to §240.13a-14 or §240.15d-14 of the Securities Exchange Act of 1934, as amended. Filed herewith.
32.1	Certification pursuant to 18 U.S.C. Section 1350. 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.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ JOHN W. LITTLECHILD</u> John W. Littlechild	Director	March 8, 2004
<u>/s/ SUSAN B. BAYH</u> Susan B. Bayh	Director	March 8, 2004
<u>/s/ DAVID J. MCLACHLAN</u> David J. McLachlan	Director	March 8, 2004
<u>/s/ MARY ANN GRAY</u> Mary Ann Gray	Director	March 8, 2004

Corporate Information

Directors

Henry E. Blair

Chairman, President and Chief Executive Officer, Dyax Corp.

Constantine E. Anagnostopoulos, Ph.D.

Managing General Partner, Gateway Associates, LP

Susan B. Bayh, J.D.

Managing Partner, Fordyce & Gabrielson, LLC

Mary Ann Gray, Ph.D.

President, Gray Strategic Advisors, LLC

Thomas L. Kempner

Chairman and Chief Executive Officer, Loeb Partners Corporation

Henry R. Lewis, Ph.D.

Former Director, Genzyme Corporation

John W. Littlechild

General Partner, HealthCare Ventures

David J. McLachlan

Senior Advisor and Former EVP and Chief Financial Officer, Genzyme Corporation

Gregory D. Phelps

Former Vice Chairman and Executive Officer, Dyax Corp.

Executive Officers and Key Employees

Henry E. Blair*

Chairman, President and Chief Executive Officer

Stephen S. Galliker, CPA*

EVP Finance and Administration and Chief Financial Officer

Lynn G. Baird, Ph.D.*

SVP Development

Robert C. Ladner, Ph.D.

SVP and Chief Technology Officer

Ivana Magovčević, Ph.D., J.D.*

SVP Legal Affairs and Chief Patent Counsel

Clive R. Wood, Ph.D.*

SVP Discovery Research and Chief Scientific Officer

Anthony H. Williams, M.D.*

SVP Medical Affairs and Clinical Operations

Fayelle Whelihan, Ph.D.

SVP Discovery Research and General Manager, Dyax SA

Transfer Agent

American Stock Transfer & Trust Company
59 Maiden Lane
New York, NY 10038

Legal Counsel

Palmer & Dodge LLP
111 Huntington Avenue
Boston, MA 02199

Independent Accountants

PricewaterhouseCoopers LLP
One Post Office Square
Boston, MA 02109

Annual Meeting of Shareholders

Dyax's 2004 Annual Meeting of Shareholders will be held at 2:00 p.m. EST on Thursday, May 20th at Dyax Corp., 300 Technology Square, 8th Floor, Cambridge, MA. You are cordially invited to attend.

Stock Listing

Common stock has been traded on the Nasdaq Stock Market under the symbol DYAX since our initial public offering in August 14, 2000.

The following table gives the quarterly high and low sales prices of our common stock for the last three years.

	2001		2002		2003	
	High	Low	High	Low	High	Low
First Quarter	\$20.94	\$6.56	\$11.38	\$3.10	\$2.25	\$1.52
Second Quarter	\$19.99	\$6.81	\$ 4.68	\$3.20	\$4.90	\$1.67
Third Quarter	\$21.24	\$6.05	\$ 4.20	\$1.65	\$7.50	\$2.58
Fourth Quarter	\$11.99	\$6.59	\$ 2.68	\$1.05	\$9.05	\$4.45

Form 10-K

Additional copies of Dyax's Annual Report on Form 10-K for the Fiscal Year 2003, as filed with the Securities and Exchange Commission, are available without charge upon request from:

Dyax Corp.
300 Technology Square
Cambridge, MA 02139
ATTN: Investor Relations

Safe Harbor

This annual report contains forward-looking statements regarding Dyax Corp., including statements regarding its revenues, results of operations, financial position, research and development expenditures and programs, clinical trials and collaborations. Statements that are not historical facts are based on Dyax's current expectations, beliefs, assumptions, estimates, forecasts and projections for Dyax and the industry and markets in which Dyax competes. Such statements 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 revenues, operating results, financial position, research and development programs, clinical trials and collaborations include Dyax's dependence on the expertise, effort, priorities and contractual obligations of its collaborators in the development, clinical trials, manufacture, marketing, sales and distribution of biopharmaceuticals developed by Dyax or its collaborators; the risk that biopharmaceuticals developed by Dyax or its collaborators may not show therapeutic effect or an acceptable safety profile in clinical trials or could take a significantly longer time to gain regulatory approval than Dyax expects or may never gain approval; Dyax's ability to obtain and maintain intellectual property protection for its products and technologies; the development of technologies or products superior to Dyax's technologies or products; and other risk factors described or referred to in Dyax's most recent Form 10-K and other periodic reports filed with the Securities and Exchange Commission. Dyax cautions investors not to place undue reliance on the forward-looking statements contained in this annual report. These statements speak only as of the date of this annual report, and Dyax undertakes no obligation to update or revise these statements, except as may be required by law.

Dyax and the Dyax logo are the registered trademarks of Dyax Corp. Trasylol® is a registered trademark of Bayer Corporation.

*Executive Officer



Dyax

Dyax Corp.

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Other Offices

Dyax SA, Liege, Belgium