ANNUAL REPORT 2004

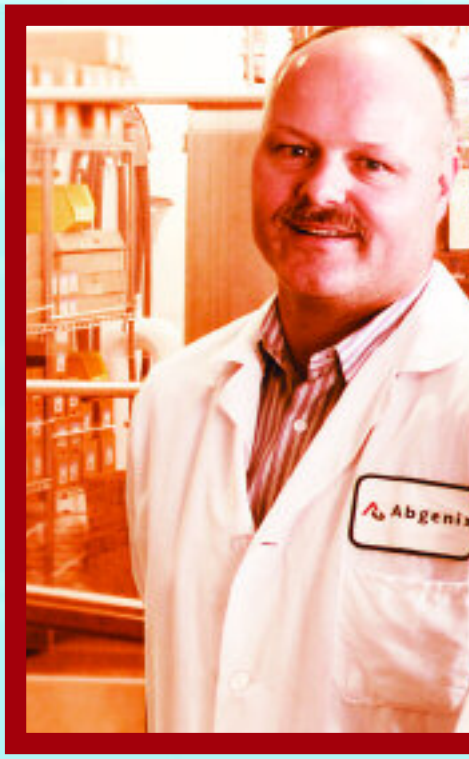
SHAPING THE FUTURE

Abgenix

DELIVERING ON THE
PROMISE OF ANTIBODIES

HELPING THE PROMISE

OF HUMAN ANTIBODIES TAKE FORM



Members of the Panitumumab Project Team

At Abgenix, we're focused on shaping fully human antibodies into the medicines of tomorrow, to combat serious diseases. This past year, we've made significant progress in our goal to become a leading therapeutics company, utilizing our unique antibody expertise and technology to:

- Advance our flagship product candidate, panitumumab, into pivotal clinical trials in colorectal cancer in collaboration with our partner, Amgen
- Build an early-stage proprietary pipeline that addresses multiple therapeutic areas
- Create additional proprietary antibodies to fuel our pipeline
- Help our partners generate and advance antibodies

These accomplishments highlight the strength of our research, development and manufacturing teams—teams that are helping to shape the future at Abgenix.

LEAD PRODUCT CANDIDATE PANITUMUMAB

- Panitumumab advanced into 2 pivotal clinical trials as a third-line monotherapy for colorectal cancer in patients who have failed prior chemotherapy.
- Interim phase 2 data at the 2004 American Society of Clinical Oncology (ASCO) annual meeting showed panitumumab has single-agent anti-tumor activity in metastatic colorectal cancer. Additionally, interim phase 2 data showed that panitumumab was generally well tolerated in advanced lung cancer when given with chemotherapy.
- Positive interim data at the European Society for Medical Oncology (ESMO) 29th Congress in Vienna suggested that panitumumab has activity as a first-line treatment with chemotherapy in patients with metastatic CRC.

PROPRIETARY PRODUCT CANDIDATE ADVANCEMENTS: ABX-PTH

- A phase 1 clinical trial was launched for ABX-PTH, a fully human monoclonal antibody that targets and neutralizes the action of parathyroid hormone (PTH).
- At the American Society for Bone Mineral Research (ASBMR) meeting, an interim analysis of the phase 1 study demonstrated that ABX-PTH was well tolerated with dose-related suppression of PTH and serum calcium levels in hemodialysis patients with SHPT.

PARTNER PIPELINE DEVELOPMENTS WITH OUR TECHNOLOGY

- Pfizer filed an Investigational New Drug (IND) application for its third Abgenix-derived antibody product candidate to enter the clinical phase.
- Amgen advanced AMG 162 into a pivotal clinical trial.
- CuraGen Corporation advanced CR002 into a phase 1 clinical trial.
- Human Genome Sciences filed an IND for a fully human monoclonal antibody to the CCR5 receptor.
- Chiron Corporation filed an IND for CHIR-12.12, a fully human antagonist antibody targeting CD40.
- Twelve programs were jointly selected during the first year of our AstraZeneca alliance, reflecting progress towards our goal of identifying 36 programs during the 3-year target selection phase.

CORPORATE DEVELOPMENTS

- Bill Ringo joined Abgenix as Chief Executive Officer and President, bringing over 30 years of marketing and product commercialization experience as a pharmaceutical and biotechnology company executive.
- Other senior management appointments include: H. Ward Wolff, Chief Financial Officer and Senior Vice President of Finance; Kristen M. Anderson, Senior Vice President of Human Resources; and Donald R. Joseph, Senior Vice President, General Counsel and Secretary. Together these executives bring decades of industry experience to Abgenix.

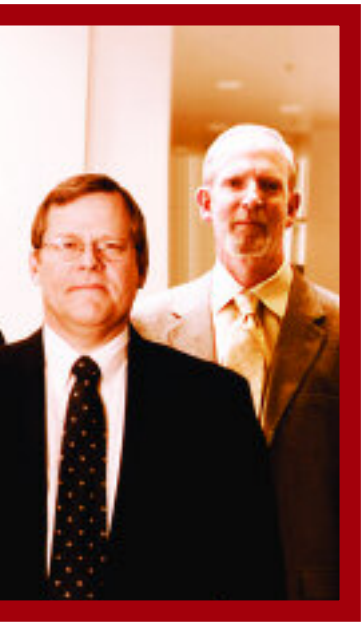
DEAR FELLOW SHAREHOLDER

Members of the Abgenix Executive Team

As Abgenix's President and Chief Executive Officer since August 2004, it is my pleasure to review the company's 2004 progress and to summarize our 2005 objectives.

I am often asked what drew me to Abgenix. In response, I emphasize two strengths: our ability to generate fully human antibodies, which I believe is world class, and the promise of human antibodies to treat a variety of serious diseases. During my 30-plus years in the life sciences industry, I believe that one of the most important developments in treating disease has been the evolution of antibodies as a proven class of therapeutics, with 17 marketed products in the U.S. With our proprietary technology platform and antibody expertise, I believe Abgenix has a strong base to build a successful therapeutics company.

During 2004, we advanced both our proprietary and partnered products in support of our goal of becoming a leading company focused on antibody therapeutics. We also strengthened our balance sheet through a $300 million convertible debt financing in December. After using a portion of the proceeds to retire some of our previously outstanding convertible notes, we ended 2004 with $416 million in cash, cash equivalents and marketable securities. Our cash position allows us to further the development of panitumumab, our lead product, in partnership with Amgen. Panitumumab, a fully human antibody created using Abgenix's XenoMouse® technology, binds to the epidermal growth factor receptor (EGFr), which plays a key role in the growth of certain tumors. Panitumumab is currently in pivotal clinical trials as a third-line treatment for metastatic colorectal cancer (CRC).



Looking ahead, our goal is to be cash flow positive by 2008-2009, contingent on the approval and launch of panitumumab in 2006. With multiple potential revenue streams, we are positioned to achieve this goal and create value and opportunity for our shareholders. We believe that the market potential for panitumumab, combined with potential revenues in the years ahead from collaborations with companies such as AstraZeneca, Amgen, Genentech, Pfizer, Chiron and Human Genome Sciences, present Abgenix and its shareholders with a compelling opportunity for growth.

PANITUMUMAB APPROACHES FDA SUBMISSION

We believe panitumumab has potential competitive advantages over currently marketed therapies given its safety and tolerability profile and its flexible dosing schedule. Based on encouraging phase 1 and 2 data, pivotal studies in third line colorectal cancer are ongoing, with the goal of submitting an application for FDA approval by the end of this year, data dependent. Enrollment was recently completed in the pivotal trial being conducted in Europe, Australia and Canada. As panitumumab approaches a potential Biologics License Application (BLA) submission in CRC, we continue to evaluate panitumumab broadly across other tumor types. While Amgen leads the development program for this important new therapy, we focus on producing commercial-scale product in our manufacturing facility to support the BLA and potential launch.

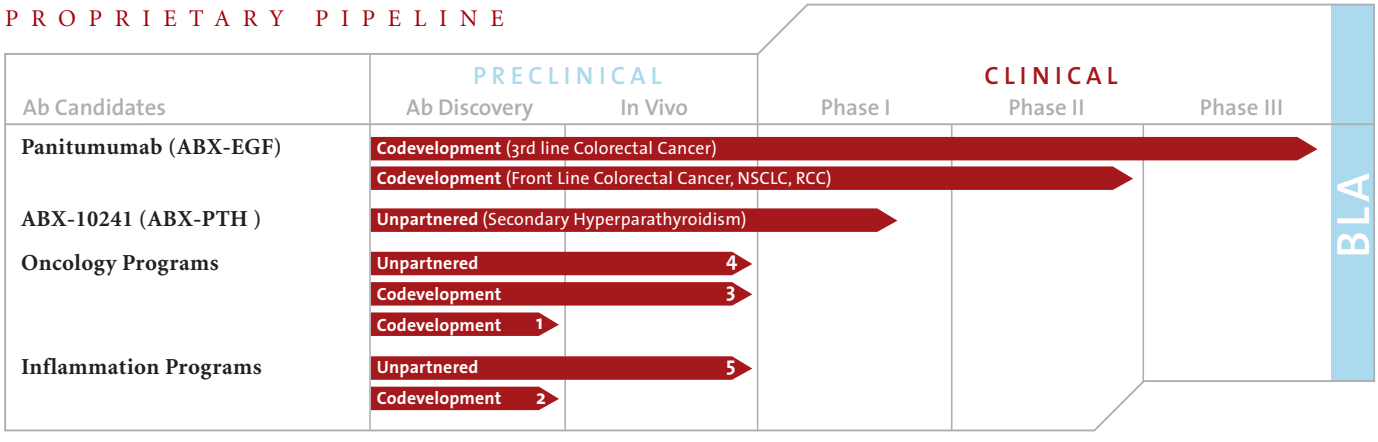
We continue to share development costs for panitumumab with our partner, Amgen, in return for equal sharing of future worldwide profits.

GROWING OUR PIPELINE

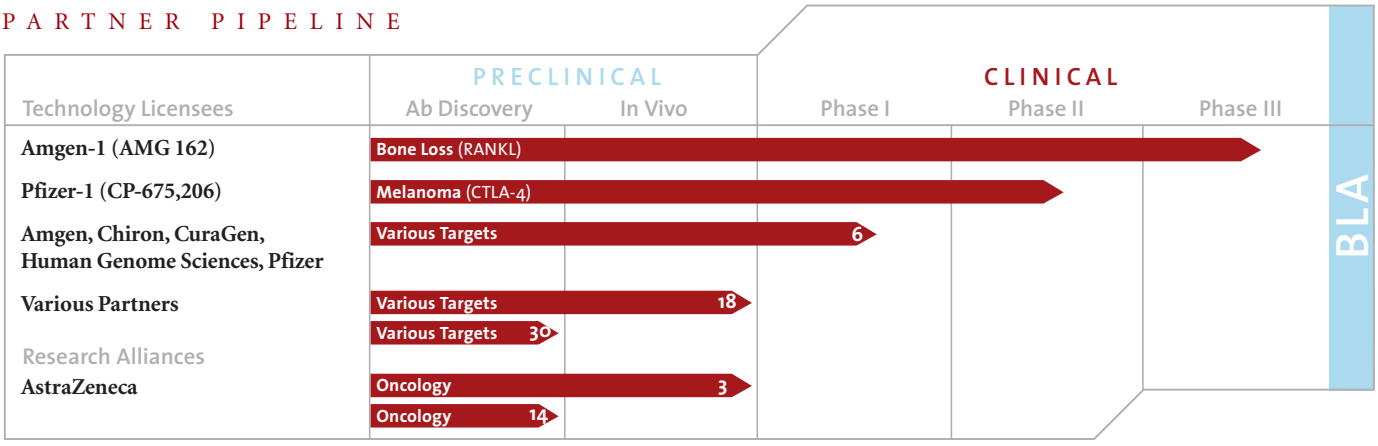
Beyond panitumumab, Abgenix's proprietary pipeline includes ABX 10241 (also known as ABX-PTH), a fully human monoclonal antibody generated by our technology that targets and neutralizes the action of parathyroid hormone (PTH). This novel therapy is in development for secondary hyperparathyroidism (SHPT), a serious condition prevalent in two-thirds of kidney dialysis patients.

Early in 2004, we initiated a phase 1, randomized, double-blind, placebo-controlled, single-dose, dose-escalation trial of ABX 10241 in SHPT patients. We later announced positive preliminary results from an interim analysis of this ongoing study. Those results suggested that the antibody was well tolerated with dose-related suppression of PTH and serum calcium levels in hemodialysis patients

PROPRIETARY PIPELINE



PARTNER PIPELINE



Antibodies generated through licensing agreements are being developed and may be commercialized by the licensee. Abgenix may receive milestone payments and royalties from future product sales. Clinical status from public sources.

with SHPT. The next step in this program is initiation of a multi-dose, multi-center phase 1 study to continue evaluation of this product candidate in treating SHPT.

In addition to our clinical candidates, we currently have 15 proprietary preclinical candidates in oncology and inflammation. Several of these represent potential Investigational New Drug filings in the next 18-24 months.

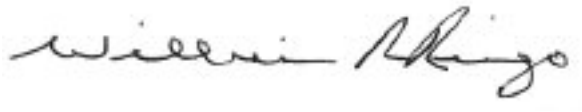
The Abgenix proprietary pipeline is augmented by an extensive group of product candidates being developed by our technology licensing partners. These collaborations may yield future milestone and royalty payments to Abgenix. In 2004, we received milestones for the advancement of 5 product candidates from Amgen, Pfizer, CuraGen, Chiron and Human Genome Sciences. In early 2005, Amgen advanced a second antibody generated with our proprietary technology into the clinic. We look forward to continued progress from our technology licensing agreements and are encouraged by the potential of royalty revenues in the future.

We are also making meaningful progress in our strategic oncology alliance with AstraZeneca. With 17 targets selected as of early 2005, we are beginning the related cell line development and preclinical activities for selected programs. As these programs move into preclinical development, Abgenix has the potential to realize collaboration revenues. We are also expanding our own biological expertise in oncology through the collaboration.

2005: AN EXCITING YEAR

We expect 2005 to be a pivotal year for Abgenix as we and Amgen advance panitumumab towards a BLA submission. We seek to expand our clinical pipeline, advance antibodies through our various partnerships, continue to make key additions to our management team, and reduce our net use of cash. In addition to progress in the panitumumab pivotal studies in third line colorectal cancer, we look forward to results from ongoing phase 2 studies of panitumumab in lung and renal cell cancers. We also plan to launch a phase 1 multi-dose trial with our parathyroid hormone antibody and to advance our earlier stage programs in oncology, inflammation and metabolic disease.

I am delighted to lead Abgenix through this exciting time. On behalf of the Board of Directors and the Executive Team, we thank our shareholders, employees and partners for making our continued progress possible.



William R. Ringo
President and Chief Executive Officer
Abgenix, Inc.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2004

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: 000-24207

ABGENIX, INC.
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	**94-3248826** (IRS employer Identification number)
6701 Kaiser Drive, Fremont, CA (Address of principal executive office)	**94555** (Zip Code)

(510) 608-6500
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) if the Act: None
Securities registered pursuant to Section 12(g) of the act: Common Stock, $0.0001 par value; Preferred Stock Purchase Rights
(Title of Class)

Indicate by check mark whether the registrant (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 in 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark 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 registrant'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. Yes ☐ No ☐

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 voting stock held by non-affiliates of the Registrant as of June 30, 2004 was $945,820,549. The number of shares of Common Stock, $0.0001 par value, outstanding on February 28, 2005, was 89,194,663.

Documents incorporated by reference: Portions of the Proxy Statement for Registrant's Annual Meeting of Shareholders to be held June 13, 2005 (the Proxy Statement), are incorporated herein by reference into Part III.

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PART I

Item 1. Business.

The following description of our business should be read in conjunction with the information included elsewhere in this annual report on Form 10-K. The description contains certain forward-looking statements that involve risks and uncertainties. When used in this annual report on Form 10-K, the words "intend," "anticipate," "believe," "estimate," "plan" and "expect" and similar expressions as they relate to us are included to identify forward-looking statements. Our actual results could differ materially from the results discussed in the forward-looking statements as a result of certain of the risk factors set forth below and in the documents incorporated herein by reference, and those factors described under "Risk Factors that Might Affect Future Results". In this annual report on Form 10-K, references to "Abgenix," "we," "us" and "our" are to Abgenix, Inc. and its subsidiaries.

Abgenix

We are a biopharmaceutical company that is focused on the discovery, development and manufacture of human therapeutic antibodies for the treatment of a variety of disease conditions, including cancer, inflammation and metabolic disease.

We have proprietary technologies that facilitate rapid generation of highly specific, antibody therapeutic product candidates that contain fully human protein sequences and that bind to disease targets appropriate for antibody therapy. In this annual report on Form 10-K we refer to these candidates as fully human antibody therapeutic product candidates. We developed our XenoMouse® technology, a technology using genetically modified mice, to generate fully human antibodies. We also own a technology that enables the rapid identification of antibodies with desired function and characteristics, referred to as SLAM™ technology. In our XenoMax™ technology, we use SLAM technology to select and isolate antibodies with particular function and characteristics from antibody-producing cells generated by XenoMouse animals.

Currently, ten antibodies generated with our XenoMouse technology are in clinical trials or are the subject of a regulatory application to initiate such trials, including two of our proprietary antibody therapeutic product candidates and eight antibody product candidates being developed by companies that have licensed our technology. Our most advanced proprietary product candidate, panitumumab (formerly known as ABX-EGF), is in pivotal trials and is being co-developed with Immunex Corporation, a wholly-owned subsidiary of Amgen Inc. References in this annual report to Amgen are to both Amgen and Immunex. Our other proprietary product candidate is in early stage clinical trials. In addition, we have entered into a variety of contractual arrangements with multiple pharmaceutical, biotechnology and genomics companies to jointly develop and commercialize products or to enable other companies to use our XenoMouse and XenoMax technologies in the development of their products. Five of our licensing partners, Pfizer, Inc., Amgen, Chiron Corporation, CuraGen Corporation and Human Genome Sciences, Inc., have initiated clinical trials or submitted regulatory applications for such trials for antibodies generated from XenoMouse animals.

Overview of Product Development

Proprietary Product Development

Two of our antibody therapeutic product candidates are in clinical trials. These clinical programs are described under **Proprietary Product Development Programs** below. The following is an overview of these programs.

- **Panitumumab** (ABX-EGF). Our leading proprietary antibody therapeutic product candidate is panitumumab. Generated using our technology, panitumumab is a fully human antibody therapeutic product candidate directed against the epidermal growth factor receptor (EGFr) and

a candidate for the treatment of a variety of solid tumors. We are co-developing this candidate with Amgen under a joint development and commercialization agreement described under **Summary of Contractual Obligations** below. The status of clinical trials of panitumumab is as follows:

- *Colorectal cancer, single agent therapy with panitumumab*—In January 2004, Amgen initiated two pivotal studies of panitumumab as third-line monotherapy in patients with metastatic colorectal cancer, one in the United States and one outside the United States. The initiation of the U.S. trial followed the receipt of a Special Protocol Assessment letter from the U.S. Food and Drug Administration, or FDA, endorsing the design of the trial to support a regulatory submission for potential accelerated approval. Enrollment in this trial, which began in the first quarter of 2004, is proceeding more slowly than originally anticipated. The second pivotal study, a randomized controlled study comparing best supportive care with best supportive care and panitumumab, is being conducted in Europe, Canada and Australia in support of the global registration program. Enrollment in this study is proceeding as anticipated. In December 2004, the FDA indicated that data from one pivotal trial, once completed, could be acceptable with additional data from other pending studies to support a submission for marketing approval in the United States.

  Amgen is also conducting a Phase 2 clinical trial evaluating the effect of panitumumab as monotherapy in patients with metastatic colorectal cancer who have previously failed chemotherapy. Enrollment in this trial, which was initiated in December 2001, is closed and treatment is ongoing.

- *Colorectal cancer, combination of panitumumab with chemotherapy*—Amgen is conducting a separate Phase 2 clinical trial evaluating the effect of panitumumab administered with irinotecan (Camptosar®)-containing regimens as first-line treatment in patients with metastatic colorectal cancer. Enrollment in this trial, which was initiated in January 2002, is closed and treatment is ongoing.

- *Non-small cell lung cancer*—Amgen is conducting a Phase 2 clinical trial for panitumumab in advanced non-small cell lung cancer administered with standard chemotherapy, compared to standard chemotherapy alone. Enrollment in this trial, which was initiated in July 2001, is closed and treatment is ongoing.

- *Renal cell cancer*—We are conducting a Phase 2 clinical trial evaluating the effect of panitumumab as monotherapy in patients with renal cell cancer. Enrollment in this trial, which was initiated in April 2001, is closed and treatment is ongoing.

- *Various cancers*—We initiated a Phase 1 clinical trial for panitumumab in various solid tumors in 1999. In 2003, we expanded enrollment to investigate additional panitumumab dose levels and schedules of administration. Enrollment is closed and treatment is complete.

- Amgen is conducting an additional study to evaluate panitumumab in metastatic colorectal cancer patients with tumors having low or undetectable levels of EGFr. This trial was initiated in 2004 and enrollment is ongoing.

- Further Phase 1 and 2 clinical studies evaluating panitumumab in different tumor types either as a single agent or in combination with different chemotherapeutic agents and targeting agents have been initiated or are expected to be initiated from time to time. For example, an evaluation of panitumumab in combination with chemotherapy and AMG 706, an Amgen proprietary multi-kinase inhibitor, is currently ongoing.

- **ABX-PTH**. Generated using our technology, ABX-PTH is a fully human antibody therapeutic product candidate directed against parathyroid hormone (PTH) for the treatment of a secondary

hyperparathyroidism. We filed an investigational new drug application, or IND, in December 2003 and initiated a Phase 1 clinical trial evaluating the safety and pharmacokinetics of ABX-PTH in patients with secondary hyperparathyroidism in February 2004. Enrollment is ongoing.

In addition, we have entered into co-development agreements for the joint development of antibody product candidates with a variety of companies including U3 Pharma AG, Microscience Limited, Dendreon Corporation, Chugai Pharmaceuticals Co., Ltd. and Sosei Co., Ltd. We intend to enter into additional joint development agreements for other product candidates.

AstraZeneca Collaboration

We have entered into a broad collaboration with AstraZeneca UK Limited for the development of antibody therapeutics for the treatment of certain types of cancer pursuant to which we have an opportunity to co-develop products with AstraZeneca, as well as provide preclinical and clinical research support and manufacturing support for the development of product candidates by AstraZeneca. This collaboration involves the development of up to 36 antibodies, to be commercialized by AstraZeneca, and potentially the co-development of up to 18 antibodies on an equal cost and profit sharing basis. In connection with this collaboration, AstraZeneca made a $100.0 million investment in our company's convertible securities and, upon the achievement of certain milestones, we may require AstraZeneca to invest up to an additional $60.0 million in our convertible preferred stock.

Customer Product Development

We license our XenoMouse technology to pharmaceutical, biotechnology and genomics companies interested in developing antibody-based products. Typically, our agreements with our customers provide for up-front and milestone payments to us upon the occurrence of certain events, along with royalty payments to us if the product reaches the market. We do not participate in the development or marketing of these products with our customers. In addition to our proprietary antibody therapeutic product candidates in clinical trials, our customers have advanced antibodies generated with XenoMouse technology into the clinical phase as follows:

- Pfizer—We generated three XenoMouse-derived fully human antibody therapeutic product candidates that Pfizer has advanced into clinical trials, including one that targets cytotoxic T lymphocyte-associated antigen 4 (CTLA-4) and one that targets type 1 insulin-like growth factor receptors (IGF-1R). The target for the third product candidate has not been disclosed. Two of the product candidates are currently in Phase 1 evaluation and one has advanced to Phase 2 evaluation.
- Amgen—We generated a XenoMouse-derived fully human antibody therapeutic product candidate that Amgen has advanced into a pivotal trial as AMG162 as a potential treatment for bone loss. Amgen has advanced an additional XenoMouse-derived fully human antibody therapeutic product candidate to an undisclosed target to Phase 1 clinical trials.
- Chiron—We generated a XenoMouse-derived fully human antibody therapeutic product candidate that binds to and neutralizes CD40, a receptor expressed on immune cells. Chiron has filed an IND to initiate a Phase 1 clinical trial of this candidate, CHIR-12.12, in patients with B cell malignancies.
- CuraGen—We generated a XenoMouse-derived fully human antibody therapeutic product candidate that binds to platelet derived growth factor D (PDGF-D) that CuraGen has advanced to Phase 1 clinical trials as CR002 as a potential treatment for inflammatory kidney disease.
- Human Genome Sciences—CCR5 mAb is a XenoMouse-derived fully human antibody therapeutic product candidate that binds to the CCR5 receptor that allows entry of the HIV

virus into immune cells. Human Genome Sciences has filed an IND to initiate a Phase 1 clinical trial in patients with HIV infection.

Abgenix Strategy

Our objective is to be a leader in the discovery, development and commercialization of antibody-based biopharmaceutical products. Key elements of our strategy to accomplish this objective include the following:

Building a diversified product portfolio. Utilizing our XenoMouse and XenoMax technologies, we intend to build a diversified product portfolio, including a mix of internally developed and jointly developed product candidates. We are targeting serious medical conditions, including cancer, inflammation, and metabolic disease. We may gain access to antigens through contractual arrangements with leading academic researchers and companies involved in the identification and development of antigens or from publicly available sources. In addition to developing our own product candidates, our strategy is to supplement our product portfolio by entering into collaborations such as the co-development agreement we have with Amgen for panitumumab. These product collaborations involve antibodies that bind to antigens to which we obtain rights from our collaborators or from publicly available sources. We may enter into additional joint development and commercialization agreements after generating antibodies and determining preliminary safety and efficacy or we may develop the product candidate through later stage clinical trials and license it to pharmaceutical or biotechnology companies for marketing. By entering into co-development and marketing arrangements, we can pursue multiple product candidates in the development stage, enabling us to spread our risk of product development and make cost-effective use of available human and capital resources.

Leveraging XenoMouse and XenoMax technologies through licensing and other contracts. We plan to continue to make our platform technologies available to others and generate revenues by entering into contracts with pharmaceutical and biotechnology companies interested in using our XenoMouse and XenoMax technologies to develop antibody-based products. We have established agreements with numerous customers covering a broad range of antigens. To date, many of these parties have entered into new or expanded agreements with us that allow them to specify additional antigens for antibody development. These agreements typically provide for immunizations of XenoMouse animals with one or more antigens provided by the customer. Customers generally have an option for a period of time to acquire product licenses for any antibody product they wish to develop and commercialize. We expect to enter into additional XenoMouse and XenoMax agreements over time. During the initial, three-year phase of our collaboration with AstraZeneca, new out-licensing agreements will generally be limited to antigens outside the cancer field. We plan to continue to enhance our platform technologies through in-licensing, acquisitions or internal development.

Production Services. Our manufacturing facility and our pilot plant provide integrated process sciences and manufacturing capabilities for the development and manufacture of our proprietary product candidates. We are using some available capacity to manufacture our proprietary product candidate, panitumumab. We intend to use other available capacity to manufacture other proprietary products that may be the subject of future co-development agreements. We also offer our production services to existing customers and to third parties to further enable their development efforts and to absorb plant capacity not used or reserved for our proprietary product candidates.

Scientific Background

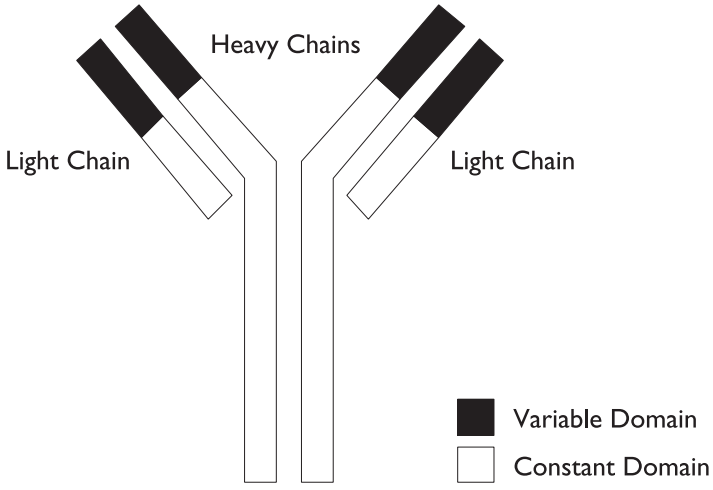
The Normal Antibody Response

The human immune system protects the body against a variety of infections and other illnesses. Specialized cells, which include B cells and T cells, work in concert with the other components of the

immune system to recognize, neutralize and eliminate from the body numerous foreign substances, infectious organisms and malignant cells. In particular, B cells generally produce protein molecules, known as antibodies, which are capable of recognizing substances potentially harmful to the human body. Such substances are called antigens. Upon being bound by an antibody, antigens can be neutralized or blocked from interacting with and causing damage to the body. Antibodies that bind tightly are said to have high affinity.

All antibodies have a common core structure composed of four subunits, two identical light (L) chains and two identical heavy (H) chains, named according to their relative size. The heavy and light chains are assembled within the B cell to form an antibody molecule that consists of a constant region and two variable regions. As shown in the diagram below, one can represent an antibody molecule schematically in the form of a "Y" structure.

Antibody Structure



The base of the "Y," together with the part of each arm immediately next to the base, is called the constant region because its structure tends to be very similar across all antibodies. In contrast, the variable regions are at the end of the two arms and are unique to each antibody.

Antibodies as Products

Recent advances in the technologies for creating and producing antibody products, coupled with a better understanding of how antibodies and the immune system function in key disease states, have led to renewed interest in the commercial development of antibodies as therapeutic products. According to a survey by the Pharmaceutical Research and Manufacturers of America, antibodies accounted for over 20% of all biopharmaceutical products in clinical development in August 2004. We are currently aware of eighteen antibody therapeutic products approved for marketing in the United States. These products are currently being marketed for a wide range of medical disorders such as autoimmune disease, cardiovascular disease, cancer and infectious diseases.

We believe that, as products, antibodies have several potential clinical and commercial advantages over traditional therapies. These advantages may include the following:

- fewer unwanted side effects as a result of high specificity for the disease target;
- greater patient compliance as a result of favorable pharmacokinetics; and

- ability to deliver various payloads, including drugs, radiation and toxins, to specific disease sites while avoiding surrounding tissues.

Current Approaches to Development of Antibody Therapeutic Products

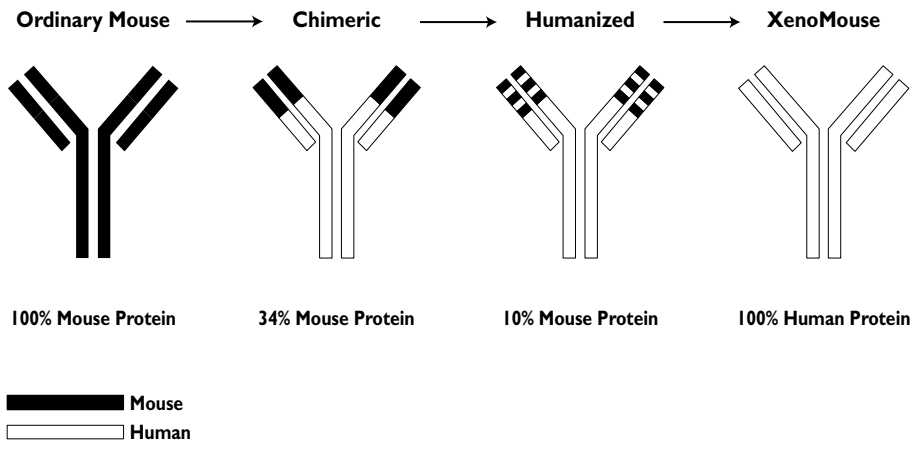
The therapeutic antibodies marketed today generally belong to a class of molecules known as "monoclonal antibodies". This term is used to refer to a homogeneous population of antibody molecules that are identical in their structure and functional characteristics. Traditionally, the approach to generating monoclonal antibodies has been to immortalize mouse antibody-secreting B cells by fusing them with a perpetually-growing cell line so that they are capable of reproducing over an indefinite period of time. Any of these fused cells, known as hybridomas, producing an antibody with the desired binding characteristics can then be selected, cloned, and expanded, allowing the large scale production of a monoclonal antibody.

Mouse monoclonal antibodies are wholly composed of mouse protein sequences and tend to be recognized as foreign by the human immune system. When patients are repeatedly treated with mouse antibodies, they will begin to produce antibodies that effectively neutralize the mouse antibody, a reaction referred to as a Human Anti-Mouse Antibody, or HAMA, response. In many cases, the HAMA response prevents the mouse antibodies from having the desired therapeutic effect and may cause the patient to have an allergic reaction.

Recognizing the limitations of mouse monoclonal antibodies, researchers have developed a number of approaches to make them appear more human-like to a patient's immune system. For example, improved forms of mouse antibodies, referred to as "chimeric" and "humanized" antibodies, are genetically engineered and assembled from portions of mouse and human antibody gene fragments. While these chimeric and humanized antibodies are more human-like, they still retain a varying amount of the mouse antibody protein sequence, and accordingly may continue to trigger a HAMA response.

Additionally, the humanization process can be expensive and time consuming, often requiring weeks or months of secondary manipulation after the initial generation of the mouse antibody.

Evolution of Antibody Technologies



Human Antibodies

The probability of inducing a HAMA response can be reduced through the generation of antibody therapeutic products with fully human protein sequences. Researchers have developed several antibody technologies to produce antibodies with 100% human protein sequences (see the diagram above). One approach to generating human antibodies, called "phage display" technology, involves the cloning of human antibody genes into bacteriophages, viruses that infect bacteria, in order to display antibody fragments on the surfaces of bacteriophage particles. This approach attempts to mimic in vitro the immune surveillance and affinity maturation processes that occur in the body.

Another approach involves the isolation of human B cells. The B cells can be further propagated either through introducing them into immunodeficient mice or through generating hybridomas. This approach is generally limited to generating antibodies only to nonhuman antigens or antigens to which the human B-cell donor had previously responded. Accordingly, this approach may not be suitable for targeting many key diseases such as cancer and inflammatory and autoimmune disorders for which appropriate therapy might require antibodies to human antigens.

The Abgenix Solution—XenoMouse and XenoMax Technologies

Our approach to generating human antibodies with fully human protein sequences is to use genetically engineered strains of mice in which mouse antibody gene expression is suppressed and functionally replaced with human antibody gene expression, while leaving intact the rest of the mouse immune system. Rather than engineering each antibody product candidate, these transgenic mice capitalize on the natural power of the mouse immune system in diversity and affinity maturation to produce a broad repertoire of high affinity antibodies. By introducing human antibody genes into the mouse genome, transgenic mice with such traits can be bred indefinitely. Importantly, these transgenic mice are capable of generating human antibodies to human antigens because the only human products expressed in the mice (and therefore recognized as "self") are the antibodies themselves. The mouse thus recognizes any other human tissue or protein as a foreign antigen and the mouse will mount an immune response.

A challenge with this approach, however, has been to introduce enough of the human antibody genes in appropriate configuration into the mouse genome to ensure that these mice are capable of recognizing the broad diversity of antigens relevant for human therapies.

To make our transgenic mice a robust tool capable of consistently generating high affinity antibodies that can recognize a broad range of antigens, we equipped the XenoMouse with approximately 80% of the human heavy chain antibody genes and a majority of the human light chain genes. The complex assembly of these genes together with their semi-random pairing allows XenoMouse animals to recognize a diverse repertoire of antigen structures. XenoMouse technology further capitalizes on the natural in vivo affinity maturation process to generate high affinity, fully human antibodies. In addition, we have developed multiple strains of XenoMouse animals, each of which is capable of producing a different class of antibody to perform different therapeutic functions. We believe that our various XenoMouse strains will provide maximum flexibility for drug developers in generating antibodies of the specific type best suited for a given disease indication.

Antibodies derived from XenoMouse animals originate solely from the human immunoglobulin genes that have been introduced into the animal. Consequently, antibodies generated using XenoMouse technology are fully human and are, therefore, expected to be less likely to be recognized as foreign and to elicit an antibody response to the therapeutic antibody than antibodies containing mouse proteins. However, an antibody response to a particular fully human antibody sequence could still occur, resulting in formation of a human anti-human antibody (HAHA) response, which neutralizes the effect of the antibody and may result in an allergic reaction.

We obtain the antibodies generated by XenoMouse animals by extracting the antibody-producing B cells. We can convert these B cells into hybridomas to generate the quantities of antibodies needed for standard methods of assaying and selecting antibodies for further development. We have expended considerable effort in enhancing hybridoma technology to optimize the diversity of the antibodies that we recover. Alternatively, we can submit the B cells to our proprietary Selected Lymphocyte Antibody Method (SLAM) technology, which we acquired through our November 2000 acquisition of Abgenix Biopharma Inc. We use the term XenoMax technology to refer to the use of XenoMouse technology together with SLAM technology. With XenoMax technology, we bypass the hybridoma step by culturing the B-cells directly and rapidly assaying them over a period of several days using a microplate-based, high throughput system. Using XenoMax, we can further increase the number of different antigen-reactive monoclonal antibodies identified in a single experiment compared to hybridoma technology.

Other approaches to generating fully human antibodies from mice that we understand are being pursued by competitors include: (i) transgenic mice containing heavy human chain and human light chain genes on a "minilocus" (which are mice that possess a relatively small number of representative human heavy and light chain genes in their genome), (ii) "transchromosomic" mice that contain large numbers of human heavy chain and light chain genes on one or more separate, or extra, chromosomes, and (iii) "UltiMab™" mice that are generated as a result of breeding "minilocus" containing mice with "transchromosomic" mice. "Transchromosomic" mice were developed by Kirin Brewing Co., Ltd. It is our understanding that "UltiMab" mice were developed through a collaboration between Medarex, Inc. and Kirin Brewing Co. and are currently used by Medarex, Kirin and GenMab A/S. Also, Avanir Pharmaceuticals and XTL Biopharmaceuticals Ltd. use technologies in which human B cells and T cells are implanted in mice with compromised immune systems.

In addition to the generation of human antibodies from mice, we understand that competitors such as Cambridge Antibody Technology Group plc, MorphoSys AG and Dyax Corporation utilize phage display technology for the generation of human antibodies from phage display libraries derived from human samples. BioSite Incorporated, through a collaboration with Medarex, generates human antibody phage display libraries from immunized "UltiMab" mice. It is our understanding that these libraries are not used for deriving therapeutic antibody products.

Our Technology Advantages

We believe that our technologies offer the following advantages:

Producing antibodies with fully human protein sequences. Our XenoMouse technology, unlike chimeric and humanization technologies, allows the generation of antibodies with 100% human protein sequences. More than 1,000 patients have been tested with our antibody product candidates and we have observed HAHA responses in two patients, both of whom were tested in our Phase 1 clinical trial of ABX-MA1.

Generating a diverse antibody response to many targets appropriate for antibody therapy. Because we have introduced a substantial majority of human antibody genes into XenoMouse animals, we believe that the technology has the potential to generate high affinity antibodies that recognize a broad range of structures contributing to human diseases. In addition, based on our experience, we expect XenoMouse technology to be capable of generating antibodies to almost any medically relevant antigen, human or otherwise. For a given antigen, having multiple antibodies to choose from could be important in selecting the optimal antibody product.

Generating high affinity antibodies that do not require further engineering. XenoMouse technology uses the natural in vivo affinity maturation process to generate antibody product candidates, usually in two to four months. In contrast to antibodies generated using humanization and phage display technology, we and our customers can produce XenoMouse antibodies without the need for any

subsequent engineering, a process that at times has proven to be challenging and time consuming. By avoiding the need to further engineer antibodies, we reduce the risk that an antibody's structure and therefore functionality will be altered between the initial antibody selected for testing and the final antibody approved for marketing and placed into production.

Enabling more efficient product development. XenoMouse technology can potentially produce multiple product candidates more quickly than humanization and phage display technology and we and our customers can conduct preclinical testing on several antibodies in parallel to identify the optimal product candidate that will be tested in clinical trials.

Providing flexibility in choosing manufacturing processes. Once we have identified an antibody with the desired characteristics, we can produce preclinical material either directly from hybridomas or from recombinant cell lines. Humanized and phage display antibodies, having been engineered, cannot be produced in hybridomas. In addition to potential timesaving, production in hybridomas avoids the need to license certain third party intellectual property rights covering certain processes for production of antibodies in recombinant cell lines.

Providing an integrated production platform. Our integrated production platform has been designed to minimize the risks associated with process, scale and site changes. We believe that our platform, which integrates a comprehensive range of process sciences services, including cell line, cell culture, purification, formulation and assay development, and our manufacturing facility can enable us to rapidly advance product candidates from cell line generation to production. This integrated approach may reduce the variability and risk associated with technology transfer and improve production quality and efficiency.

Proprietary Product Development Programs

We are currently developing antibody therapeutics for a variety of indications. The table below sets forth the current development status of our proprietary product candidates:

Product Candidate	Indication	Status
Panitumumab-(ABX-EGF)	**Colorectal Cancer (CRC)**	
	Third line treatment (monotherapy), US and outside the US	Pivotal[1]
	First line treatment (with chemotherapy)	Phase 2[1]
	Third line treatment (monotherapy), low or no EGFr expression	Phase 2[1]
	Non-Small Cell Lung Cancer (NSCLC)	
	First line treatment (with chemotherapy)	Phase 2[1]
	Second line treatment (monotherapy)	Phase 2[1]
	First line treatment (with chemotherapy and AMG 706[2])	Phase 1/2[1]
	Renal Cell Cancer (RCC)	
	First and second line treatment (monotherapy)	Phase 2
ABX-PTH	Secondary hyperparathyroidism	Phase 1

(1) Clinical trial managed by Amgen.

(2) AMG 706 is an Amgen proprietary multi-kinase inhibitor.

Panitumumab

Tumor cells that overexpress the epidermal growth factor receptor, or EGFr, on their surface often depend on EGFr's activation for growth. EGFr is expressed in a variety of cancers including lung, breast, ovarian, bladder, prostate, colorectal, kidney and head and neck. The activation of EGFr is triggered by the binding to EGFr by epidermal growth factor, or EGF, or transforming growth factor alpha, or TGFα, both of which are expressed by the tumor or by neighboring cells. We believe that blocking the ability of EGF and TGFα to bind with EGFr may offer a treatment for certain cancers. Panitumumab binds to EGFr with high affinity and has been shown to inhibit tumor cell proliferation in vivo and cause eradication of EGF dependent human tumors established in mouse models. Published studies have shown that panitumumab can inhibit growth of EGF-dependent human tumors cells in mouse models. Panitumumab has also demonstrated the ability to reverse cancer cell growth and cause eradication of established tumors in mice even when administered after significant tumor growth has occurred. Furthermore, in these models where tumors were eradicated, researchers did not observe any relapse of the tumor after discontinuation of the antibody treatment.

We are co-developing panitumumab with Amgen under a development and commercialization agreement. The following is a summary of the status of these clinical trials.

Colorectal cancer, single agent therapy with panitumumab. In January 2004, Amgen initiated two pivotal studies of panitumumab as third-line monotherapy in patients with metastatic colorectal cancer, one in the United States and one outside the United States. The initiation of the U.S. trial followed the receipt of a Special Protocol Assessment letter from the FDA endorsing the design of the trial to support a regulatory submission for potential accelerated approval. Enrollment in this trial, which began in the first quarter of 2004, is proceeding more slowly than originally anticipated. The second pivotal study, a randomized controlled study comparing best supportive care with best supportive care and panitumumab, is being conducted in Europe, Canada and Australia in support of the global registration program. Enrollment in this study is proceeding as anticipated. In December 2004, the FDA indicated that data from one pivotal trial, once completed, could be acceptable with additional data from other pending studies to support a submission for marketing approval in the United States.

A Phase 2 study is evaluating the effect of panitumumab monotherapy in patients with metastatic colorectal cancer who have previously failed chemotherapy. An interim analysis of this study was reported at the annual meeting of the American Society of Clinical Oncology in May 2003. Forty-four patients were included in this analysis. Forty patients were efficacy evaluable, which was prospectively defined as having received at least 5 of 8 planned weekly doses of panitumumab during the first 8 weeks of treatment. Panitumumab was given weekly at 2.5 mg/kg. Four of 40 (10%) efficacy evaluable patients achieved a partial response at week 8, which was confirmed 4 weeks later. Fifty-five percent of patients had stable disease at week 8. On the basis of this efficacy result, we and Amgen designed a pivotal trial program for panitumumab in third line monotherapy treatment of colorectal cancer.

Updated interim data from this Phase 2 study were presented at the annual meeting of the American Society for Clinical Oncology in June 2004 and demonstrated that panitumumab has antitumor activity when administered as a single-agent treatment to patients with metastatic colorectal cancer who have failed chemotherapy. The interim analysis showed that patients with measurable metastatic colorectal cancer which expressed the epidermal growth factor receptor experienced partial responses. The study included 148 patients who were previously treated with fluoropyrimidine (with or without leucovorin), and either irinotecan or oxaliplatin, or both. Patients received 2.5 mg/kg of panitumumab by weekly intravenous infusion in 8-week treatment cycles until disease progression or unacceptable toxicity. Tumor responses were confirmed at least four weeks after the initial response was observed. Treatment with panitumumab resulted in a partial response in 15 of the 148 patients (10%) with a median duration of response of 5.2 months, and no complete responses. Stabilization of disease was observed in 56 of the 148 patients (38%) with a median duration of stable disease of 3.8 months.

Median overall time to progression was two months and median overall survival time was 7.9 months. Exploratory subgroup analyses comparing patients who had received two prior chemotherapy agents, (80 patients), versus those who had received three prior chemotherapy agents (68 patients), demonstrated similar response rates of 11% and 9%, respectively. In the interim analysis, panitumumab was generally well-tolerated, with skin rash as the most common side effect: 95% experienced a skin rash and 4% experienced a grade 3 skin rash. Other side effects experienced by some patients were fatigue, nausea and diarrhea. One patient had a grade 3 infusion-related reaction related to panitumumab, which did not result in discontinuation of panitumumab. There were no instances of anaphylaxis. In the 110 patients for whom samples were available for testing, no human antihuman antibodies (HAHAs) were observed.

Colorectal cancer, combination of panitumumab with chemotherapy. A separate Phase 2 study is evaluating the effect of panitumumab administered with standard chemotherapy, as first-line treatment in patients with metastatic colorectal cancer. Interim data of this study presented at the European Society of Medical Oncology (ESMO) annual conference in October of 2004 showed an objective response rate of 47% among 19 patients who have received panitumumab with chemotherapy (irinotecan, fluorouracil and leucovorin, given according to the "Saltz" regimen). Time to tumor progression was 8.2 months and median overall survival time was 16.4 months. The most common side effects were skin rash and diarrhea.

The Initial Phase 1 Study. We began the clinical development of panitumumab with a Phase 1 dose-escalating clinical trial in July 1999 examining the safety, pharmacokinetics and biological activity of multiple doses of panitumumab as monotherapy in patients with a variety of advanced cancers. On the basis of preliminary results from this study, a number of Phase 2 studies were initiated in 2001 and 2002. We first reported data on this ongoing study in November 2001 and presented updated information at the annual meeting of the American Society for Clinical Oncology in May 2002. Forty-six patients had been recruited to this study at that time. Panitumumab appeared to be well tolerated at weekly doses ranging up to 3.5 mg/kg. We did not observe any allergic reactions, clinically significant infusion-related reactions or human anti-human antibody formation. At doses greater than or equal to 2.0 mg/kg, typical EGF receptor mediated skin rashes were seen in 100% of patients. Six patients who had received panitumumab (doses of 0.1 or 0.75, 2.5 or 3.5 mg/kg) achieved a partial response, minor response or disease stabilization. In 2003, we expanded enrollment in this trial to investigate additional panitumumab does levels and schedules of administration. Enrollment is closed and treatment is complete.

Non-small Cell Lung Cancer. We are also conducting a Phase 2 study in patients with non-small cell lung cancer receiving either standard chemotherapy with carboplatin and paclitaxel alone or administered with panitumumab. Interim data from Part 1 of this Phase 2 study were presented at the conference of the American Society of Clinical Oncology in June 2004 and demonstrated that frontline therapy with panitumumab was generally well tolerated when administered with paclitaxel and carboplatin in patients with advanced non-small cell lung cancer. Nineteen patients were enrolled into three groups and were administered panitumumab weekly for up to eight 6-week cycles, in combination with paclitaxel and carboplatin administered every three weeks, for up to six 3-week cycles: six subjects were administered panitumumab at a does of 1.0 mg/kg/week; seven subjects were administered panitumumab at a dose of 2.0 mg/kg/week; and six subjects were administered panitumumab at a dose of 2.5 mg/kg/week. Five of 19 patients had objective responses (one complete, four partial). In this small study of 19 patients, the observed median time to progression was six months and the observed median overall survival was 17 months. The most common adverse event seen in this study was skin rash, but the incidence of grade 3 skin rash did not appear to increase with panitumumab dose. Part 2 of this study, which is fully enrolled with 175 patients, compares time to progression for patients receiving panitumumab plus chemotherapy against time to progression for patients receiving chemotherapy alone as frontline therapy for advanced non-small cell lung cancer.

In addition, an evaluation of panitumumab in non-small cell lung cancer in combination with chemotherapy and AMG 706, Amgen's proprietary multi-kinase inhibitor, is currently ongoing.

Renal Cell Cancer. This Phase 2 study is evaluating the effect of panitumumab monotherapy in patients with renal cell cancer. An interim analysis of this study was reported at the annual meeting of the American Society of Clinical Oncology in May 2002. A total of 88 patients with metastatic renal cell cancer had been treated in this panitumumab monotherapy study at the time. Panitumumab was given weekly in doses of 1.0, 1.5, 2.0, and 2.5 mg/kg to cohorts of approximately 20 patients each. Panitumumab was administered for eight weeks or until patients demonstrated progressive disease. Eighty-nine percent of patients included in this study had received prior systemic therapy and the majority of patients had received more than one prior systemic regimen. Panitumumab was generally well tolerated. No allergic reactions, clinically significant infusion-related reactions, or human anti-human antibody formation were observed. A dose-related typical EGFr mediated skin rash was observed with an incidence of 100% at a dose level of 2.5 mg/kg. Single agent biological activity was seen in this heavily pre-treated patient population with 3 partial responses, 2 minor responses and 50% stable disease reported.

Additional Studies. Amgen has also initiated an additional study to evaluate panitumumab in metastatic colorectal cancer patients with tumors having low or undetectable levels of EGFr. Further Phase 1 and 2 clinical studies evaluating panitumumab in different tumor types either as a single agent or in combination with different chemotherapeutic agents or targeting agents have been initiated and are expected to be initiated from time to time.

ABX-PTH

Secondary hyperparathyroidism (SHPT) is a chronic disorder that is frequently observed in patients with chronic renal disease. As renal function declines, abnormal calcium and phosphorus metabolism and impaired vitamin D synthesis combine to increase serum parathyroid hormone (PTH). Typically, the condition begins to manifest before dialysis and worsens while on hemodialysis often resulting in enlarged parathyroid glands that are refractory to treatment. SHPT can lead to significant morbidity including bone disease, soft tissue calcification and increased cardiovascular disease.

According to the U.S. Renal Data System, in 2002, there were over 300,000 hemodialysis patients in the United States, a significant proportion of whom suffer from SHPT. Currently available therapies including calcium supplements, nonabsorbable phosphate binders, cinacalcet HCI (Sensipar®) and vitamin D, can be associated with limited efficacy, poor compliance or significant toxicities.

Using our proprietary technology, we have generated a novel antibody known as ABX-PTH, to target and neutralize the action of parathyroid hormone. We are developing ABX-PTH as a potential treatment for secondary hyperparathyroidism. This fully human antibody has a novel mechanism of action that, in preclinical studies, neutralizes PTH by directly lowering serum levels of free PTH. We believe that ABX-PTH could provide a significant therapeutic advance for the SHPT population by directly reducing bioactive PTH levels, rather than relying on the indirect mechanisms provided by current therapies.

Clinical Status. In December 2003, we filed an IND and in February 2004 we initiated a Phase 1 clinical trial of ABX-PTH for the treatment of patients with SHPT. Preliminary results from an interim analysis of this ongoing study were presented during a poster presentation at the 26thAnnual Meeting of the American Society for Bone and Mineral Research on October 3, 2004. In the Phase 1 study, five patients received a single dose of placebo, four patients received 30 mg of ABX-PTH and eight patients received 100 mg of ABX-PTH by intravenous bolus injection. ABX-PTH treatment resulted in dose dependent suppression of parathyroid hormone and a dose dependent reduction in serum calcium. Intravenous bolus administration was generally well tolerated. We intend to initiate a multi-dose Phase 1 trial of ABX-PTH later this year.

ABX-MA1

Melanoma is the most serious cancer of the skin. Currently, it is the seventh most common cancer in the United States. The American Cancer Society estimates that in 2005 approximately 59,580 cases of melanoma will be diagnosed in the United States and approximately 7,770 Americans are expected to die from melanoma. Melanoma can spread in the body through the blood and lymphatic system. Organ involvement by metastasis, most commonly to the lungs and liver, is the leading cause of death from the disease. Melanomas that have not spread beyond the site at which they developed are curable by surgical excision. Melanoma that has spread to distant sites is infrequently curable with surgery, although long-term survival is occasionally achieved by resection of metastases. Radiation therapy may provide symptomatic relief for metastases to brain, bones and viscera. Although advanced melanoma is relatively resistant to standard chemotherapy, some biologic therapies, such as interferon alpha and interleukin-2, have been reported to produce a low percentage of objective responses.

ABX-MA1 targets a protein called MUC18, a cell surface adhesion molecule that is highly expressed on metastatic melanoma cells but not on normal skin cells. Studies suggest that MUC18 may play a critical role in melanoma growth and metastasis by regulating the adhesion and interaction between melanoma cells and surrounding skin cells and new blood vessel cells. In some preclinical studies, binding of the MUC18 antigen by ABX-MA1 inhibited primary melanoma tumor growth and the formation of tumor metastases. MUC18 is also expressed on sarcomas, including smooth muscle and blood vessel-derived sarcomas, prostate cancer and renal cell cancers.

Clinical Status. In December 2001, we filed an IND and in February 2002 we initiated a Phase 1 clinical trial of ABX-MA1 for the treatment of patients with metastatic melanoma. Enrollment is closed and treatment is complete. In connection with our collaboration in the field of oncology, AstraZeneca had the first right to negotiate terms for the development of this product candidate. AstraZeneca has recently declined to exercise this right. In March 2005, we decided not to pursue further clinical development independently or to dedicate further significant time and resources to this program.

Summary of Contractual Arrangements

Overview

We have entered into a variety of contractual arrangements covering numerous antigens to use our XenoMouse and XenoMax technologies to generate and/or develop the resulting fully human antibodies. The following is a summary of these relationships.

Amgen Collaboration

In 2000, we entered into a joint development and commercialization agreement with Immunex, now a wholly-owned subsidiary of Amgen, for the co-development of ABX-EGF, now known as panitumumab. We amended this agreement in October 2003. Under the amended agreement, Amgen has decision-making authority for development and commercialization activities and we have the right to co-promote panitumumab. We are obligated to pay 50% of the development and commercialization costs and we are entitled to receive 50% of any profits from sales of panitumumab. In addition, Amgen is required to make available in 2004 and 2005 up to $60.0 million in advances that we may use to fund a portion of our share of development and commercialization costs for panitumumab after we have contributed $20.0 million toward development costs. We began accessing this credit facility in 2004 and, as of December 31, 2004, we had a carrying balance of $25.6 million, consisting of $25.1 million in advances and $517,000 of interest accrued at the contract rate of 12% per annum. We have drawn an additional $9.0 million under this facility in 2005 and we intend to continue to draw up to the $60.0 million limit in 2005. The amount of any such advances, plus interest, may be repaid out of profits resulting from future product sales; however, we are generally not obligated to repay any portion of the outstanding balance if panitumumab does not reach commercialization. Under a separate

agreement with Amgen, we are manufacturing clinical supplies of panitumumab for the collaboration and will manufacture commercial supplies for the first five years after commercial launch, with Amgen's support and assistance. The costs of manufacturing clinical and commercial supplies are also shared equally.

AstraZeneca Collaboration

We entered into a collaboration and license agreement with AstraZeneca in October 2003 for the discovery, development and commercialization of fully human monoclonal antibodies to treat cancer. This alliance involves the joint discovery and development of therapeutic antibodies for up to 36 cancer targets to be commercialized exclusively worldwide by AstraZeneca. We will conduct early stage preclinical research on behalf of AstraZeneca with respect to some or all of these targets, and have initiated research programs for several of them. To date, we and AstraZeneca have selected seventeen targets for inclusion in the collaboration, including several for which we had pre-existing preclinical programs. For any resulting products, we may receive milestone payments at various stages of development and royalties on future product sales. AstraZeneca may make milestone payments to us of up to $51 million per candidate that is developed under the agreement, and for any antibody we choose to develop to a target that is discontinued from the collaboration, we may pay AstraZeneca up to $15 million. Under the agreement, we also may conduct early clinical trials, process development and clinical manufacturing, as well as commercial manufacturing during the first five years of commercial sales, and would be compensated for those activities at competitive market rates. The collaboration also gives us the right to select and develop an additional pool of antibodies against up to 18 targets, which the companies may elect to further develop on an equal cost and profit sharing basis. Subject to a number of exceptions, we will work exclusively with AstraZeneca to generate and develop antibodies for therapeutic use in the field of oncology during a three-year target selection period. These exceptions include, among others, work on antibodies directed at antigens that are or become subject to existing collaborations and antigens that we and AstraZeneca decide not to pursue in the collaboration, and certain process development and manufacturing services. In connection with this collaboration, AstraZeneca made a $100.0 million investment in Abgenix securities. Upon the achievement of certain milestones, we may also require AstraZeneca to invest up to an additional $60.0 million in our convertible preferred stock.

Joint Development Collaborations

We have entered into joint development and commercialization arrangements for the development of fully human antibody therapeutic products with a number of collaborators, including U3 Pharma, Microscience, Sosei, Dendreon and Chugai. Development activities under these agreements are in various early stages. Pursuant to these arrangements we and our collaborators typically share equally the costs of development and commercialization as well as any profits from the collaboration. We intend to enter into additional joint development agreements for other product candidates.

Technology Out-Licensing

We have licensed our XenoMouse technology to third parties for the purpose of generating antibody product candidates to one or more specific antigens provided by the customer. We may also use our XenoMax technology on the customer's behalf. Pursuant to these contracts, we and our customers intend to generate antibodies for development as product candidates for the treatment of cancer, inflammation, autoimmune diseases, cardiovascular disease, growth factor modulation, neurological diseases, metabolic diseases and infectious diseases, and may pursue other diseases. The customer generally has an option for a period of time to acquire a product license for any antibody identified using XenoMouse technology that the customer wishes to develop and commercialize. The financial terms of these agreements may include license fees, option fees and milestone payments paid

to us by the customers. Based on our agreements, these payments and fees would average from approximately $7.0 million to $10.0 million per antigen if our customer takes the antibody into development and ultimately to commercialization. Generally, under these agreements, our collaborators are responsible for the costs of product development, manufacturing and commercialization. Additionally, these license agreements entitle us to receive royalties on any future product sales by the customer.

Production Services

We have entered into a limited number of contracts for process sciences and manufacturing services. We may offer a variety of process development, cell banking and clinical and commercial scale manufacturing services for antibody product candidates to existing and new customers to absorb production services capacity we are not using for our proprietary product candidates. Pursuant to such arrangements we may receive fees and, in some circumstances, royalties from future product sales. We may continue to assess and enter into such service contracts.

Xenotech and Japan Tobacco

In June 1991, in connection with the formation of Xenotech, both Cell Genesys and Japan Tobacco contributed cash, and Cell Genesys contributed the exclusive right to certain of its technology for the research and development of genetically modified strains of mice that can produce fully human antibodies. Cell Genesys assigned its rights in Xenotech to us in connection with our formation as an independent company in 1996. Through 1998, we made capital contributions to Xenotech, and provided research and development to Xenotech related to the development of XenoMouse technology in exchange for cash payments.

Under several agreements with Japan Tobacco that became effective December 31, 1999, we acquired Japan Tobacco's fifty percent interest in the Xenotech joint venture and became the sole owner of Xenotech and the XenoMouse technology. Under these agreements, Japan Tobacco acquired a license to use certain existing XenoMouse technology and future XenoMouse technology that we develop and a license to certain new technology related to the generation of mouse models of certain human diseases, in exchange for cash payments and future royalty obligations.

Intellectual Property

Proprietary protection for our products, processes and know-how is important to our business. We rely on patents, trade secrets and proprietary know-how to protect our intellectual property rights. We plan to aggressively prosecute and defend our patents and proprietary technology.

We and our subsidiaries own 15 issued patents in the United States, including an issued patent directed to panitumumab, and numerous granted patents in other foreign countries. In addition, we have ten issued U.S. patents and several granted patents in foreign countries that we jointly own with Japan Tobacco relating to, among other things, antibody technology and genetic manipulation.

Under a comprehensive patent cross-license and settlement agreement that we, Cell Genesys, Xenotech and Japan Tobacco signed with GenPharm in March 1997, we have licensed on a non-exclusive basis certain patents, patent applications, third-party licenses and inventions pertaining to the development and use of certain transgenic rodents, including mice that produce fully human antibodies. We use our XenoMouse technology to generate fully human antibody products and believe that we do not use any transgenic rodents developed or used by GenPharm. All of our financial obligations in connection with the cross-license were recorded in 1997.

In 2000, the Japanese Patent Office granted a patent to Kirin Beer Kabushiki Kaisha, one of our competitors, relating to non-human transgenic mammals. In October 2003, the United States Patent

and Trademark Office issued a corresponding patent to Kirin. Kirin has filed corresponding patent applications in Europe and Australia. Our licensee, Japan Tobacco, filed opposition proceedings against the Kirin patent in Japan and in July 2004 the Patent Appeals Board in Japan upheld the patent, subject to certain claim amendments. We use our XenoMouse technology to generate fully human antibody products and believe that we do not use the Kirin technology.

Genentech, Johnson & Johnson, GlaxoSmithKline plc and Transkaryotic Therapies, Inc. and the Trustees of the Columbia University in the City of New York each owns or controls a U.S. patent that relates to recombinant cell lines or methods of generating recombinant cell lines for the production of antibodies. We do not believe that these patents would be successfully asserted against any of our current or planned activities. If a court determines that the claims of any of these patents cover our activities and are valid, such a decision may require us to obtain a license or licenses. Under these circumstances, our failure to obtain a license at all or on commercially reasonable terms could impede commercialization of one or more of our products.

Genentech owns a U.S. patent that issued in June 1998 relating to a method of inhibiting the growth of tumor cells that involves an anti-EGF receptor antibody in combination with a cytotoxic factor. In addition, ImClone Systems, Inc. owns or is licensed under patents issued in the United States, Canada and Europe, relating to inhibiting the growth of tumor cells that involves an anti-EGF receptor antibody in combination with an anti-neoplastic agent. Abgenix and others are opposing the European patent in the European Patent Office. However, we do not believe that the Genentech patent or any of the ImClone patents would be successfully asserted against any of our current or planned activities relating to panitumumab or future commercial sales of panitumumab. If a court determines that the claims of either the Genentech patent or the ImClone patents cover our activities with panitumumab and are valid, such a decision may require us to obtain a license to Genentech's patent or ImClone's patents, as the case may be, in order for us to label and sell panitumumab for certain combination therapies. Our failure to obtain a license at all or on commercially reasonable terms could impede our commercialization of panitumumab.

Government Regulation

Our product candidates under development are subject to extensive and rigorous domestic government regulation and will be subject to further regulation if approved for commercial sale. The FDA regulates, among other things, the development, testing, manufacture, safety, efficacy, record keeping, labeling, storage, approval, advertising, promotion, sale and distribution of biopharmaceutical products. If we market our products abroad, they will also be subject to extensive regulation by foreign governments. Non-compliance with applicable requirements can result in fines, warning letters, recall or seizure of products, clinical study holds, total or partial suspension of production, refusal of the government to grant approvals, withdrawal of approval, and civil and criminal penalties.

We believe our antibody therapeutic products will be classified by the FDA as "therapeutic biologic products" as opposed to "drug products." On October 1, 2003, the FDA transferred certain oversight responsibility for therapeutic biologic products from the Center for Biologics Evaluation and Research (CBER) to the Center for Drug Products Evaluation and Research (CDER). The FDA has stated that biologic products transferred to CDER will continue to be regulated as biologics. The steps ordinarily required before a biological product may be marketed in the United States include:

- preclinical testing;
- submission to the FDA of an IND which must become effective before clinical trials may commence;
- adequate and well-controlled clinical trials to establish the safety and efficacy of the biologic;

- submission to the FDA of a Biologic License Application, or BLA, for the approval to market the product; and
- FDA approval of the application, which encompasses inspection and licensing of the manufacturing facility for commercial production of product and approval of all product labeling.

Preclinical testing includes laboratory evaluation of product chemistry, formulation and stability, as well as animal studies to assess the potential safety and efficacy of each product. Laboratories that conduct preclinical safety tests must comply with FDA regulations regarding good laboratory practices. We submit the results of the preclinical tests, together with manufacturing information, analytical data and clinical study plans, to the FDA as part of the IND and the FDA reviews those results before the commencement of clinical trials. Unless the FDA objects to an IND, the IND will become effective 30 days following its receipt by the FDA. If we submit an IND, our submission may not result in FDA authorization to commence clinical trials. Also, the lack of an objection by the FDA does not mean it will ultimately approve an application for marketing approval. Furthermore, we may encounter problems in clinical trials or in manufacturing clinical supplies that cause us or the FDA to delay, suspend or terminate our trials.

Clinical trials involve the administration of the investigational product to humans under the supervision of a qualified principal investigator. We must conduct clinical trials in accordance with Good Clinical Practice regulations under protocols submitted to the FDA as part of the IND. In addition, each clinical trial site must have approval from and conduct the trial under the auspices of an Institutional Review Board and with patient informed consent. The Institutional Review Board will consider, among other things, ethical factors, the safety of human subjects and the possibility of liability of the institution conducting the trial.

We conduct clinical trials in three sequential phases that may overlap. Phase 1 clinical trials may be performed in healthy human subjects or, depending on the disease, in patients. The goal of a Phase 1 clinical trial is to establish initial data about safety and tolerability of the biologic agent in humans. In Phase 2 clinical trials, we seek preliminary evidence of the desired therapeutic efficacy of a biologic agent in limited studies of patients with the target disease. We make efforts to evaluate the effects of various dosages and to establish an optimal dosage level and dosing schedule. We also gather additional safety data from these studies. The Phase 3 clinical trial program consists of expanded, large-scale, multi-center studies of persons who are susceptible to or have developed the disease. A pivotal study is designed to meet registration requirements. Phase 3 studies that are designed for registration purposes are considered pivotal studies and Phase 2 studies specifically designed for registration purposes also can be pivotal studies. The goal of these studies is to obtain statistically significant evidence of the efficacy and relevant safety data of the proposed product and dosage regimen.

Antibody therapeutic products must be manufactured by an appropriately validated process and in a facility that complies with FDA good manufacturing practice regulations and other regulations. Good manufacturing practice regulations include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation. In addition, the FDA and other regulatory authorities will require us to register any manufacturing facilities in which our antibody therapeutic products are manufactured. These facilities will be subject to periodic and unannounced inspections to confirm continued compliance with FDA good manufacturing practices or other regulations. The FDA or foreign regulatory bodies will not grant pre-market approval of our product candidates if the facilities in which they are manufactured cannot pass a pre-license inspection. In addition, manufacturing facilities in California, including our facility, are also subject to the licensing requirements of and inspection by the California Department of Health Services.

For clinical investigation and marketing outside the United States, we are subject to the regulatory requirements of other countries, which vary from country to country. The regulatory approval process in other countries includes requirements similar to those associated with FDA approval set forth above.

Competition

The biotechnology and pharmaceutical industries are highly competitive and subject to significant and rapid technological change. We face competition in several different forms. Our antibody generation activities currently face competition from several companies and technologies. In addition, the product candidates that we, our partners or customers are developing also face competition from biologic and small molecule products as well as other treatment modalities.

We are aware of several pharmaceutical and biotechnology companies that are actively engaged in research and development in areas related to antibody therapy. Many of these companies have commenced clinical trials of antibody therapeutic product candidates or have successfully commercialized antibody therapeutic products. Many of these companies are addressing the same diseases and disease indications as we or our customers are.

We compete with companies that offer the services of generating monoclonal antibodies for antibody-based therapeutics. Many of these competitors have specific expertise or technology related to antibody development and introduce new or modified technologies from time to time. One such competitor is Medarex, through its wholly owned subsidiary GenPharm. Other companies are also developing or have developed technologies for generating human or partially human antibodies, including Avanir Pharmaceuticals, XTL Biopharmaceuticals Ltd., Kirin Brewing Co. and GenMab. Several companies are developing, or have developed, technologies, not involving animal immunization, that result in libraries composed of numerous human antibody sequences. Cambridge Antibody Technology Group, Dyax, MorphoSys and Alexion Pharmaceuticals, Inc. are using libraries of human antibody genes to develop therapeutic products comprising human antibody sequences.

Panitumumab

We are aware of several companies that have approved products or product candidates in clinical testing that target the EGF receptor and therefore may compete with panitumumab. These include, but are not limited to ImClone with cetuximab (Erbitux®), OSI Pharmaceuticals, Inc. and Genentech, Inc. with erlotinib (Tarceva™), and AstraZeneca with gefitinib (Iressa™). Other potential competitors include Pfizer, GlaxoSmithKline, Novartis, Merck KgaA, Wyeth, Medarex and YM Bioscience Inc.

In February 2004, ImClone and Bristol-Myers Squibb received approval from the FDA to market Erbitux in the United States for use in combination with irinotecan in the treatment of patients with metastatic colorectal cancer who are refractory to irinotecan-based chemotherapy and for use as a single agent in the treatment of patients with metastatic colorectal cancer who are intolerant to irinotecan-based chemotherapy. ImClone and Bristol-Myers Squibb have also announced the submission of an application for approval to market Erbitux in Canada in combination with irinotecan for the treatment of patients with irinotecan-refractory metastatic colorectal cancer. In June 2004, Merck received approval to market Erbitux in the European Union in combination with irinotecan for the treatment of patients with metastatic colorectal cancer after failure of irinotecan-including cytotoxic therapy. Merck has also gained approval for use of Erbitux in combination with irinotecan in patients with metastatic colorectal cancer who have failed prior irinotecan therapy in Switzerland in December 2003. Erbitux was also approved in Argentina and Mexico in May 2004 and in Chile in June 2004, for use in combination with irinotecan or as a single agent in patients with metastatic colorectal cancer after failure of irinotecan-including cytotoxic therapy.

On February 26, 2004, Genentech announced that the FDA approved bevacizumab (Avastin™) for treatment in first line metastatic colorectal cancer. Avastin is an approved therapeutic antibody

designed to inhibit vascular endothelial growth factor, a protein that plays a role in tumor angiogenesis (the formation of new blood vessels to the tumor) and maintenance of existing tumor blood vessels.

On May 5, 2003, AstraZeneca received approval from the FDA to market Iressa, a small molecule product indicated as monotherapy for the treatment of patients with locally advanced or metastatic advanced non-small cell lung cancer after failure of both platinum-based and docetaxel chemotherapies. AstraZeneca also received approval in many other markets in the world, including Japan, Australia and Canada, for the treatment of advanced non-small cell lung cancer. On January 4, 2005, AstraZeneca announced that it was withdrawing its application for marketing authorization of Iressa in the European Union for the treatment of non-small cell lung cancer in view of trial results that did not meet the approval requirements for the application.

On November 18, 2004, Genentech and OSI announced that they received approval from the FDA to market Tarceva in the United States for the treatment of patients with locally advanced or metastatic advanced non-small cell lung cancer after failure of at least one prior chemotherapy regimen.

ABX-PTH

On March 8, 2004, Amgen announced that it had received approval to market cinacalcet HCI (Sensipar®), a small molecule product that may compete with ABX-PTH, in the United States for the treatment of secondary hyperparathyroidism in chronic kidney disease patients on dialysis and the treatment of elevated calcium levels in patients with parathyroid carcinoma. Amgen received approval to market cinacalcet HCI as Mimpara® in Europe and Canada and has applied for regulatory approval in Australia and New Zealand.

Many of these companies and institutions, either alone or together with their customers, have substantially greater financial resources and larger research and development staffs than we do. In addition, many of these competitors, either alone or together with their customers, have significantly greater experience than we do in:

- developing products;
- undertaking preclinical testing and human clinical trials;
- obtaining FDA and other regulatory approvals of products; and
- manufacturing and marketing products.

Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval or commercializing products before we do. If we commence commercial product sales, we will be competing against companies with greater marketing and manufacturing capabilities, areas in which we have limited or no experience.

We also face, and will continue to face, competition from academic institutions, government agencies and research institutions. There are numerous competitors working on products to treat each of the diseases for which we are seeking to develop therapeutic products. In addition, any product candidate that we successfully develop may compete with existing therapies that have long histories of safe and effective use. Competition may also arise from:

- other drug development technologies and methods of preventing or reducing the incidence of disease;
- new small molecules, antibodies or biologics; or
- other classes of therapeutic agents.

Developments by competitors may render our product candidates or technologies obsolete or non-competitive. We face and will continue to face intense competition from other companies for

agreements with pharmaceutical and biotechnology companies, for establishing relationships with academic and research institutions, and for licenses to proprietary technology.

Antibody Production

Our antibody production activities, also referred to as production services, include closely integrated process sciences and manufacturing capabilities for the manufacture of therapeutic product candidates. We use this capability for the manufacture of our own proprietary products candidates and also offer these services to our collaborators and others. We believe the close integration between process sciences and manufacturing enables us to streamline the production process. Within our pilot plant, our process sciences services include cell line development, optimization and production scale up. The resulting process can be transitioned to our manufacturing facility.

Our manufacturing facility is designed to manufacture product candidates for clinical trials and to support the potential commercial launch of a limited number of products in compliance with FDA and European good manufacturing practices. In May 2000, we signed a long-term lease for the building that contains this manufacturing facility. Construction has been completed and portions of the facility are operational and validated. In October 2003, following an inspection by the State Department of Health Services, we received a Drug Manufacturing License from the State of California. The license permits us to manufacture and ship clinical material from our manufacturing facility. The total cost of constructing the facility was approximately $150 million. The costs of completing validation of this facility, making the remaining portions of the facility operational and qualifying the facility for regulatory compliance may be higher than expected. We currently have excess production services capacity and this condition may persist for an extended period. However, if the commercial launch of one of our product candidates proves successful, we may experience capacity shortages and may need to use one or more third-party facilities to produce these products in sufficient commercial quantities.

Previously, we relied on contract manufacturers to produce candidates under good manufacturing practice regulations for use in our clinical trials. We continually evaluate our options for commercial production of our product candidates, including use of third-party manufacturers or entering into a manufacturing joint venture relationship with a collaborator or other third party. We are aware of only a limited number of companies on a worldwide basis that operate manufacturing facilities in which our product candidates can be manufactured under good manufacturing practice regulations. It may take a substantial period of time for a contract manufacturing facility that has not been producing antibodies to begin producing antibodies in compliance with good manufacturing practice regulations and we may not be able to contract with any of these companies on acceptable terms, if at all.

Employees

As of December 31, 2004, we employed 523 persons. We also use temporary contractor personnel to fill staffing needs from time to time.

Our success will depend in large part upon our ability to attract and retain employees. We face competition in this regard from other companies, research and academic institutions, government entities and other organizations. We believe that we maintain good relations with our employees.

Executive Officers

The names and ages of our executive officers are as follows:

Name	Age	Position(s)
William R. Ringo	59	President and Chief Executive Officer
H. Ward Wolff	56	Senior Vice President, Finance and Chief Financial Officer
Kristen Metza Anderson	45	Senior Vice President, Human Resources
C. Geoffrey Davis, Ph.D.	53	Chief Scientific Officer
Donald R. Joseph	51	Senior Vice President, General Counsel and Secretary
Gayle M. Mills	50	Senior Vice President, Business Development
Gisela M. Schwab, M.D.	48	Chief Medical Officer

William R. Ringo has served as our Chief Executive Officer and President since July 2004. From 1973 to 2001, Mr. Ringo held various commercial and product marketing positions at Eli Lilly and Company, including president of the company's Oncology and Critical Care Product teams. Mr. Ringo also served as president of Eli Lilly's Internal Medicine Products unit and as president of its Infectious Diseases business unit. Previously, he was vice president of Sales and Marketing for Eli Lilly's U.S. pharmaceutical operations, after holding a variety of positions in general management, marketing and business planning across Eli Lilly's pharmaceutical and devices businesses. Mr. Ringo is currently the non-executive chairman of the board of directors of InterMune, Inc. and served as interim Chief Executive Officer from June to September 2003. He has served as a director on a number of biotechnology company boards and he is currently a director of Inspire Pharmaceuticals, Inc. Mr. Ringo received a B.S. degree in management and an M.B.A. degree from the University of Dayton.

H. Ward Wolff has served as our Chief Financial Officer and Senior Vice President, Finance, since September 2004. From 2002 to 2003, Mr. Wolff served as Chief Financial Officer of QuantumShift. From 1998 to 2002, he was Senior Vice President and Chief Financial Officer of DoubleTwist, Inc. and from 1992 to 1998, he was Senior Vice President of Finance and Administration and Chief Financial Officer of Premenos Technology Corporation. From 1985 to 1992, Mr. Wolff was an Executive Director of Russell Reynolds Associates, Inc. From 1974 to 1985, Mr. Wolff held numerous positions with Price Waterhouse, as a certified public accountant, including Senior Audit Manager. Mr. Wolff received a B.A. degree in Economics from the University of California at Berkeley and an M.B.A. degree from Harvard Business School.

Kristen Metza Anderson has served as our Senior Vice President, Human Resources since January 2005. Prior to joining Abgenix, Ms. Anderson served from 2001 to 2004 as Vice President of Human Resources at Applied Biosystems, a developer of innovative products and services for life science research, pharmaceutical research and development, diagnostics and agriculture. From 1997 until 2001, Ms. Anderson was Vice President, Human Resources and Communications for the Digital Linear Tape Group at Quantum Corporation, a diversified mass storage company with leadership positions in both fixed and removable storage markets. Prior to her work at Quantum, Ms. Anderson worked in human resources leadership positions at Motorola, Inc. and Allied Signal Inc. Ms. Anderson received her B.A. degree from and completed her graduate coursework in Industrial Relations and Organizational Psychology at the University of Minnesota.

C. Geoffrey Davis, Ph.D. has served as our Chief Scientific Officer since January 2000 and from June 1996 until December 2000 as our Vice President, Research. From January 1995 to June 1996, Dr. Davis was Director of Immunology at the Xenotech Division of Cell Genesys. From November 1991 to December 1994, he served at Repligen Corporation, a biotechnology company, first as Principal Investigator and then as Director of Immunology. Dr. Davis received a B.A. degree in

Biology from Swarthmore College and a Ph.D. degree in Immunology from the University of California, San Francisco.

Donald R. Joseph has served as our Senior Vice President, General Counsel and Secretary since March 2005. From 2004 to 2005, Mr. Joseph was a partner and co-founder of Alekta Group, LLC, a specialty pharmaceutical consulting group and development company. From 2001 to 2004, he served as Executive Vice President, Commercial Development of Amarin Corporation, PLC and as Executive Vice President, Legal and Commercial Development of its U.S. subsidiary, Amarin Pharmaceuticals, Inc. From 1998 to 2001, Mr. Joseph served in a number of senior roles at Elan Pharmaceuticals, North America, most recently as Senior Vice President, Commercial and Legal Affairs and, from 1994 to 1998, Athena Neurosciences, Inc., most recently as Vice President and General Counsel. Prior to joining Athena, Mr. Joseph was a partner at the law firm of Baker & McKenzie. Mr. Joseph received a B.A. degree from the University of Oklahoma and a J.D. degree from the University of Texas Law School.

Gayle M. Mills has served as our Senior Vice President, Business Development since June 2004 and from September 2000 to June 2004 served as our Vice President, Business Development. From 1998 to September 2000, Ms. Mills was Vice President, Business Development at Eos Biotechnology, Inc., a biopharmaceutical company. From 1995 to 1998, Ms. Mills was Vice President, Business Development and Strategic Marketing for the Neurobiology Unit at Roche Bioscience. Ms. Mills served as Director, Business Development both at Affymax Technologies from 1993 to 1995 and at Syntex Corp. from 1991 to 1993. Ms. Mills received a B.S. degree in Business Administration from the College of Notre Dame and an M.B.A. degree from Santa Clara University.

Gisela M. Schwab, M.D. has served as our Chief Medical Officer since January 2002 and from November 1999 until December 2001 as our Vice President, Clinical Development. From September 1992 to October 1999, Dr. Schwab held various positions at Amgen, a biotechnology company, most recently as Director, Clinical Research and Therapeutic Area Team Leader for Oncology/Hematology. Dr. Schwab received an M.D. degree from the University of Heidelberg in Germany. She is board certified in hematology and oncology and has performed research in molecular biology at the National Cancer Institute in Bethesda, Maryland, and at the French National Institute for Health and Research in Paris.

Risk Factors That Might Affect Future Results

Risks Related to our Finances

We are an early stage company without commercial therapeutic products, and we cannot assure you that we will develop sufficient revenues in the future to sustain our business.

You must evaluate us in light of the uncertainties and complexities present in an early stage biopharmaceutical company. Our product candidates are in early stages of development. We will need to make significant additional investments in research and development, preclinical testing and clinical trials, and in regulatory and sales and marketing activities, to commercialize current and future product candidates. Our product candidates, if successfully developed and approved for marketing, may not generate sufficient or sustainable revenues to enable us to be profitable.

We have a history of losses and we expect to continue to incur losses for the foreseeable future.

We have incurred net losses since we were organized as an independent company, including in the last five years net losses of $8.8 million in 2000, $60.9 million in 2001, $208.9 million in 2002,

$196.4 million in 2003 and $187.5 million in 2004. As of December 31, 2004, our accumulated deficit was $752.3 million. Our losses to date have resulted principally from:

- research and development costs relating to the development of our XenoMouse and XenoMax technologies and antibody product candidates;
- general and administrative costs relating to our operations;
- manufacturing start-up costs related to our manufacturing facility including depreciation, outside contractor costs and personnel costs for activities such as quality assurance and quality control;
- impairment charges related to our strategic investments in CuraGen, ImmunoGen, Inc., and MDS Proteomics Inc.;
- impairment charges relating to technology in the field of catalytic antibodies, which includes intellectual property that was acquired through the acquisition of Hesed Biomed, Inc.

We expect to incur additional losses for the foreseeable future as a result of our research and development costs and manufacturing start-up costs, including costs associated with conducting preclinical development and clinical trials, which will continue to be substantial, and charges related to purchases of technology or other assets. We intend to invest significantly in our products prior to entering into licensing agreements. This will increase our need for capital and will result in losses for at least the next several years. We expect that the amount of operating losses will fluctuate significantly from quarter to quarter as a result of increases or decreases in our research and development efforts, the execution or termination of licensing, manufacturing and other contractual arrangements, the progress or lack of progress of product development candidates in our collaboration with AstraZeneca and the initiation, success or failure of clinical trials.

We are currently unprofitable and may never be profitable, and our future revenues could fluctuate significantly.

Since our founding, we have funded our research and development activities primarily from private placements and public offerings of our securities and from revenues generated by our licensing and other contractual arrangements.

Prior to the potential marketing approval of panitumumab, we expect that substantially all of our revenues for the foreseeable future will result from payments under licensing and other contractual arrangements. To date, payments under licensing and other agreements have been in the form of license fees, milestone payments, reimbursement for research and development expenses, option fees, and payments for manufacturing services. Payments under our existing and any future customer agreements will be subject to significant fluctuation in both timing and amount. Our revenues may not be indicative of our future performance or of our ability to continue to achieve contractual milestones. Our revenues and results of operations for any period may also not be comparable to the revenues or results of operations for any other period. Our revenues for any period may not be sufficient to cover our operating costs, including the costs of operating our manufacturing plant. We may not be able to:

- enter into further co-development, licensing, manufacturing or other agreements;
- successfully complete preclinical development or clinical trials;
- obtain required regulatory approvals;
- successfully manufacture or market product candidates; or
- generate additional revenues or profitability.

Our failure to achieve any of the above goals would materially harm our business, financial condition and results of operations.

We may require additional financing, and an inability to raise the necessary capital or to do so on acceptable terms would threaten the continued success of our business.

We will continue to expend substantial resources to support research and development and operate our manufacturing facility, including costs associated with preclinical development and clinical trials. In the years ended December 31, 2004, 2003 and 2002, we incurred expenses of $124.8 million, $98.2 million and $128.5 million, respectively, on research and development. For the year ended December 31, 2004, our manufacturing start-up costs were $25.4 million. Regulatory and business factors will require us to expend substantial funds in the course of completing required additional development, preclinical testing and clinical trials of, and attaining regulatory approvals for, product candidates. The amounts of expenditures that will be necessary to execute our business plan are subject to numerous uncertainties that may adversely affect our liquidity and capital resources. Our future liquidity and capital requirements will depend on many factors, including:

- the scope and results of preclinical development and clinical trials;
- the retention of existing and establishment of further co-development, licensing, manufacturing and other agreements, if any;
- the decisions of our collaborator, Amgen, under our co-development agreement for panitumumab, which provides Amgen decision-making authority for development and commercialization activities and obligates us to share 50% of the development and commercialization costs;
- continued scientific progress in our research and development programs;
- the size and complexity of these programs;
- the cost of operating our manufacturing facility, validating our processes and complying with good manufacturing practice regulations;
- the cost of conducting commercialization activities and arrangements;
- the time and expense involved in seeking regulatory approvals;
- competing technological and market developments;
- the time and expense of filing and prosecuting patent applications, and enforcing and defending against patent claims;
- our investment in, or acquisition of, other companies;
- the amount of product or technology in-licensing in which we engage;
- the extent and duration of market exclusivity we can command for our products, through patent and regulatory laws; and
- other factors not within our control.

We believe that our current cash balances, cash equivalents, marketable securities, and the cash generated from our licensing and other contractual arrangements, will be sufficient to meet our operating and capital requirements for at least one year. However, because of the uncertainties in our business, including the uncertainties listed above, we cannot assure you that this will be the case. In addition, we may choose to obtain additional financing from time to time. We may choose to raise additional funds through public or private equity or debt financing, licensing and other agreements, a bank line of credit, sale-lease back financing, mortgage financing, asset sales or other arrangements. We cannot be sure that any additional funding, if needed, will be available on terms favorable to us or at all. Furthermore, any additional equity or equity-related financing may be dilutive to our stockholders, and debt financing, if available, may subject us to restrictive covenants and significant interest costs. We

may also choose to obtain funding through licensing and other contractual arrangements. Such agreements may require us to relinquish our rights to certain of our technologies, products or marketing territories. Our failure to raise capital when needed would harm our business, financial condition and results of operations.

Our indebtedness may harm our financial condition and results of operations.

At December 31, 2004, we had approximately $463.6 million of outstanding notes, including $113.7 million of convertible subordinated notes due March 15, 2007, $300.0 million of outstanding convertible senior notes due December 15, 2011 and a $50.0 million note held by AstraZeneca. In addition, at December 31, 2004, we had accrued approximately $25.6 million in long-term liabilities to Amgen pursuant to our co-development agreement. We may incur additional indebtedness in the future. Our level of indebtedness will have several important effects on our future operations, including, without limitation:

- we will have additional cash requirements in order to support the payment of interest on our outstanding indebtedness;
- increases in our outstanding indebtedness and leverage will increase our vulnerability to adverse changes in general economic and industry conditions, as well as to competitive pressure; and
- depending on the levels of our outstanding debt, our ability to obtain additional financing for working capital, capital expenditures, general corporate and other purposes may be limited.

Our ability to make payments of principal and interest on our indebtedness depends upon our future performance, which will be subject to general economic conditions, industry cycles and financial, business and other factors affecting our operations, many of which are beyond our control. If we are unable to generate sufficient cash flow from operations in the future to service our debt, we may be required, among other things:

- to seek additional financing in the debt or equity markets;
- to refinance or restructure all or a portion of our indebtedness, including the notes;
- to sell selected assets;
- to reduce or delay planned capital expenditures; or
- to reduce or delay planned operating expenditures, such as clinical trials.

Such measures might not be sufficient to enable us to service our debt. In addition, any such financing, refinancing or sale of assets might not be available on economically favorable terms.

Our strategic investments expose us to equity price risk and our investments in those companies may be deemed impaired, which would affect our results of operations.

We are exposed to equity price risk on our strategic investments in CuraGen and ImmunoGen and we may elect to make additional similar investments in the future. In 1999 and 2000, we purchased an aggregate amount of $80.0 million of the common stock of CuraGen and ImmunoGen as strategic investments. In 2002, declines in the fair value of the CuraGen and ImmunoGen common stock were deemed to be other than temporary, primarily because the stock of each company traded below our cost basis for more than six months. Accordingly, we recorded a total impairment charge for the year ended December 31, 2002 of $67.3 million. The public trading prices of the shares of both companies have fluctuated significantly since we purchased them and could continue to do so. If these shares trade below their new cost bases in future periods, we may incur additional impairment charges relating to these investments. As of December 31, 2004, these investments were recorded at fair value in long-term

investments on the balance sheet, and any net unrealized holding gains and losses are reported as a component of stockholders' equity.

Risks Related to the Development and Commercialization of our Products

Our XenoMouse and XenoMax technologies may not produce safe, efficacious or commercially viable products, which will be critical to our ability to generate revenues from our products.

Our XenoMouse and XenoMax technologies are new approaches to developing antibodies as products for the treatment of diseases and medical disorders. To date, neither we nor our customers have commercialized any antibody therapeutic products based on our technologies. Moreover, we are not aware of any commercialized, fully human antibody therapeutic products that have been generated from any technologies similar to ours. Our antibody therapeutic product candidates are still in various stages of development and many are in an early development stage. We have initiated clinical trials with respect to four proprietary fully human antibody therapeutic product candidates, and our collaborators have initiated clinical trials with respect to eight other fully human antibody therapeutic product candidates generated by XenoMouse technology. We cannot be certain that either XenoMouse technology or XenoMax technology will generate antibodies against every antigen to which they are exposed in an efficient and timely manner, if at all. Furthermore, XenoMouse technology and XenoMax technology may not result in any meaningful benefits to our current or potential customers or in product candidates that are safe and efficacious for patients. Our failure to generate antibody therapeutic product candidates that lead to the successful commercialization of products would materially harm our business, financial condition and results of operations.

If we do not successfully develop our products, or if they do not achieve commercial success, our business will be materially harmed.

Our development of current and future product candidates, either alone or in conjunction with collaborators, is subject to the risks of failure inherent in the development of new pharmaceutical products and products based on new technologies. These risks include:

- delays in product development, clinical testing or manufacturing;
- unplanned expenditures in product development, clinical testing or manufacturing;
- failure in clinical trials or failure to receive regulatory approvals;
- emergence of superior or equivalent product development technologies or products;
- inability to manufacture on our own, or through others, product candidates on a clinical or commercial scale;
- inability to market products due to third-party proprietary rights;
- election by our customers not to pursue product development;
- failure by our customers to develop products successfully; and
- failure to achieve market acceptance.

In certain instances, we have terminated the clinical development of product candidates when the results of clinical trials did not warrant continued development. We hope to be able to make up for the loss of diversity in our product pipeline through the number and variety of potential new product candidates we have in preclinical development. However, to the extent that we are unable to maintain a broad and diverse range of product candidates, our success would depend more heavily on one or a few product candidates.

Because of these risks, our research and development efforts and those of our customers and collaborators may not result in any commercially viable products. Our failure to successfully complete a significant portion of these development efforts, to obtain required regulatory approvals or to achieve commercial success with any approved products would materially harm our business, financial condition and results of operations.

Before we commercialize and sell any of our product candidates, we must conduct clinical trials, which are expensive and have uncertain outcomes.

Conducting clinical trials is a lengthy, time-consuming and expensive process. Before obtaining regulatory approvals for the commercial sale of any products, we must demonstrate through preclinical testing and clinical trials that our product candidates are safe and effective for use in humans. We have incurred and will continue to incur substantial expense for, and we have devoted and expect to continue to devote a significant amount of time to, preclinical testing and clinical trials.

Completion of clinical trials may take several years or more. The length of time generally varies substantially according to the type, complexity, novelty and intended use of the product candidate.

Many factors may delay our commencement and rate of completion of clinical trials, including:

- the number of patients that ultimately participate in the trial, which may be affected by the availability of competing therapeutic alternatives;
- the length of time required to enroll suitable patient subjects;
- the duration of patient follow-up that seems appropriate in view of the results;
- the number of clinical sites included in the trials;
- changes in regulatory requirements for clinical trials or any governmental or regulatory delays or clinical holds requiring suspension or termination of the trials;
- delays, suspensions or termination of the clinical trials due to the institutional review board responsible for overseeing the study at a particular study site;
- unforeseen safety issues; and
- inability to manufacture on our own, or through others, adequate supplies of the product candidate being tested.

We have limited experience in conducting and managing clinical trials. We rely on third parties, including our collaborators, to assist us in managing and monitoring clinical trials. Our reliance on these third parties may result in delays in completing, or in failure to complete, these trials if the third parties fail to perform under our agreements with them.

In addition, we have ongoing research projects that may lead to product candidates, but we have not submitted INDs, nor begun clinical trials for these projects. Our ability to file additional INDs, and to build diversity and scale in our product portfolio, depends to a significant extent on our ability to identify additional potential product candidates through our preclinical research and to conduct preclinical research efficiently. Our preclinical or clinical development efforts may not be successfully completed, we may not file further INDs and clinical trials may not commence as planned.

Two of our proprietary product candidates, panitumumab and ABX-PTH, are in various stages of clinical trials. We have discontinued development of three proprietary product candidates, ABX-CBL, ABX-IL8 and ABX-MA1. To date, data obtained from these clinical trials have been insufficient to demonstrate safety and efficacy under applicable FDA guidelines. As a result, these data will not support an application for regulatory approval without further clinical trials or further results from ongoing trials. Clinical trials that we conduct or that third parties conduct on our behalf may not

demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals for any of our product candidates. We expect to commence new clinical trials from time to time in the course of our business as our product development work continues. However, regulatory authorities may not permit us to undertake any additional clinical trials for our product candidates. In addition, the FDA, other regulatory authorities, our partners, the institutional review boards for clinical trial sites or we may suspend or terminate clinical trials at any time.

Our product candidates may fail to demonstrate safety or efficacy in clinical trials. For example, in 2002 we completed analysis of a Phase 2b clinical trial of ABX-IL8 in psoriasis, concluded that the results did not warrant continued development in psoriasis and decided not to proceed with studies in other disease indications. Similarly, in February 2003, we completed a preliminary analysis of the results from the Phase 2/3 clinical trial of ABX-CBL and concluded that the study did not meet its primary endpoint. Therefore, we and our co-developer, SangStat (now a subsidiary of Genzyme Corporation) do not plan any further development of ABX-CBL. Failures of clinical trials of any product candidate could delay the development of other product candidates or hinder our ability to obtain additional financing. In addition, failures in our clinical trials can lead to additional research and development expenses. Any delays in, or termination of, our clinical trials could impede our ability to commercialize our product candidates and materially harm our business, financial condition and results of operations.

Success in early clinical trials may not be indicative of results obtained in subsequent trials.

Results from our early stage clinical trials and those of our collaborators are based on a limited number of patients and may, upon review, be revised or negated by authorities or by later stage clinical trials. Historically, the results from preclinical testing and early clinical trials have often not been predictive of results obtained in later clinical trials. A number of new drugs and biologics have shown promising results in clinical trials, but subsequently failed to establish sufficient safety and efficacy data to obtain necessary regulatory approvals. Data obtained from preclinical and clinical activities are susceptible to varying interpretations, which may delay, limit or prevent regulatory approval. In addition, we may encounter regulatory delays or rejections as a result of many factors, including: changes in regulatory policy during the period of product development; delays in obtaining regulatory approvals to commence a study; lack of efficacy during clinical trials; or unforeseen safety issues.

Our own ability to manufacture is uncertain, which may make it more difficult for us to develop and sell our products.

We have limited experience manufacturing antibody therapeutic product candidates in our manufacturing facility. We intend to use our manufacturing facility for the manufacture of product candidates for clinical trials and to support the potential early commercial launch of a limited number of products, in each case, in compliance with FDA and European good manufacturing practices. In May 2000, we signed a long-term lease for the building that contains this manufacturing facility. Construction has been completed and portions of the facility are operational and validated. In October 2003, following an inspection by the California State Department of Health Services, we received a State Drug Manufacturing License. The license permits us to manufacture and ship clinical material from our manufacturing facility. The total cost of the facility was approximately $150 million. The costs of completing validation of this facility, making the remaining portions of the facility operational and qualifying the facility for regulatory compliance may be higher than expected. We currently have excess production services capacity and this condition may persist for an extended period. However, if the commercial launch of one or more of our product candidates proves successful, we will likely experience capacity shortages and may need to use one or more third-party facilities to produce these products in sufficient quantities.

The process of manufacturing antibody therapeutic products is complex. While the managers of the facility have gained extensive manufacturing experience in prior positions with other companies, we

have limited experience in the clinical or commercial scale manufacturing of our existing product candidates, or any other antibody therapeutic products, in our facility. We will need to hire, train and retain additional qualified manufacturing, quality control and quality assurance personnel. Also, we will need to manufacture such antibody therapeutic products in a facility and by an appropriately validated process that comply with FDA, European and other regulations. Our manufacturing operations will be subject to ongoing, periodic unannounced inspection by the FDA and state agencies to ensure compliance with good manufacturing practices. If we are unable to manufacture product or product candidates in accordance with FDA and European good manufacturing practices we may not be able to obtain regulatory approval for our products and to supply our clinical trial needs. Any significant manufacturing changes for the production of our product candidates could result in delays in development or regulatory approval or in the reduction or interruption of commercial sales of our product candidates. Our inability to maintain our manufacturing operations in compliance with applicable regulations within our planned time and cost parameters could materially harm our business, financial condition and results of operations.

We also may encounter problems with the following:

- production yields;
- quality control and assurance;
- availability of qualified personnel;
- availability of raw materials;
- adequate training of new and existing personnel;
- on-going compliance with our standard operating procedures;
- on-going compliance with FDA regulations;
- production costs; and
- development of advanced manufacturing techniques and process controls.

In addition, the FDA and other regulatory authorities will require us to register any manufacturing facilities in which our antibody therapeutic products are manufactured. These facilities will be subject to periodic and unannounced inspections to confirm compliance with FDA good manufacturing practices or other equivalent regulations. The FDA or foreign regulatory bodies will not grant pre-market approval of our product candidates, including panitumumab, if our facilities cannot pass a pre-license inspection. Therefore, both the filing and approval of a BLA for panitumumab could be delayed if we are unable to meet the relevant pre-license requirements and or if our facilities do not pass a pre-license inspection. In complying with these regulations and foreign regulatory requirements, we will be obligated to expend time, money and effort in production, record keeping and quality control in an effort to ensure that our product candidates meet applicable specifications and other requirements. Our failure to maintain regulatory compliance would materially harm our business, financial condition and results of operations.

We may rely on third-party manufacturers, and we may have difficulty conducting clinical trials or commercializing product candidates if a manufacturer does not perform in accordance with our expectations.

Previously, we relied on contract manufacturers to produce candidates under good manufacturing practice regulations for use in our clinical trials. While we have established our own manufacturing facility, we cannot assure you that we will be able to qualify this facility for compliance with FDA and European good manufacturing practices or manufacture sufficient quantities of our product candidates

for clinical trials or a potential early commercial launch. We continually evaluate our options for commercial production of our product candidates, including third-party manufacturers.

Third-party manufacturers may encounter difficulties in scaling up production, including problems involving production yields, quality control and assurance, shortage of qualified personnel, shortage of capacity, compliance with FDA and other applicable regulations, production costs, and development of advanced manufacturing techniques and process controls. They may not perform as agreed or may not remain in the contract manufacturing business for the time required by us to successfully produce and market our product candidates. Also, third-party manufacturers may have difficulty maintaining compliance with FDA good manufacturing practices or equivalent regulations, or having their facilities pass a pre-license inspection. Any failure of third-party manufacturers to deliver the required quantities of our product candidates for clinical use on a timely basis and at commercially reasonable prices, and our failure to find replacement manufacturers or successfully implement our own manufacturing capabilities, would materially harm our business, financial condition and results of operations.

The successful growth of revenues from our manufacturing services depends to a large extent on our ability to find third parties who agree to use our services and our ability to provide those services successfully.

We intend to enhance our contract revenues by entering into agreements to provide antibody production services to third parties. Potential third parties include our existing collaborators, as well as other pharmaceutical and biotechnology companies, technology companies, academic institutions and other entities. We must enter into these agreements to successfully develop this aspect of our business. To date, we have entered into only a few production services agreements and we cannot assure you that we will be able to enter into additional agreements.

We may not be able to secure manufacturing agreements on favorable terms. If we do obtain such agreements, we may encounter difficulties in performing as agreed. We may encounter difficulties in scaling up production, including problems involving production yields, quality control and assurance, shortage of qualified personnel, training of personnel, compliance with FDA good manufacturing practices and other applicable regulations, production costs, and development of advanced manufacturing techniques and process controls. The failure to deliver required quantities of product on a timely basis and at commercially reasonable prices could materially harm our business, financial condition and results of operations.

The successful growth of our business depends to a large extent on our ability to find third-party collaborators to develop and commercialize many of our product candidates.

Our strategy for the development and commercialization of antibody therapeutic products depends, in large part, upon the formation of collaboration agreements with third parties. Potential third parties include pharmaceutical and biotechnology companies, technology companies, academic institutions and other entities. We must enter into these agreements to successfully develop and commercialize product candidates. These agreements are necessary in order for us to:

- access proprietary antigens for which we can generate fully human antibody products;
- fund research, preclinical development, clinical trials and manufacturing;
- seek and obtain regulatory approvals; and
- successfully commercialize existing and future product candidates.

Our ability to continue our current collaborations and to enter into additional third party collaborations is dependent in large part on our ability to successfully demonstrate that our XenoMouse technology is an attractive method of developing antibody therapeutic products. We have generated only a limited number of fully human antibody therapeutic product candidates pursuant to

our collaboration agreements that have advanced to the clinical stage. Our failure to maintain our existing collaboration agreements or to enter into additional agreements could materially harm our business, financial condition and results of operations.

Our dependence on licensing, collaboration, manufacturing and other agreements with third parties subjects us to a number of risks. These agreements may not be on terms that prove favorable to us, and we typically afford our collaborators significant discretion in electing whether to pursue any of the planned activities. Licensing and other contractual arrangements may require us to relinquish our rights to certain of our technologies, products or marketing territories. To the extent we agree to work exclusively with one collaborator in a given therapeutic area, our opportunities to collaborate with other entities could be curtailed. For example, our collaboration with AstraZeneca for the identification and development of therapeutic antibodies in oncology contains exclusivity provisions that significantly restrict our ability to enter into arrangements with third parties in the field of oncology as well as our ability to conduct research and development activities in that field. To the extent that our collaboration with AstraZeneca is not successful, our ability to develop antibodies for use in oncology applications through other collaborations will be severely curtailed. Our collaboration with AstraZeneca also limits our ability to develop such antibodies through our own independent development.

We cannot control the amount or timing of resources our collaborators may devote to a collaboration, and collaborators may not perform their obligations as expected. Additionally, business combinations or significant changes in a collaborator's business strategy may adversely affect a collaborator's willingness or ability to complete its obligations under the arrangement. Even if we fulfill our obligations under an agreement, typically our collaborators can terminate the agreement at any time following proper written notice. The termination or breach of agreements by our collaborators, or the failure of our collaborators to complete their obligations in a timely manner, could materially harm our business, financial condition and results of operations. If we are not able to establish further collaboration agreements or any or all of our existing agreements are terminated, we may be required to seek new collaborators or to undertake product development and commercialization at our own expense. Such an undertaking may:

- limit the number of product candidates that we will be able to develop and reduce the likelihood of successful product introduction;
- significantly increase our capital requirements; and
- place additional strain on our management's time.

Existing or potential collaborators may pursue alternative technologies, including those of our competitors, or enter into other transactions that could make a collaboration with us less attractive to them. For example, if an existing collaborator purchases a company that is one of our competitors, that company could be less willing to continue its collaboration with us. In addition, a company that has a strategy of purchasing companies with attractive technologies might have less incentive to enter into a collaboration agreement with us. Moreover, disputes may arise with respect to the ownership of rights to any technology or products developed with any current or future collaborator. Lengthy negotiations with potential new collaborators or disagreements between us and our collaborators may lead to delays in or termination of the research, development or commercialization of product candidates or result in time-consuming and expensive litigation or arbitration. The decision by our collaborators to pursue alternative technologies or the failure of our collaborators to develop or commercialize successfully any product candidate to which they have obtained rights from us could materially harm our business, financial condition and results of operations.

We are subject to extensive government regulation, which will require us to spend significant amounts of money, and we may not be able to obtain regulatory approvals, which are required for us to conduct clinical testing and commercialize our products.

Our product candidates under development are subject to extensive and rigorous domestic government regulation. The FDA regulates, among other things, the development, testing, manufacture, safety, efficacy, record-keeping, labeling, storage, approval, advertising, promotion, sale and distribution of biopharmaceutical products. If we market our products abroad, they will also be subject to extensive regulation by foreign governments. Neither the FDA nor any other regulatory agency has approved any of our product candidates for sale in the United States or any foreign market. The regulatory review and approval process, which includes preclinical studies and clinical trials of each product candidate, is lengthy, expensive and uncertain. The recent withdrawal of certain approved products from the market may lead to longer review periods by the FDA, particularly for product candidates being reviewed under an accelerated approval process, or may result in requests for more extensive trials or data.

Securing FDA approval requires the submission of extensive preclinical and clinical data, manufacturing data and supporting information to the FDA for each indication to establish the product candidate's safety and efficacy. The generation of data supporting the approval process takes many years, requires the expenditure of substantial resources, and may involve post-marketing surveillance and requirements for post-marketing studies. As we conduct clinical trials for a given product candidate, we may decide or the FDA may require us to make changes in our plans and protocols. Such changes may relate to, for example, changes in the standard of care for a particular disease indication, comparability of efficacy and toxicity of materials where a change in materials is proposed, or competitive developments foreclosing the availability of expedited approval procedures. We may be required to support proposed changes with additional preclinical or clinical testing, which could delay the expected time line for concluding clinical trials. The approval of a product candidate may depend on the acceptability to the FDA of data from clinical trials conducted outside the United States. Regulatory requirements are subject to frequent change. Delays in obtaining regulatory approvals may:

- adversely affect the successful commercialization of any drugs that we or our customers develop;
- impose costly procedures on us or our customers;
- diminish any competitive advantages that we or our customers may attain; and
- adversely affect our receipt of revenues or royalties.

Our product candidates may not be approved or may be approved with limitations or for indications that differ from those we initially target. Even if marketing approval from the FDA is received, the FDA may impose post-marketing requirements, such as:

- labeling and advertising requirements, restrictions or limitations, such as the inclusion of warnings, precautions, contra-indications or use limitations that could have a material impact on the future profitability of our product candidates;
- testing and surveillance to monitor our future products and their continued compliance with regulatory requirements; and
- inspection of products and manufacturing operations and, if any inspection reveals that the product or operation is not in compliance, prohibiting the sale of all products, suspending manufacturing or withdrawing market clearance.

The discovery of previously unknown problems with our future products may result in restrictions of the products, including withdrawal from manufacture. Additionally, certain material changes affecting an approved product such as manufacturing changes or additional labeling claims are subject to further FDA review and approval. The FDA may revisit and change its prior determination with

regard to the safety or efficacy of our products and withdraw any required approvals after we obtain them. Even prior to any formal regulatory action requiring labeling changes or affecting manufacturing, we could voluntarily decide to cease the distribution and sale or recall any of our future products if concerns about their safety and efficacy develop.

In their regulation of advertising, the FDA and the Federal Trade Commission ("FTC") may issue correspondence alleging that particular advertising or promotional practices are false, misleading or deceptive. The FDA or FTC may impose a wide array of sanctions on companies for such advertising practices. Additionally, physicians may prescribe pharmaceutical or biologic products for uses that are not described in a product's labeling or differ from those tested by us and approved by the FDA. While such "off-label" uses are common and the FDA does not regulate physicians' choice of treatments, the FDA does restrict a manufacturer's communications on the subject of "off-label" use. Companies cannot promote FDA-approved pharmaceutical or biologic products for off-label uses. If our advertising or promotional activities fail to comply with the FDA's or FTC's regulations or guidelines, we may be subject to warnings from, or enforcement action by, the FDA or FTC.

If we fail to comply with applicable FDA and other regulatory requirements at any stage during the regulatory process, we or our third-party manufacturers may be subject to sanctions, including:

- delays;
- warning letters;
- fines;
- clinical holds;
- product recalls or seizures;
- changes to advertising;
- injunctions;
- refusal of the FDA to review pending market approval applications or supplements to approval applications;
- total or partial suspension of product manufacturing, distribution, marketing and sales;
- civil penalties;
- withdrawals of previously approved marketing applications; and
- criminal prosecutions.

In many instances we expect to rely on our customers and co-developers to file INDs and generally direct the regulatory approval process for products derived from our technologies. These customers and co-developers may not be able to or may choose not to conduct clinical testing or obtain necessary approvals from the FDA or other regulatory authorities for any product candidates. If they fail to obtain required governmental approvals, we will experience delays in or be precluded from marketing or realizing the commercial benefits from the marketing of products derived from our technologies. In addition, our failure to obtain the required approvals would preclude the commercial use of our products. Any such delays and limitations may materially harm our business, financial condition and results of operations.

If we are unable to manufacture our product candidates in compliance with current good manufacturing practices requirements, we will not be able to commercialize our product candidates.

We are required to comply with the applicable FDA current good manufacturing practice, or "cGMP" regulations and other regulatory requirements. Good manufacturing practice regulations

include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation. Manufacturing facilities, including our facility, must pass a pre-license inspection by the FDA before initiating commercial manufacturing of any product. The FDA enforces post-marketing regulatory requirements such as cGMP requirements, through periodic unannounced inspections. We do not know whether we will pass any future FDA inspections. Failure to pass an inspection could disrupt, delay or shut down our manufacturing operations. In addition, cGMP requirements are constantly evolving and new or different requirements may apply in the future. Manufacturing facilities in California, including our facility, are also subject to the licensing requirements of and inspection by the State of California Department of Health Services. In October 2003, following an inspection, we received a Drug Manufacturing License from the State of California. The license, which must be renewed annually, permits us to manufacture and ship clinical material. We are responsible for manufacturing clinical and, for the first five years after launch, commercial supplies for panitumumab with Amgen's support and assistance. We may not be able to comply with applicable cGMP requirements and other regulatory requirements. Our failure to comply with these requirements could delay or prevent the approval of our product candidates and would materially harm our business, financial condition and results of operations.

If our products do not gain market acceptance among the medical community, our revenues would greatly decline and might not be sufficient to support our operations.

Our product candidates may not gain market acceptance among physicians, patients, third-party payors and the medical community. We may not achieve market acceptance even if clinical trials demonstrate safety and efficacy, and the necessary regulatory and reimbursement approvals are obtained. The degree of market acceptance of any product candidates that we develop will depend on a number of factors, including:

- establishment and demonstration of clinical efficacy and safety;
- cost-effectiveness of our product candidates;
- their potential advantage over alternative treatment methods;
- reimbursement policies of government and third-party payors; and
- marketing and distribution support for our product candidates, including the efforts of our collaborators where they have marketing and distribution responsibilities.

Physicians will not recommend therapies using our products until such time as clinical data or other factors demonstrate the safety and efficacy of such procedures as compared to conventional drug and other treatments. Even if we establish the clinical safety and efficacy of therapies using our antibody product candidates, physicians may elect not to recommend the therapies for any number of other reasons, including whether the mode of administration of our antibody products is effective for certain indications. Antibody products, including our product candidates as they would be used for certain disease indications, are typically administered by infusion or injection, which requires substantial cost and inconvenience to patients. Our product candidates, if successfully developed, will compete with a number of drugs and therapies manufactured and marketed by major pharmaceutical and other biotechnology companies. Our products may also compete with new products currently under development by others. Physicians, patients, third-party payers and the medical community may not accept or utilize any product candidates that we or our customers develop. The failure of our products to achieve significant market acceptance would materially harm our business, financial condition and results of operations.

We do not have marketing and sales experience, which may require us to rely on others to market and sell our products and may make it more challenging for us to commercialize our product candidates.

Although we have been marketing our XenoMouse technology to potential customers and collaborators for several years, we do not have marketing, sales or distribution experience or capability with respect to our therapeutic product candidates. We intend to enter into arrangements with third parties to market and sell most of our therapeutic product candidates when we commercialize them. For example, pursuant to our amended joint development agreement for panitumumab, Amgen has decision-making authority for development and commercialization activities relating to any products developed under the collaboration, although we have the right to co-promote any products. Should we exercise this right to co-promote, it will take significant resources to develop the appropriate sales capabilities and there can be no assurance that we will be able to do this successfully. We may not be able to enter into additional marketing and sales arrangements with others on acceptable terms, if at all. To the extent that we enter into marketing and sales arrangements with other companies, our revenues, if any, will depend on the efforts of others. These efforts may not be successful. If we are unable to enter into third-party arrangements, we will need to develop a marketing and sales force, which may need to be substantial in size, in order to achieve commercial success for any product candidate approved by the FDA. We may not successfully develop marketing and sales capabilities or have sufficient resources to do so. If we do develop such capabilities, we will compete with other companies that have experienced and well-funded marketing and sales operations. Our failure to enter into successful marketing arrangements with third parties and our inability to conduct such activities ourselves would materially harm our business, financial condition and results of operations.

Risks Related to Intellectual Property

Our ability to protect our intellectual property rights will be critically important to the success of our business, and we may not be able to protect these rights in the United States or abroad.

Our success depends in part on our ability to:

- obtain patents;
- protect trade secrets;
- operate without infringing the proprietary rights of others and defend ourselves from any allegation that we have done so; and
- prevent others from infringing our proprietary rights.

We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary rights are covered by valid and enforceable patents or are effectively maintained as trade secrets. We attempt to protect our proprietary position by filing U.S. and foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development of our business. However, the patent position of biopharmaceutical companies involves complex legal and factual questions, and, therefore, we cannot predict with certainty whether our patent applications will be approved or any resulting patents will be enforced. In addition, third parties may challenge, seek to invalidate or circumvent any of our patents, once they are issued. Thus, any patents that we own or license from third parties may not provide any protection against competitors. Our pending patent applications, those we may file in the future, or those we may license from third parties, may not result in patents being issued. Also, patent rights may not provide us with adequate proprietary protection or competitive advantages against competitors with similar technologies. The laws of certain foreign countries do not protect our intellectual property rights to the same extent as do the laws of the United States.

In addition to patents, we rely on trade secrets and proprietary know-how. We seek protection, in part, through confidentiality and proprietary information agreements. These agreements may not provide meaningful protection for our technology or adequate remedies in the event of unauthorized use or disclosure of confidential and proprietary information, and, in addition, the parties may breach such agreements. Also, our trade secrets may otherwise become known to, or be independently developed by, our competitors. Furthermore, others may independently develop similar technologies or duplicate any technology that we have developed.

We may face challenges from third parties regarding the validity of our patents and proprietary rights, or from third parties asserting that we are infringing their patents or proprietary rights, which could result in litigation that would be costly to defend and could deprive us of valuable rights.

Parties have conducted research for many years in the antibody and transgenic animal fields. The term "transgenic", when applied to an animal, such as a mouse, refers to an animal that has chromosomes into which human genes have been incorporated. This research has resulted in a substantial number of issued patents and an even larger number of pending patent applications. The publication of discoveries in the scientific or patent literature frequently occurs substantially later than the date on which the underlying discoveries were made. Our commercial success depends significantly on our ability to operate without infringing the patents and other proprietary rights of third parties. Our technologies may unintentionally infringe the patents or violate other proprietary rights of third parties. Such infringement or violation may prevent us and our customers from pursuing product development or commercialization. Such a result could materially harm our business, financial condition and results of operations.

Extensive litigation regarding patents and other intellectual property rights has been common in the biotechnology and pharmaceutical industries. The defense and prosecution of intellectual property suits, United States Patent and Trademark Office interference proceedings, and related legal and administrative proceedings in the United States and internationally involve complex legal and factual questions. As a result, such proceedings are costly and time-consuming to pursue and their outcome is uncertain. Litigation may be necessary to:

- enforce patents that we own or license;
- protect trade secrets or know-how that we own or license; or
- determine the enforceability, scope and validity of the proprietary rights of others.

Our involvement in any litigation, interference or other administrative proceedings could cause us to incur substantial expense and could significantly divert the efforts of our technical and management personnel. An adverse determination may subject us to loss of our proprietary position or to significant liabilities, or require us to seek licenses that may not be available from third parties. An adverse determination in a judicial or administrative proceeding, or a failure to obtain necessary licenses, may restrict or prevent us from manufacturing and selling our products, if any. Costs associated with these arrangements may be substantial and may include ongoing royalties. Furthermore, we may not be able to obtain the necessary licenses on satisfactory terms, if at all. These outcomes could materially harm our business, financial condition and results of operations.

Risks Related to Our Industry

We face intense competition and rapid technological change, and if we fail to develop products that keep pace with new technologies and that gain market acceptance, our product candidates or technologies could become obsolete.

The biotechnology and pharmaceutical industries are highly competitive and subject to significant and rapid technological change. We face competition in several different forms. Our antibody

generation activities currently face competition from several companies and technologies. In addition, the product candidates that we or our customers are developing also face competition. Finally, we compete with companies that currently offer antibody production services, and may compete with companies that currently only manufacture their own antibodies but could offer antibody production services to third parties.

We are aware of several pharmaceutical and biotechnology companies that are actively engaged in research and development in areas related to antibody therapy. Many of these companies have commenced clinical trials of antibody therapeutic product candidates or have successfully commercialized antibody therapeutic products for use on their own or in combination therapies. Many of these companies are addressing the same diseases and disease indications as we or our customers are.

We compete with companies that offer the services of generating monoclonal antibodies for antibody-based therapeutics. These competitors have specific expertise or technology related to antibody development and introduce new or modified technologies from time to time.

Many of these companies and institutions, either alone or together with their customers or collaborators, have substantially greater financial resources and larger research and development staffs than we do. In addition, many of these competitors, either alone or together with their customers or collaborators, have significantly greater experience than we do in:

- developing products;
- undertaking preclinical testing and human clinical trials;
- obtaining FDA and other regulatory approvals of products; and
- manufacturing and marketing products.

Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval or commercializing products before we do. If we commence commercial product sales, we will be competing against companies with greater marketing and manufacturing capabilities, areas in which we have limited or no experience.

We also face, and will continue to face, competition from academic institutions, government agencies and research institutions. There are numerous competitors working on products to treat each of the diseases for which we are seeking to develop therapeutic products. In addition, any product candidate that we successfully develop may compete with existing therapies that have long histories of safe and effective use. Competition may also arise from:

- other drug development technologies and methods of preventing or reducing the incidence of disease;
- new small molecules; or
- other classes of therapeutic agents.

Developments by competitors may render our product candidates or technologies obsolete or non-competitive. We face and will continue to face intense competition from other companies for agreements with pharmaceutical and biotechnology companies, for establishing relationships with academic and research institutions, and for licenses to proprietary technology. These competitors, either alone or with their customers, may succeed in developing technologies or products that are more effective than ours.

We also face competition from companies that provide production services. These include contract manufacturers, such as Lonza, Avid Bioservices, Inc., Diosynth Biotechnology, DSM N.V., Cangene Corporation and Goodwin Biotechnology Inc., and other pharmaceutical and biotechnology companies

that manufacture their own product candidates but can make extra capacity available to collaborators and customers, such as Boehringer Ingelheim GmbH, Biogen Idec Inc., ICOS Corporation, Abbott and Novartis AG.

We face uncertainty over reimbursement and healthcare reform, which, if determined adversely to us, could seriously hinder the market acceptance of our products.

In both domestic and foreign markets, sales of our product candidates will depend in part upon the availability of reimbursement from third-party payors, such as government health administration authorities, managed care providers and private health insurers. Third-party payors are increasingly challenging the price and examining the cost effectiveness of medical products and services. In addition, significant uncertainty exists as to the reimbursement status of newly approved healthcare products. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development. In addition, domestic and foreign governments continue to propose and pass legislation designed to reduce the cost of healthcare, which could further limit reimbursement for pharmaceuticals. The failure of government and third-party payors to provide adequate coverage and reimbursement rates for our product candidates could adversely affect the market acceptance of our products. The failure of our products to receive market acceptance would materially harm our business, financial condition and results of operations.

We may experience pressure to lower the prices of any prescription pharmaceutical products we are able to obtain approval for because of new and/or proposed federal legislation.

New federal legislation, enacted in December 2003, has added an outpatient prescription drug benefit to Medicare, effective January 2006. In the interim, Congress has established a discount drug card program for Medicare beneficiaries. Both benefits will be provided primarily through private entities, which will attempt to negotiate price concessions from pharmaceutical manufacturers. These negotiations may increase pressures to lower prices. While the new law specifically prohibits the United States government from interfering in price negotiations between manufacturers and Medicare drug plan sponsors, some members of Congress are pursuing legislation that would permit the United States government to use its enormous purchasing power to demand discounts from pharmaceutical companies, thereby creating de facto price controls on prescription drugs. In addition, the new law contains triggers for Congressional consideration of cost containment measures for Medicare in the event Medicare cost increases exceed a certain level. These cost containment measures could include some sorts of limitations on prescription drug prices. The new legislation also modified the methodology used for reimbursement of physician administered and certain other drugs already covered under Medicare Part B. This new methodology would likely apply to certain of our products if and when commercialized. Experience with new reimbursement methodology is limited, and could be subject to change in the future. Our results of operations could be materially harmed by the different features of the Medicare prescription drug coverage legislation, by the potential effect of such legislation on amounts that private insurers will pay for our products and by other healthcare reforms that may be enacted or adopted in the future.

Other Risks Related to Our Company

The future growth and success of our business will depend on our ability to continue to attract and retain our employees and consultants.

For us to pursue product development, manufacturing, marketing and commercialization plans, we will need to hire additional qualified scientific, manufacturing, quality control, quality assurance, and key management personnel, including a vice president of quality and a vice president of process science. We may also need to hire personnel with expertise in clinical testing, government regulation,

marketing, law and finance. Attracting and retaining qualified personnel will be critical to our success. We may not be able to attract and retain personnel on acceptable terms given the competition for such personnel among biotechnology, pharmaceutical and healthcare companies, universities and non-profit research institutions. The inability to attract and retain qualified personnel could materially harm our business, financial condition and results of operations.

We grant stock options as a method of attracting and retaining employees, to motivate performance and to align the interests of management with those of our stockholders. Due to fluctuations in the trading price of our common stock in recent years, a substantial portion of the stock options held by our employees have an exercise price that is higher than the current trading price of our common stock. We may elect to grant additional stock options at the current lower market price, pay higher cash compensation, or provide some combination of these alternatives to retain and attract qualified employees, but we cannot be sure that any of these actions would be successful. If we issue additional stock options, this would dilute existing stockholders. In addition, the expensing of stock options and other stock-based awards may increase any net losses or decrease any net income recorded in any given period and could affect the price that investors might be willing to pay in the future for shares of our common stock.

As a result of these factors, we may have difficulty attracting and retaining qualified personnel, which could materially harm our business, financial condition and results of operations.

We may experience difficulty in the integration of any future acquisition with the operations of our business.

We may from time to time seek to expand our business through corporate acquisitions. Our acquisition of companies and businesses and expansion of operations, involve risks such as the following:

- the potential inability to identify target companies best suited to our business plan;
- the potential inability to successfully integrate acquired operations and businesses and to realize anticipated synergies, economies of scale or other expected value;
- incurrence of expenses attendant to transactions that may or may not be consummated; and
- difficulties in managing and coordinating operations at multiple venues, which, among other things, could divert our management's attention from other important business matters.

In addition, our past and future acquisitions of companies and businesses and expansion of operations may result in dilutive issuances of equity securities, the incurrence of additional debt, U.S. or foreign tax liabilities, large one-time write-offs and the creation of goodwill or other intangible assets that could result in amortization expense or other charges to expense. For example, we recorded a one-time charge of $17.2 million in the quarter ended June 30, 2004, as a result of our determination that an impairment of our acquired technology in the field of catalytic antibodies had occurred and that the estimated value had declined to zero. This technology was acquired in 2001 through the acquisition of Hesed Biomed, Inc. After assessing the associated patent position and the likelihood of sale or license of the technology to a third party, we further determined that the possibility of generating positive future cash flows from the technology was remote. We continue to evaluate our internal programs and assets. Further changes in our plans or strategy could result in additional one-time charges.

We have implemented a stockholder rights plan and are subject to other anti-takeover provisions, which could deter a party from effecting a takeover of us at a premium to our then-current stock price.

In June 1999, our board of directors adopted a stockholder rights plan, which we amended and restated in November 1999 and May 2002, and amended in October 2003. The stockholder rights plan

and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws may have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, control of us. This could affect the price that certain investors might be willing to pay in the future for our common stock. Certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws allow us to:

- issue preferred stock without any vote or further action by the stockholders;
- eliminate the right of stockholders to act by written consent without a meeting;
- specify procedures for director nominations by stockholders and submission of other proposals for consideration at stockholder meetings; and
- eliminate cumulative voting in the election of directors.

In October 2003, we entered into a collaboration and license agreement with AstraZeneca for the purpose of identifying and developing antibody products for use in oncology therapeutics. The collaboration agreement includes provisions that would allow AstraZeneca to accelerate its selection of target antigens and, in certain situations, terminate the collaboration agreement, or specific programs or activities conducted under it, in the event of a change in control in us, particularly if we were acquired by a competitor of AstraZeneca. In the event of a change in control of us, AstraZeneca could also acquire control over the development programs and various intellectual property rights in respect of antigens that are the subject of the collaboration agreement. This would result in a reduction in the royalties and milestones to be paid by AstraZeneca to us under the collaboration agreement and the release of AstraZeneca from certain exclusivity provisions. In addition, certain exclusivity provisions contained in the collaboration agreement would apply to an acquirer of our company and would restrict the acquirer's ability to operate its business in the oncology field after the acquisition, except with respect to pre-existing development programs. These and other provisions of the collaboration agreement could make our company less attractive to a potential acquirer, particularly an acquirer that conducts or expects to conduct significant operations in the field of oncology therapeutics.

We are also subject to certain provisions of Delaware law which could also delay or make more difficult a merger, tender offer or proxy contest involving us. In particular, Section 203 of the Delaware General Corporation Law prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years unless the transaction meets certain conditions. The stockholder rights plan, the possible issuance of preferred stock, the procedures required for director nominations and stockholder proposals, our collaboration agreement with AstraZeneca and Delaware law could have the effect of delaying, deferring or preventing a change in control of us, including, without limitation, discouraging a proxy contest or making more difficult the acquisition of a substantial block of our common stock. The provisions also could limit the price that investors might be willing to pay in the future for shares of our common stock.

We face product liability risks and may not be able to obtain adequate insurance, and if we are held liable for an uninsured claim or a claim in excess of our insurance limits, our business, financial condition and results of operations may be harmed.

The use of any of our product candidates, or of any products manufactured in our facility, in clinical trials, and the sale of any approved products, may expose us to liability claims resulting from such use or sale. Consumers, healthcare providers, pharmaceutical companies or others selling such products might make claims of this kind. We may experience financial losses in the future due to product liability claims. We have obtained limited product liability insurance coverage for our clinical trials and production services activities, under which the coverage limits are $15.0 million per occurrence and $15.0 million in the aggregate. We may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses. If third parties bring a successful

product liability claim or series of claims against us for uninsured liabilities or in excess of insured liabilities, our business, financial condition and results of operations may be materially harmed.

Our operations involve hazardous materials, and we could be held responsible for any damages caused by such materials.

Our research and manufacturing activities involve the controlled use of hazardous materials. In addition, although we maintain insurance for harm to employees and to our facilities caused by hazardous materials, we do not insure against any other harm (including harm to the environment) caused by the use of hazardous materials on our premises. We cannot eliminate the risk of accidental contamination or injury from these materials. In the event of an accident or environmental discharge, we may be held liable for any resulting damages, which may exceed our financial resources and may materially harm our business, financial condition and results of operations.

We do not intend to pay cash dividends on our common stock.

We intend to retain any future earnings to finance the growth and development of our business and we do not plan to pay cash dividends on our common stock in the foreseeable future.

Our stock price is highly volatile, and you may not be able to sell your shares of our common stock at a price greater than or equal to the price you paid for them.

The market price and trading volume of our common stock are volatile, and we expect such volatility to continue for the foreseeable future. For example, during the period between December 31, 2003 and December 31, 2004, our common stock closed as high as $18.55 per share and as low as $7.77 per share. This may impact your decision to buy or sell our common stock. Factors affecting our stock price include:

- our financial results;
- fluctuations in our operating results;
- announcements of technological innovations or new commercial therapeutic products by us or our competitors;
- published reports by securities analysts;
- developments in our clinical trials and in clinical trials for potentially competitive product candidates;
- government regulation;
- changes in reimbursement policies;
- developments in patent or other proprietary rights;
- announcements that we have entered into new collaboration, licensing or similar arrangements with new collaborators, or amendments of the terms of our existing collaborations;
- developments in our relationship with customers;
- public concern as to the safety and efficacy of our products; and
- general market conditions.

Available Information

Our Internet address is *http://www.abgenix.com*. We make available free of charge on or through our Internet website our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports

on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Other than the information expressly set forth in this annual report, the information contained, or referred to, on our website is not incorporated into this annual report.

Item 2. Properties

We currently lease approximately 516,000 square feet of office, laboratory and manufacturing facilities in Fremont, California and British Columbia, Canada. Our leases expire in the years 2010 through 2015 and each includes an option to extend, other than the leases for our facilities in Canada. We believe that our current facilities are adequate for our needs for the foreseeable future and that, should it be needed, suitable additional space will be available to accommodate expansion of our operations on commercially reasonable terms.

Item 3. Legal Proceedings

We are involved from time to time in ordinary and routine litigation in connection with our business. We do not believe that there is any pending litigation in which we are involved or threatened claim against us that will materially harm, our business, financial condition or results of operations.

Item 4. Submission of Matters to a Vote of Security Holders

No matters were submitted to a vote of our stockholders, either through the solicitation of proxies or otherwise, during the quarter ended December 31, 2004.

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

Price Range of Common Stock

Our common stock trades on the Nasdaq National Market under the symbol "ABGX." The following table lists quarterly information on the price range of our common stock based on the high and low reported closing prices for our common stock as reported on the Nasdaq National Market for the periods indicated below. These prices do not include retail markups, markdowns or commissions. As of February 28, 2005, there were 228 holders of record of our common stock.

	High	Low
Fiscal 2003:		
First Quarter	$ 8.86	$ 4.58
Second Quarter	12.28	7.80
Third Quarter	16.58	10.36
Fourth Quarter	15.05	10.56
Fiscal 2004:		
First Quarter	$16.53	$12.42
Second Quarter	18.55	11.22
Third Quarter	11.36	7.77
Fourth Quarter	10.83	8.25

Item 6. Selected Consolidated Financial Data

	Year Ended December 31,				
	2004	2003	2002	2001	2000
	(in thousands, except per share data)				
Consolidated Statement of Operations Data:					
Revenues:					
Contract revenue	$ 16,070	$ 16,852	$ 19,293	$ 34,064	$ 26,601
Contract manufacturing revenue	1,695	—	—	—	—
Total revenues	17,765	16,852	19,293	34,064	26,601
Operating expenses:					
Cost of goods manufactured	2,227	—	—	—	—
Research and development	124,758	98,159	128,494	96,234	50,137
Manufacturing start-up costs	25,430	72,473	—	—	—
Amortization of intangible assets, related to research and development	6,465	7,190	7,251	8,602	3,992
General and administrative	27,271	30,209	31,625	19,367	8,859
Impairment of intangible assets	17,241	1,443	—	—	—
Restructuring charge	—	—	1,751	—	—
In-process research and development charge	—	—	—	—	5,215
Total operating expenses	203,392	209,474	169,121	124,203	68,203
Loss from operations	(185,627)	(192,622)	(149,828)	(90,139)	(41,602)
Other income (expenses):					
Interest and other income (expense), net	5,382	9,953	20,145	29,542	32,848
Interest expense	(7,233)	(5,784)	(4,830)	(259)	(39)
Impairment of investments	—	(7,892)	(74,385)	—	—
Total other income (expenses)	(1,851)	(3,723)	(59,070)	29,283	32,809
Loss before income tax expense	(187,478)	(196,345)	(208,898)	(60,856)	(8,793)
Foreign income tax expense	—	84	—	—	—
Net loss	$(187,478)	$(196,429)	$(208,898)	$(60,856)	$ (8,793)
Basic and diluted net loss per share	$ (2.11)	$ (2.23)	$ (2.39)	$ (0.71)	$ (0.11)
Shares used in computing basic and diluted net loss per share	88,710	87,930	87,237	86,111	80,076

	December 31,				
	2004	2003	2002	2001	2000
			(in thousands)		
Consolidated Balance Sheet Data*:					
Cash, cash equivalents and marketable securities	$ 416,329	$ 347,763	$ 396,549	$ 493,733	$692,884
Working capital	400,567	304,292	381,790	470,810	621,481
Total assets	812,718	780,193	841,997	837,876	936,800
Long-term debt	489,256	200,000	200,000	—	—
Redeemable convertible preferred stock	49,869	99,737	—	—	—
Accumulated deficit	(752,254)	(564,776)	(368,347)	(159,449)	(98,593)
Total stockholders' equity	231,125	413,016	601,639	790,970	839,675

* Certain prior-year balances have been reclassified to conform to the current-year presentation.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements based upon current expectations that involve risks and uncertainties. When used in this Annual Report on Form 10-K, the words "intend," "anticipate," "believe," "estimate," "plan" and "expect" and similar expressions as they relate to Abgenix are included to identify forward-looking statements. Our actual results and the timing of certain events could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth below and under "Risk Factors that Might Affect Future Results" set forth in Item 1 of Part I of this Annual Report on Form 10-K and elsewhere in this Annual Report on Form 10-K.

Overview

The following Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to help the reader understand our company.

Our Business

We are a biopharmaceutical company that is focused on the discovery, development and manufacture of human therapeutic antibodies for the treatment of a variety of diseases. We intend to use our proprietary technologies to build a diversified product portfolio that we expect to develop and commercialize internally or through joint development and commercialization arrangements with pharmaceutical and biotechnologies companies.

We are co-developing our most advanced proprietary product candidate, panitumumab, with Amgen. Panitumumab is in pivotal trials, and we have one other product candidate, ABX-PTH, in early stage clinical trials. In addition, we have entered into a variety of contractual arrangements with pharmaceutical, biotechnology and genomics companies involving our technologies. We use our closely integrated process sciences and manufacturing capabilities for the manufacture of our own proprietary product candidates and also offer these services to our collaborators and others.

We have entered into joint development arrangements with companies such as Chugai, U3 Pharma and Dendreon, and intend to enter into additional joint development agreements. We generally expect to self-fund preclinical and clinical activities to determine preliminary safety and efficacy before deciding whether to conduct further product development internally or enter into joint development and commercialization agreements. Our strategy is designed to diversify the risks associated with our research and development spending and to continue to focus our activities on product development and commercialization.

We also have a broad collaboration in oncology with AstraZeneca UK Limited. Pursuant to this collaboration we are providing preclinical and clinical research support and process development for up to 36 product candidates to be developed by AstraZeneca, and have the opportunity to co-develop up to 18 additional products with AstraZeneca.

Our Financial Position and Liquidity

We derive our revenues from our technology out-licensing contracts, our proprietary product development agreements, our target sourcing contracts and our production services contracts. Prior to the potential marketing approval of panitumumab, we expect that substantially all of our revenues for the foreseeable future will result from payments under these and similar arrangements and that payments we receive under these arrangements will continue to be subject to significant fluctuation in both timing and amount.

We have incurred and expect to continue to incur substantial expenses in connection with our product development activities, both under contractual arrangements with third parties and related to

our independent research and development efforts. Regulatory and business factors will require us to expend substantial funds in the course of completing required additional development, preclinical testing and clinical trials of, and attaining regulatory approvals for, product candidates. The amounts of the expenditures that will be necessary to execute our business plan are subject to numerous uncertainties that may adversely affect our liquidity and capital resources.

We have incurred net losses since we were organized as an independent company, including a net loss of $187.5 million in 2004. We expect to incur additional losses for the foreseeable future as a result of our research and development costs and manufacturing start-up costs, including costs associated with conducting preclinical development and clinical trials, and charges related to purchases of technology or other assets. We expect that the amount of our operating losses will fluctuate significantly from quarter to quarter.

At December 31, 2004, we had cash, cash equivalents and marketable securities of $416.3 million, which included proceeds from the issuance of the convertible senior notes due 2011, net of initial purchasers' discount and commission, in December 2004. The amounts of the expenditures that will be necessary to execute our business plan are subject to numerous uncertainties that may adversely affect our liquidity and capital resources to a significant extent. We plan to continue to make significant expenditures to staff and operate our own manufacturing facility and support our research and development activities, including preclinical product development and clinical trials. We expect that these activities may increase our operating expenses over the next few years in comparison to prior periods. We may also repurchase a portion of our outstanding convertible subordinated notes due 2007.

Results of Operations

Years Ended December 31, 2004, 2003 and 2002

Contract Revenues

Contract revenues totaled $16.1 million, $16.8 million and $19.3 million in 2004, 2003 and 2002, respectively. Because contract revenues depend to a large extent on the success or failure of research and development efforts undertaken by our collaborators and licensees, our year-to-year contract revenues can fluctuate significantly and are inherently difficult to predict.

The primary components of contract revenues for all periods were as follows:

- Technology Licensing

We recognized a total of $14.4 million, $11.8 million and $14.1 million in 2004, 2003 and 2002, respectively, from licensing our proprietary technologies. Revenues consisted primarily of the following:

- Chugai—In 2003, we recognized $3.1 million under an agreement with Chugai in which we exclusively licensed to Chugai rights under patent applications and patents held by us related to methods of treatment of certain diseases with an antibody.
- Celltech R&D Ltd.—In 2002, we recognized $8.4 million under an agreement with Celltech in which we granted a license of our SLAM technology. The payments we received represented a research license fee and service fees for the transfer of technology, net of shared closing costs. We recognized these fees in the first quarter of 2002, during which we fulfilled our obligations to provide Celltech with the applicable protocols, technical information, and training to enable Celltech to effectively utilize the SLAM technology.
- Additionally, in 2004, 2003 and 2002 we recognized various fees, such as research license and service fees, research milestone payments, product license fees, product development and option fees, under agreements related to the licensing of our XenoMouse technology.

These revenues were generated from several collaborators, but were primarily from Pfizer, Amgen, Chiron and CuraGen.

- Proprietary Product Development

  We recognized a total of $0.3 million, $3.8 million and $5.2 million in 2004, 2003 and 2002, respectively. In each of these periods, we recognized revenue for development reimbursement pursuant to our joint development and commercialization agreements for the development of the panitumumab program. In addition to the panitumumab program, 2003 and 2002 also included the development of ABX-CBL. In 2004, 2003 and 2002, these revenues consisted of reimbursement of development costs. The revenue decreased in 2004 as compared to 2003 primarily due to a decrease in reimbursement of development costs as our collaborator's cost exceeded our cost for the development of the panitumumab program. The decrease in 2003 as compared to 2002 was primarily due to the discontinuation of the development of the ABX-CBL program in 2003, which resulted in the reduction of development costs related to reimbursements.

- Non-manufacturing Production Services

  We recognized a total of $1.4 million and $1.2 million in 2004 and 2003, respectively, for production services. In both 2004 and 2003, these revenues consisted primarily of process sciences services and were generated from one of our product services agreements. In 2002 we did not recognize any revenues from our production services.

Contract Manufacturing Revenues

Contract manufacturing revenues totaled $1.7 million in 2004. These revenues consisted primarily of manufacturing services for the manufacture of an antibody product for a customer under a production services agreement. In 2003 and 2002, we did not recognize any revenues from manufacturing services.

Cost of Goods Manufactured

Cost of goods manufactured was $2.2 million in 2004. Cost of goods manufactured included material, direct labor, outside testing and overhead costs associated with manufacturing an antibody product for a customer under a production services agreement. In 2003 and 2002, we did not have any cost of goods manufactured.

Research and Development Expenses

Research and development expenses increased to $124.8 million in 2004 from $98.2 million in 2003 and decreased from $128.5 million in 2002. The major components of research and development expenses for 2004, 2003 and 2002 were as follows:

	December 31,		
	2004	2003	2002
	(in thousands)		
Product development	$ 88,873	$62,236	$ 85,381
Research	33,423	32,557	38,280
In-licensing	2,462	3,366	4,833
Total research and development costs	$124,758	$98,159	$128,494

Product development costs include costs of preclinical development, cell line development and conducting clinical trials for our proprietary product candidates. Additionally, starting in 2003, product

development includes costs related to cell line development activities we perform under our production services contracts. The primary components of product development include the costs of Abgenix personnel, drug supply costs, research fees charged by outside contractors, co-development costs, and facility expenses including depreciation. Our product development costs increased in 2004 as compared to 2003, primarily due to a significant increase in the development costs for the panitumumab program. To a lesser extent, the increase was due to costs related to new preclinical and clinical product candidates including ABX-PTH. In 2003, our product development costs decreased in comparison 2003 to 2002. Development costs for the panitumumab program increased significantly in 2003; however, offsetting this increase were decreases that were primarily related to discontinuing the development of ABX-IL8 and ABX-CBL, as well as decreases in costs for ABX-PTH, ABX-MA1 and other pipeline product candidates. Product development costs can vary significantly from period to period depending on the progress of the development activities in the period. Overall, we expect costs associated with product development to increase in 2005 as we and our co-development partner Amgen continue to focus our development efforts on the panitumumab program. In addition, we expect product development costs related to ABX-PTH to increase in 2005.

Research costs include costs associated with research, and testing of antibodies we generate, whether for ourselves or for our customers, prior to the development stage which begins with the commencement of preclinical activities. Research costs also include the costs of research relating to proprietary technologies, including enhancements to those technologies. The primary components of research costs include the costs of Abgenix personnel, facilities, including depreciation, and lab supplies. Our research costs generally remained at the same level in 2004 as compared to 2003. Beginning in October of 2002, we implemented a restructuring of our operations and reduced many of our research and testing activities including those related to new target validation. As a result, our research costs decreased in 2003 as compared to 2002. We expect research costs to increase in 2005 due to increased research activities related to our proprietary and partner pipelines.

In-licensing costs include costs to acquire licenses to develop and commercialize various technologies and product candidates. In-licensing costs decreased in 2004 and 2003 primarily due to a reduction in costs associated with licensing charges from arrangements with research institutions and others. We expect in-licensing costs to decrease in 2005.

Major components of research and development costs for 2004 and 2003 were as follows:

- Costs of Abgenix Personnel—Personnel costs primarily include salary, benefits, recruiting and relocation costs. Costs of Abgenix personnel to support research and development activities increased 29% in 2004 from 2003 and decreased 21% in 2003 from 2002. The increase in 2004 was primarily due to increased personnel costs for process sciences and preclinical research and increased use of our manufacturing facility for development activities, including process validation for the manufacture of our conformance lots. The decrease in 2003 was attributed to our restructuring plan implemented in October 2002, which resulted in an approximately 15% reduction in total employees overall. We were able to support a reduced workforce in 2003 due to discontinuing the development of ABX-IL8 and ABX-CBL and because our co-development partner has taken over responsibility for many new development activities for the development of panitumumab.
- Consulting and Outside Contractors—Costs of consulting and outside contractors to support research and development activities decreased 5% in 2004 from 2003 and decreased 68% in 2003 from 2002. The decrease in 2004 was primarily due to a reduction of activities performed by outside contractors related to toxicology studies, and the decrease was offset in part by an increase in clinical trial activities for panitumumab. The decrease in 2003 was primarily due to a reduction of activities performed by outside contractors related to the development of cell lines for our product candidates.

- Clinical Research Fees—Clinical research fees including clinical investigator site fees, monitoring costs, and data management costs, increased 54% in 2004 from 2003 and decreased 10% in 2003 from 2002. The increase in 2004 was primarily due to increased clinical trial activities for panitumumab and ABX-PTH. The decrease in 2003 was primarily due to the decrease in clinical trials being conducted for ABX-IL8 and ABX-CBL, partially offset by increased clinical trial activities for panitumumab.
- Drug Supply Costs—Drug supply costs decreased 26% in 2004 from 2003 and decreased 15% in 2003 from 2002. The decrease in 2004 was primarily due to the timing of manufacturing the conformance lots. The decrease in 2003 was primarily due to discontinuing the clinical trials related to ABX-IL8 and ABX-CBL.
- Co-development Costs—Co-development costs, which primarily consist of reimbursement to Amgen for our share of panitumumab development costs, increased 105% in 2004 from 2003 and increased 226% in 2003 from 2002. The increases in both years were primarily related to cost sharing for activities performed by Amgen associated with the co-development of panitumumab.
- Facility and Other Overhead Related Costs—These costs, which primarily consist of depreciation, rent and other facility related costs, increased 56% in 2004 from 2003 and decreased 20% in 2003 from 2002. The increase in 2004 was primarily related to increased use of our manufacturing facility for development activities, including process validation activities to the manufacture of panitumumab conformance lots. The decrease in 2003 was primarily related to facility expenses charged to manufacturing start-up costs in 2003 as we began manufacturing antibody therapeutic candidates in portions of our manufacturing facility in the second quarter of 2003.

Manufacturing Start-up Costs

Manufacturing start-costs were $25.4 million and $72.5 million in 2004 and 2003, respectively. We began manufacturing antibody therapeutic candidates in portions of our manufacturing facility in the second quarter of 2003, at which time we began to depreciate the portions of the facility that were placed into service. Manufacturing start-up costs include certain costs associated with our new manufacturing facility, including depreciation, outside contractor costs and personnel costs for activities such as quality assurance and quality control. The primary component of this cost in 2003 was a fee of approximately $28.0 million for the negotiated cancellation of a manufacturing supply agreement with an outside contractor, Lonza Biologics plc. The manufacturing agreement was for a production suite held exclusively for us, which we were not using. In addition to the absence of the cancellation fee in 2004, the decrease in 2004 as compared to 2003 was primarily due to the increased use of our manufacturing facility for the manufacture of panitumumab and other development activities, including process validation for the manufacture of panitumumab conformance lots.

Amortization of Identified Intangible Assets

Our identified intangible assets consist primarily of existing technology (including patents and certain royalty rights) we acquired through the acquisitions of Hesed Biomed in 2001, Abgenix Biopharma and IntraImmune in 2000, and JT America's interest in Xenotech in 1999. Amortization of intangible assets totaled $6.5 million, $7.2 million and $7.3 million in 2004, 2003 and 2002, respectively. Beginning January 1, 2002, upon our adoption of Statement of Financial Accounting Standards (SFAS) No. 141, "Business Combinations" and No. 142, "Goodwill and Other Intangible Assets," we no longer amortize goodwill. Instead, we will perform impairment tests annually, or earlier if indications of impairment exist. We conducted an initial test for impairment of our goodwill in 2002 and an annual impairment test in 2004, 2003 and 2002, and concluded that no impairment charge was required. All

other intangible assets will continue to be amortized over their estimated useful lives. The decrease in amortization in 2004 from 2003 was due to a reduction in intangible assets due to the write-off in the second quarter of 2004 of the remaining value of the catalytic antibody technology that we acquired through the acquisition of Hesed Biomed Inc.

General and Administrative Expenses

General and administrative expenses include compensation, professional services, consulting and other expenses related to information systems, legal, finance, and an allocation of facility costs. General and administrative expenses totaled $27.3 million in 2004, $30.2 million in 2003 and $31.6 million in 2002. The decrease in 2004 as compared to 2003 was primarily due to a charge of $2.1 million in 2003 related to the sublease of one of our facilities. The decrease in 2003 as compared to 2002 was primarily due to a decrease in consulting services related to the implementation of our new information systems in 2002 and in legal costs, partially offset by a charge of $2.1 million in 2003 due to the sublease of one of our facilities for less than our obligation under the lease.

Impairment of Intangible Assets

In June 2004, we determined that an impairment of the Company's acquired technology in the field of catalytic antibodies had occurred and that the estimated value had declined to zero. This technology, which includes intellectual property, was acquired in 2001 through the acquisition of Hesed Biomed, Inc. We decided to focus our resources on other research and development projects and to wind down our catalytic antibody program. Additionally, after assessing the associated patent position and the likelihood of sale or license of the technology to a third party, we further determined in 2004 that the possibility of generating positive future cash flows from the technology was remote. As a result of this determination, we recorded an impairment charge of $17.2 million in 2004.

In 2003, we decided to discontinue the development of anti-properdin antibodies. As a result, we recorded an impairment charge of $1.4 million for previously capitalized costs related to licenses and research funding for the development of therapeutic antibodies to the complement protein properdin, which we licensed from Gliatech, Inc.

Restructuring Charge

In October 2002, we announced a restructuring plan, which consisted primarily of a 15% reduction in employees. A restructuring charge of $1.8 million was recorded in 2002 to account for severance, medical and other benefits associated with this restructuring. Of the $1.8 million, $0.7 million was paid in 2002 and the remainder in 2003.

Interest and Other Income (Expense), Net

Interest and other income (expense), net, consists primarily of interest from cash, cash equivalents and marketable securities and loss from early extinguishment of debt. Interest and other income (expense), net, totaled $5.4 million in 2004, $10.0 million in 2003 and $20.1 million in 2002. The decrease in 2004 as compared to 2003 was due to the $1.0 million of loss from early extinguishment of debt related to the repurchase of $86.3 million of our convertible subordinated notes due 2007 and the result of lower average cash, marketable securities and cash equivalent balances. The decrease in 2003 as compared to 2002 was primarily due to lower interest rates and lower average investment balances.

Interest Expense

Interest expense is primarily related to interest and amortization of issuance costs on our convertible subordinated notes due 2007. Interest expense totaled $7.2 million in 2004, $5.8 million in 2003 and $4.8 million in 2002. The increase in 2004 as compared to 2003 was primarily due to the

interest related to the credit facility with Amgen and a decrease in the amount of capitalized interest. The interest expense increase in 2003 as compared to 2002 was primarily due to the $200.0 million of convertible notes due 2007 we issued in March 2002, which accrue interest at an annual rate of 3.5%, payable semi-annually. Interest expense in the amount of $1.7 million, $2.5 million and $1.9 million related to the convertible notes was capitalized in 2004, 2003 and 2002, respectively. Capitalized interest decreased in 2004 and the third and fourth quarters of 2003 because we placed into service a portion of our manufacturing facility in 2003 when we began manufacturing antibody therapeutic candidates in that portion of the facility. In December 2004, we issued $300.0 million of convertible senior notes due 2011, which accrue interest at an annual rate of 1.75% payable semi-annually, and used a portion of the proceeds to repurchase $86.3 million of the outstanding notes due 2007. In 2005, we expect to pay and record expense of approximately $9.2 million in interest related to our convertible notes assuming we do not repurchase or otherwise retire any additional notes due 2007. Additionally, we will record interest at 12% on the amounts we draw on our credit facility with Amgen until we repay the balance in full. For the year ended December 31, 2004, the amount of interest expense recorded under the Amgen arrangement was $517,000. The amount of any such advances, plus interest, may be repaid out of profits resulting from future product sales; however, we are generally not obligated to repay any portion of the outstanding balance if panitumumab does not reach commercialization.

Impairment of Investments

In 2001, we invested $15.0 million in equity securities of MDS Proteomics, a privately held company, in connection with our collaboration with that company. As of December 31, 2003 and June 30, 2002, we determined that an impairment of our investment had occurred and estimated that the value of our investment had declined to zero and $7.9 million, respectively. Accordingly, we recorded impairment charges of $7.9 and $7.1 million, respectively, in the fourth quarter of 2003 and second quarter of 2002. The amount of the charge was based on the difference between the estimated value as determined by our management and our revised or original cost basis.

We purchased an aggregate amount of $80.0 million of common stock of CuraGen and ImmunoGen as strategic investments at various times in 1999 and 2000. In 2002, declines in the fair value of the CuraGen and ImmunoGen common stock were deemed to be other than temporary. Accordingly, we recorded a total impairment charge of $67.3 million for the year ended December 31, 2002. As of December 31, 2004, these investments were recorded at fair value in long-term investments on the balance sheet, and the net unrealized holding gain of $10.6 million is included as a component of stockholders' equity. If we deem these investments further impaired at the end of any future period, we may incur an additional impairment charge on these investments.

Foreign Income Tax Expense

Foreign income tax expense was recorded reflecting an income tax provision on foreign contract research projects of approximately $84,000 in the year ended December 31, 2003.

Liquidity and Capital Resources

At December 31, 2004, we had cash, cash equivalents and marketable securities of $416.3 million. We invest our cash equivalents and marketable securities primarily in highly liquid, interest bearing, investment grade and government securities in order to preserve principal. We have also invested in certain marketable equity securities of ImmunoGen and CuraGen for strategic reasons. These securities had a fair value of $23.3 million at December 31, 2004.

Cash Used in Operating Activities. Net cash used in operating activities was $130.8 million, $118.2 million and $118.7 million in 2004, 2003 and 2002, respectively. This reflects an increase of

$12.6 million in 2004 and a decrease of $0.5 million in 2003. The major components of the changes in cash used in operating activities were primarily the following:

- An increase of $25.6 million in 2004 in our liability to Amgen under the joint development agreement. There was no such liability outstanding in 2003 and 2002.
- An increase of $16.4 million and $7.0 million in 2004 and 2003, respectively, in payments pursuant to the Lonza contract cancellation obligation. As of December 31, 2004, we had no remaining obligations to Lonza.
- An increase of $4.8 million and a decrease of $2.8 million in 2004 and 2003, respectively, in research and development and manufacturing start-up costs, not including the Lonza contract cancellation charge in 2003, amortization of identified intangible assets and depreciation related to the development of new products.
- An increase of $2.2 million in costs of goods manufactured in 2004. There was no cost of goods manufactured in 2003 and 2002.
- A decrease of $9.8 million and an increase of $13.0 million in 2004 and 2003, respectively, in customer payments. Both the decrease in 2004 and the increase in 2003 were affected by the timing of payments received under our contracts.
- A decrease of $1.3 million and $12.9 million in 2004 and 2003, respectively, in cash from interest income. The decrease in 2004 was due to lower average balances of cash equivalents and marketable securities, partially offset by a gradual increase in interest rates throughout 2004. The decrease in 2003 was primarily due to lower interest rates and lower average balance of cash equivalents and marketable securities.

Cash Provided by (Used in) Investing Activities. Net cash provided by investing activities was $50.5 million and $30.5 million in 2004 and 2002, respectively. Net cash used in investing activities was $173.5 million in 2003. Net cash provided by and used in investing activities primarily consisted of the following:

- Capital expenditures of $8.6 million, $30.5 million and $170.9 million in 2004, 2003 and 2002, respectively. The investments in 2004, 2003 and 2002 reflected primarily investment in construction in progress and equipment for our new manufacturing facility as well as investment in lab equipment. The investments in 2002 also included investment in leasehold improvements in our new office facility and process science laboratory and investments in computer hardware and software, including the acquisition of a new enterprise resource planning system.
- Sales and maturities, net of purchases, of marketable securities of $59.2 million and $204.5 million in 2004 and 2002, respectively, and purchases, net of sales and maturities, of marketable securities of $143.0 million in 2003.

Cash Provided by Financing Activities. Net cash provided by financing activities was $210.1 million, $102.8 million and $196.5 million in 2004, 2003 and 2002, respectively. In 2004, net cash provided by financing activities included $291.0 million of net proceeds from our issuance of convertible senior notes due 2011, as described below. A portion of the net proceeds was used to repurchase $86.3 million principal amount of convertible subordinated notes due 2007, which we issued in March 2002. In 2003, cash provided by financing activities included $99.7 million of net proceeds from our issuance of Series A-1 and A-2 redeemable convertible preferred stock, as described below. In 2002, cash provided by financing activities included $194.0 million of net proceeds from our issuance of convertible subordinated notes due 2007, as described below. In 2004, 2003 and 2002 we received proceeds of $5.1 million, $3.1 million and $2.5 million, respectively from the issuance of our common stock upon exercise of stock options and pursuant to our employee stock purchase plan.

In December 2004, we issued $300.0 million principal amount of convertible senior notes due 2011 in a private placement. The notes are senior in right to any existing indebtedness which is subordinated by its terms, including our 3.5% convertible subordinated notes due 2011 and convertible subordinated note due 2013. The notes are convertible into shares of our common stock at an initial conversion rate of 78.0153 shares per each $1,000 principal amount of notes (which is equivalent to a conversion price of approximately $12.82 per share), subject to adjustment in certain circumstances. The notes accrue interest at an annual rate of 1.75% payable on June 15 and December 15 of each year. The notes will mature on December 15, 2011 and are redeemable at our option on or after December 20, 2009 at the specified redemption prices. In addition, the holders of the notes may require us to repurchase the notes at their principal amount plus accrued and unpaid interest, subject to certain conditions, if we undergo certain changes in control. In addition, upon certain changes in control and subject to certain conditions, additional shares of common stock may become issuable to holders upon conversion of the notes. Holders of the notes also may require us to repurchase their notes for their principal amount plus accrued and unpaid interest upon the occurrence of an event of default. Proceeds from issuance of the notes, net of commissions payable to the initial purchasers, were $291.0 million.

In October 2003, in connection with a collaboration agreement, we entered into a securities purchase agreement with AstraZeneca. Pursuant to the agreement, we issued to AstraZeneca $50.0 million of Series A-1 and $50.0 million of Series A-2 convertible preferred stock which mature 7 and 10 years, respectively, from the date of issuance. The net proceeds from the securities were $99.7 million. Due to the redemption feature, we do not record the redeemable convertible preferred stock in stockholders' equity on our consolidated balance sheet. Pursuant to its terms, the Series A-2 preferred stock was redeemed at the option of AstraZeneca in February 2004 and we issued AstraZeneca a convertible subordinated note with a principal amount of $50.0 million, which matures on October 29, 2013. No interest is payable on the note except in the event of a payment default by us. Subject to various terms and conditions, if a certain milestone event is reached, we will have the option to issue to AstraZeneca up to $30.0 million of Series A-3 preferred stock and if a further milestone event is reached, we will have the option to issue to AstraZeneca up to $30.0 million of Series A-4 preferred stock. Each of the Series A-3 preferred stock and the Series A-4 preferred stock will have a maturity date that is five years from issuance.

Subject to certain conditions, we can convert each series of preferred stock and can convert the convertible subordinated note issued to AstraZeneca into shares of our common stock at a conversion price equal to the lower of (a) the average market price for the 10 days prior to the trading day immediately preceding the conversion date (provided that the average market price shall in no event be higher than 101% of the market price on the trading day immediately preceding the conversion date) or (b) $30.00 per share. AstraZeneca may convert each series of preferred stock and the convertible subordinated note into shares of common stock at a conversion price of $30.00 per share, at any time prior to the earlier of (a) the redemption date or (b) the maturity date, as applicable. We must redeem all outstanding shares of the Series A-1 preferred stock, if any, at a cash redemption price per share equal to the liquidation preference by October 29, 2010, the mandatory redemption date. The note matures on October 29, 2013, if still outstanding. In addition, we can, upon at least 15 days' notice to the holder, redeem the shares of Series A-1 preferred stock and the convertible subordinated note for cash in an amount equal to its liquidation preference or face amount, as the case may be, at any time prior to maturity of the instrument. In addition to the mandatory redemption and maturity dates of these securities, certain events can give rise to an earlier redemption. In certain circumstances, we have certain rights to convert the securities into common stock instead of redeeming the securities for cash. See Note 9 to the financial statements for a full description of the conversion, redemption, and liquidation rights.

In March 2002, we issued $200.0 million principal amount of convertible subordinated notes due 2007 in a private placement. The notes are convertible into shares of our common stock at a conversion price of $27.58 per share subject to certain adjustments. The notes accrue interest at an annual rate of 3.5% and we are obligated to pay interest on March 15 and September 15 of each year. The notes will mature on March 15, 2007 and are redeemable at our option on or after March 20, 2005, or earlier if the price of our common stock exceeds specified levels. In addition, the holders of the notes may require us to repurchase the notes if we undergo a change in control. In addition, holders of the notes may require us to repurchase their notes for their principal amount plus accrued and unpaid interest upon occurrence of an event of default. Proceeds from the sale of the notes, net of commissions payable to the initial purchasers of the notes but before subtracting other offering expenses payable by us, were $194.0 million.

In March 2000 and February 2001, we obtained stand-by letters of credit for $2.0 million and $3.0 million, respectively, from a commercial bank as security for our obligations under two facility leases. These were increased in January 2002 to $2.5 and $3.2 million, respectively, in connection with amendments to our facility leases. In December 2003, the $3.2 million stand-by letter of credit increased to $3.5 million. The outstanding stand-by letters of credit are secured by an investment account, in which we must maintain a balance of approximately $7.0 million.

Financing Uncertainties Related to Our Business Plan. We plan to continue to make significant expenditures to staff and operate our own manufacturing facility and support our research and development activities, including preclinical product development and clinical trials. We also intend to look for opportunities to acquire new technology through in-licensing, collaborations or acquisitions. We may spend additional amounts to support new production services contracts.

We currently intend to use our available cash on hand to finance these projects and business developments, but we might also pursue other financing alternatives, such as equity, equity-linked debt or debt financing, a bank line of credit, sale-lease back financing, asset sales, funding by one or more collaborators or a mortgage financing, that may become available to us. We have a currently effective shelf registration that allows us to issue from time to time up to $250 million in equity or debt securities. Whether we use cash on hand or choose to obtain financing will depend on, among other things, the future success of our business, the prevailing interest rate environment and the condition of financial markets generally.

In October 2003, we entered into an amendment of our joint development and commercialization agreement with Amgen for the co-development of panitumumab. Under the agreement, Amgen is obligated to make available in 2004 and 2005 up to $60.0 million in advances that we may use to fund a portion of our share of development and commercialization costs after we have contributed $20.0 million toward development costs in 2004. As of December 31, 2004 we had a carrying balance of $25.6 million and had drawn an additional $9.0 million under this facility in February 2005. We expect to continue to make use of this credit facility in 2005 up to the $60.0 million limit.

The amounts of the expenditures that will be necessary to execute our business plan are subject to numerous uncertainties that may adversely affect our liquidity and capital resources to a significant extent. Two of our proprietary product candidates, panitumumab and ABX-PTH, are in various stages of clinical trials which may require significant expenditures in the foreseeable future. Completion of clinical trials may take several years or more, but the length of time generally varies substantially according to the type, complexity, novelty and intended use of a product candidate.

We test our potential product candidates in numerous preclinical studies to identify disease indications for which they may be product candidates. We may conduct multiple clinical trials on our own or with our collaborators to cover a variety of indications for each product candidate. As we obtain results from trials, we may elect to discontinue clinical trials for certain product candidates or for one or more indications for a given product candidate in order to focus our resources on more

promising product candidates or indications. For example, in January 2002 and May 2002, we announced that clinical trials of our proprietary product candidate ABX-IL8 as a treatment for rheumatoid arthritis and psoriasis, respectively, did not support further clinical studies of that product candidate. Additionally in February 2003, we announced that the clinical trial of our proprietary product candidate ABX-CBL as a treatment for graft versus host disease, did not support further clinical studies of that product candidate.

An important element of our business strategy is to pursue the research and development of a diverse range of product candidates for selected disease indications in our areas of focus. We may enter co-development agreements, similar to our agreement with Amgen for panitumumab, and may enter into additional joint development agreements earlier in the development life cycle of product candidates than we did in our existing co-development agreements. We have begun to implement our collaboration strategy through co-development arrangements with companies such as Chugai, U3 and Dendreon. Our strategy is designed to diversify the risks associated with our research and development spending. The decisions to terminate or wind down our clinical programs for developing ABX-IL8, ABX-CBL and ABX-MA1 have reduced the diversity of our product portfolio. We believe that this effect is temporary in view of the number and diversity of potential product candidates we have in preclinical development. For example, we recently advanced ABX-PTH from the preclinical stage into a clinical study in patients with secondary hyperparathyrodism. To the extent, however, that we are unable to maintain a diverse and broad range of product candidates; our success would depend to a greater extent on the success of one or a few product candidates.

Our proprietary product candidates also have not yet achieved FDA regulatory approval, which is required before we can market them as therapeutic products. In order to proceed to subsequent clinical trial stages and to ultimately achieve regulatory approval, the FDA must conclude that our clinical data establish safety and efficacy. The number, size and type of clinical trials we conduct for a particular product candidate are also affected by the policies of the FDA and European regulatory agencies regarding the availability of possible expedited approval procedures, which we may seek to utilize. These policies may change from time to time. As we conduct clinical trials for a given product candidate, we may decide or the FDA may require us to make changes in our plans and protocols. Such changes may relate to, for example, changes in the standard of care for a particular disease indication, comparability of efficacy and toxicity of materials where a change in materials is proposed, or competitive developments foreclosing the availability of expedited approval procedures. We may be required to support proposed changes with additional preclinical or clinical testing, which could delay the expected time line for concluding clinical trials. In addition, the results from preclinical testing and early clinical trials have often not been predictive of results obtained in later clinical trials. A number of new drugs and biologics have shown promising results in clinical trials, but subsequently failed to establish sufficient safety and efficacy data to obtain necessary regulatory approvals.

As a result of the uncertainties discussed above, among others, the duration and completion costs of our research and development projects are difficult to estimate and are subject to considerable variation. Our inability to complete our research and development projects in a timely manner or our failure to enter into collaborative agreements, when appropriate, could significantly increase our capital requirements and could adversely impact our liquidity. These uncertainties could force us to seek additional, external sources of financing from time to time in order to continue with our business strategy. Our inability to raise additional capital, or to do so on terms reasonably acceptable to us, would jeopardize the future success of our business.

We also may be required to make further substantial expenditures if unforeseen difficulties arise in other parts of our business. In particular, our future liquidity and capital requirements also will depend on many factors other than our research and development activities, including:

- the scope and results of preclinical development and clinical trials;

- the retention of existing and establishment of further co-development, licensing, manufacturing and other agreements, if any;
- continued scientific progress in our research and development programs;
- the size and complexity of these programs;
- the cost of establishing our manufacturing capabilities and complying with good manufacturing practice regulations;
- the cost of conducting commercialization activities and arrangements;
- the time and expense involved in seeking regulatory approvals;
- competing technological and market developments;
- the time and expense of filing and prosecuting patent applications, and enforcing and defending against patent claims;
- our investment in, or acquisition of, other companies;
- the amount of product or technology in-licensing in which we engage; and
- other factors not within our control.

We believe that our current cash balances, cash equivalents, marketable securities, and the cash generated from our licensing and other agreements will be sufficient to meet our operating and capital requirements for at least one year. However, because of the uncertainties in our business discussed above, among others, we cannot assure you that this will be the case. In addition, we may choose to, or prevailing business conditions may require us to, obtain additional financing from time to time. We may choose to raise additional funds through public or private financing, licensing and other agreements or other arrangements. We cannot be sure that any additional funding, if needed, will be available on terms favorable to us or at all. Furthermore, any additional equity or equity-related financing may be dilutive to our stockholders, and debt financing, if available, may subject us to restrictive covenants. We may also choose to obtain funding through collaborations, licensing and other contractual arrangements. Such agreements may require us to relinquish our rights to certain of our technologies, products or marketing territories. Our failure to raise capital when needed would harm our business, financial condition and results of operations.

History of Net Losses. We have incurred net losses since our organization as an independent company, including in the last five years net losses of $8.8 million in 2000, $60.9 million in 2001, $208.9 million in 2002, $196.4 million in 2003 and $187.5 million in 2004. As of December 31, 2004, our accumulated deficit was $752.3 million. Our losses to date have resulted principally from:

- research and development costs relating to the development of our XenoMouse and XenoMax technologies and antibody therapeutic product candidates;
- general and administrative costs relating to our operations;
- manufacturing start-up costs relating to our new manufacturing facility including depreciation, outside contractor costs and personnel costs for activities such as quality assurance and quality control;
- impairment charges relating to our strategic investments in CuraGen, ImmunoGen and MDS Proteomics;
- impairment charges relating to technology in the field of catalytic antibodies, which includes intellectual property that was acquired through the acquisition of Hesed Biomed.

We expect to incur additional losses for the foreseeable future as a result of our research and development costs, including costs associated with conducting preclinical development and clinical trials, which will continue to be substantial, charges related to purchases of technology or other assets, and costs associated with establishing and operating our manufacturing facilities. We intend to invest significantly in our products prior to entering into licensing agreements. This will increase our need for capital and will result in losses for at least the next several years. We expect that the amount of operating losses will fluctuate significantly from quarter to quarter as a result of increases or decreases in our research and development efforts, the execution or termination of licensing and other agreements, and the initiation, and success or failure, of clinical trials.

Net Operating Loss Carryforwards. As of December 31, 2004, we had net operating loss carryforwards for federal and state income tax purposes of approximately $670.0 million and $194.0 million, respectively. Our net operating loss carryforwards exclude losses incurred prior to our formation in July 1996. Further, we have capitalized the amounts associated with the 1997 patent cross-license and settlement agreement with GenPharm, which we have expensed for financial statement accounting purposes and we are amortizing those amounts over a period of approximately 15 years for tax purposes. The federal and state net operating loss and credit carryforwards will expire in the years 2006 through 2024, if not utilized. Utilization of the net operating losses and credits may be subject to a substantial annual limitation due to the "change in ownership" provisions of the Internal Revenue Code of 1986 and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization.

Critical Accounting Estimates

Several estimates and judgments involved in the application of accounting principles impact the financial results that we report. We are required to estimate the effect of matters that are inherently uncertain. Changes in our estimates or judgments could materially impact our results of operations, financial condition and cash flows in future years. We believe our most critical accounting estimates include revenue recognition, and accounting for goodwill, intangible assets, income taxes and stock option valuation.

Revenue Recognition

We derive our contract revenue from license, option, service and milestone fees received from customers. Services include those performed under our technology out-licensing, co-development and production services agreements. As described below, within the framework of generally accepted accounting principles, significant management judgments and estimates must be made and applied in connection with the revenue recognized in any accounting period. If our management made different judgments or utilized different estimates, material differences could result in the amount and timing of our revenue in any period.

Abgenix enters into revenue arrangements with multiple deliverables in order to meet its customer's needs. For example, the arrangements may include a combination of up-front fees, license payments, research and development services, milestone payments, future royalties, and manufacturing arrangements. Multiple element revenue agreements entered into on or after July 1, 2003 are evaluated under Emerging Issues Task Force No. 00-21, "Revenue Arrangements with Multiple Deliverables," or EITF 00-21, to determine whether the delivered item has value to the customer on a stand-alone basis and whether objective and reliable evidence of the fair value of the undelivered item exists. Deliverables in an arrangement that do not meet the separation criteria in EITF 00-21 must be treated as one unit of accounting for purposes of revenue recognition. Generally, the revenue recognition guidance applicable to the final deliverable is followed for the combined unit of accounting. For certain arrangements, the period of time over which certain deliverables will be provided is not contractually

defined. Accordingly, management is required to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes.

Accounting for Goodwill and Intangible Assets

As a result of the adoption of SFAS No. 142, "Goodwill and Other Intangible Assets," in 2002, we no longer amortize goodwill but instead review goodwill for impairment on an annual basis, or sooner if indications of impairment exist. Under our accounting policy, we have adopted the beginning of the fourth quarter as an annual goodwill impairment test date. Following this approach, we compare the carrying values available as of September 30 with the estimated fair value of the reporting unit to assess if there has been a potential impairment, and, if impairment is indicated, complete the measurement of impairment under the procedures established by SFAS 142. Because we have determined that we have one reporting unit under SFAS No. 142, our market capitalization is considered to be a reasonable proxy for the fair value of the reporting unit. We also consider whether current business and general market conditions suggest that the fair value of the reporting unit has likely declined below its carrying value.

For a brief period during the first quarter of 2003, our common stock had traded at a price that represented a market capitalization less than our book value. However this condition did not persist for long and since March 31, 2003, our common stock has traded at a price that represents a market capitalization higher than our book value. Our market capitalization at December 31, 2004 was $921.8 million based on the December 31, 2004 stock price of $10.34 per share. Accordingly, no impairment has occurred.

If we were to determine in a future period that an impairment of goodwill existed, the impairment measurement procedures could result in a charge for the impairment of goodwill. Furthermore, a change in our determination of reporting units could result in a charge for the impairment of goodwill in future periods. A change in the determination of reporting units could occur should we reorganize into reporting units such that each unit constitutes a business for which discrete financial information is available that is regularly reviewed by management to evaluate the performance of that unit. As of December 31, 2004, the carrying value of our goodwill was $34.8 million.

As a result of the adoption of SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets," intangible assets held and used must be tested for impairment when events or changes in circumstances indicate that its carrying amount may not be recoverable. Factors that are considered important in determining whether impairment might exist include a significant change in the manner in which an asset is being used, a significant adverse change in legal factors or the business climate that could affect the value of an asset, including an adverse action or assessment by a regulator, a current expectation that, more likely that not, an asset will be sold or otherwise disposed of before the end of its previously estimated useful life.

During 2003, we decided to discontinue the development of therapeutic antibodies to the complement protein properdin. Accordingly, we recorded an impairment charge of approximately $1.4 million related to the license to develop and commercialize antibodies to properdin. The impairment charge was included in research and development expenses on our statement of operations.

In 2004, management determined that an impairment of our acquired technology in the field of catalytic antibodies had occurred and that the estimated value had declined to zero. This technology, which includes intellectual property, was acquired in 2001 through the acquisition of Hesed Biomed, Inc. We decided to focus our resources on other research and development projects and decided to wind down our catalytic antibody program. Additionally, after assessing the associated patent position and the likelihood of sale or license of the technology to a third party, management further determined that the possibility of generating positive future cash flows from the technology was remote.

As a result of this determination, we recorded an impairment charge of $17.2 million in the quarter ended June 30, 2004.

As of December 31, 2004, we have determined that no changes in circumstances have occurred that would indicate that an additional impairment of an intangible asset had occurred. If we were to determine in a future period that an impairment of intangible assets has occurred, the impairment measurement procedures could result in a charge for the impairment of long-lived assets. As of December 31, 2004 the carrying value of our intangible assets was $60.0 million.

Income Taxes

Significant management judgment is required in developing our provision for income taxes, including the calculation of tax liabilities, the determination of deferred tax assets and liabilities and any valuation allowances that might be required against the deferred tax assets. Results of operations in each jurisdiction involve intercompany agreements between our Canadian subsidiary and U.S. parent. Such agreements could be unfavorably interpreted by the applicable taxing authorities, causing an increase in the income tax provision and an increase in our net loss. The assessment of the income tax implications of this intercompany relationship requires significant management judgment.

Stock Option Valuation

The preparation of the notes to our consolidated financial statements requires us to estimate the fair value of stock options granted to employees. While fair value may be readily determinable for awards of stock, market quotes are not available for long-term, nontransferable stock options because these instruments are not traded. We currently use the Black-Scholes option pricing model to estimate the fair value of employee stock options. However, the Black-Scholes option pricing model was developed for use in estimating the fair value of traded options, which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Because our employee stock options have characteristics significantly different from those of traded options and because changes to the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not provide a reliable single measure of the fair value of our employee stock options. We are currently evaluating our option valuation methodologies and assumptions in lights of evolving accounting standards related to employee stock options.

Contractual Obligations and Commercial Commitments

As of December 31, 2004, future minimum payments for certain contractual obligations for years subsequent to December 31, 2004 were as follows:

	Total	Less than 1 year	1-3 years	4-5 years	After 5 years[1]
			(in thousands)		
Operating leases	$130,757	$13,848	$ 29,151	$31,213	$ 56,545
Convertible notes due 2007 & interest	123,537	3,981	119,556	—	—
Convertible notes due 2011 & interest	336,692	5,250	10,500	10,500	310,442
Convertible note due 2013	50,000	—	—	—	50,000
Redeemable convertible preferred stock	50,000	—	—	—	50,000
Amgen[2]	25,626	—	—	—	—
Purchase orders	2,451	2,451	—	—	—
Total	$719,063	$25,530	$159,207	$41,713	$466,987

(1) Amounts represent total of minimum payments for the entire period.

(2) The $25.6 million long term obligation to Amgen consists of $25.1 million in advances under the credit facility and $517,000 of interest.

We have a commitment to share equally all development and commercialization costs for panitumumab pursuant to our development and commercialization agreement with Amgen. As amended in October 2003, that agreement provides that Amgen will have decision-making authority for development and commercialization activities and will make available to us in 2004 and 2005 up to $60.0 million in advances that we may use to fund our share of development and commercialization costs for panitumumab after we have contributed $20.0 million toward development costs in 2004. As of December 31, 2004, we had a carrying balance of $25.6 million under this facility consisting of $25.1 million in advances and $517,000 of interest accrued at the contract rate of 12% per annum. We have drawn a cash advance of an additional $9.0 million in February 2005. We expect to continue to draw on this credit facility up to the $60.0 million limit in 2005. The amount of any such advances, plus interest, may be repaid out of profits resulting from future product sales and we are generally not obligated to repay any portion of the loan if panitumumab does not reach commercialization.

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards (SFAS) No. 123(R), "Share-Based Payment", which is a revision of SFAS No. 123 and supersedes APB Opinion No. 25. SFAS No. 123(R) requires that all share-based payments to employees, including grants of employee stock options, be recognized in the financial statements based on their fair values. Pro forma disclosure previously permitted under SFAS No. 123 will no longer be an alternative. SFAS No. 123(R) does not change the accounting guidance for share-based payment transactions with parties other than employees provided in SFAS No. 123 as originally issued and EITF Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services."

SFAS No. 123(R), which is effective July 1, 2005, permits public companies to adopt its requirements using either the modified prospective or modified retrospective transition method. We expect to use the modified prospective transition method, which requires that compensation cost is recognized for all awards granted, modified or settled after the effective date as well as for all awards granted to employees prior to the effective date that remain unvested as of the effective date.

As permitted by SFAS No. 123, we currently account for our share-based payments to employees using APB Opinion No. 25's intrinsic value method and do not recognize compensation costs for our employee stock options. Accordingly, we expect that the adoption of SFAS No. 123(R)'s fair value method will have a significant impact on our result of operations, although it will have no impact on our overall financial position. The impact of adopting SFAS No. 123(R) cannot be predicted at this time because it will depend on levels of share-based payments granted in the future. However, had we adopted SFAS No. 123(R) in prior periods, the impact would approximate the impact of SFAS No. 123 as shown in Note 1 of our consolidated financial statements under the heading of "Stock-Based Compensation."

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk. We are exposed to interest rate sensitivity on our investments in debt securities and our outstanding fixed rate debt. The objective of our investment activities is to preserve principal, while at the same time maximizing yields without significantly increasing risk. To achieve this objective, we invest in highly liquid, investment grade and government debt securities. Our investments in debt securities are subject to interest rate risk. To minimize the exposure due to an adverse shift in interest rates, we invest in short-term securities and our goal is to maintain an average maturity of approximately one year. In addition, as of December 31, 2004, we had $113.7 million of outstanding

3.5% convertible subordinated notes due in 2007, and $300.0 million of outstanding 1.75% convertible senior notes due in 2011. The fair value of these convertible notes may fluctuate with changes in market interest rates, as well as changes in the market price of our common stock. A hypothetical 1.0% per annum decrease in interest rates would result in an adverse net change in the fair value of our interest rate sensitive assets and liabilities of approximately $16.6 million and $3.2 million at December 31, 2004 and 2003, respectively.

Equity Price Risk. We are exposed to equity price risk on strategic investments, such as those we have made in CuraGen and ImmunoGen. We typically do not attempt to reduce or eliminate our market exposure on these securities. With respect to CuraGen and ImmunoGen, each of whose common stock is publicly traded, the aggregate market value of our investments in these securities was approximately $23.3 million and $20.7 million as of December 31, 2004 and 2003, respectively. Due to decreases in the market prices of the shares of CuraGen and ImmunoGen, we recorded impairment charges of $67.3 million in 2002 related to these investments. The trading prices of shares of CuraGen and ImmunoGen have fluctuated significantly since we purchased these securities. Each additional 10% decrease in market value of these securities would result in a decrease in value of approximately $2.3 million and $2.1 million from the fair value of those investments at December 31, 2004 and 2003, respectively. Additional price declines could cause us to record additional impairment charges in future periods.

Item 8. Financial Statements and Supplementary Data

INDEX TO FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm
On Internal Control Over Financial Statements

The Board of Directors and Stockholders of Abgenix, Inc.

We have audited management's assessment, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting included in Item 9A., that Abgenix, Inc. maintained effective internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Abgenix, Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

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

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

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

In our opinion, management's assessment that Abgenix, Inc. maintained effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, Abgenix, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on the COSO criteria**.**

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Abgenix, Inc. as of December 31, 2004 and 2003, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2004, of Abgenix, Inc. and our report dated February 25**,** 2005 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Palo Alto, California
February 25, 2005

Report of Independent Registered Public Accounting Firm
On Consolidated Financial Statements

The Board of Directors and Stockholders of Abgenix, Inc.

We have audited the accompanying consolidated balance sheets of Abgenix, Inc. as of December 31, 2004 and 2003, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2004. These financial statements are the responsibility of Abgenix, Inc.'s management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Abgenix, Inc. at December 31, 2004 and 2003, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2004, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Abgenix, Inc.'s internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 25, 2005 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Palo Alto, California
February 25, 2005

ABGENIX, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

	December 31, 2004	December 31, 2003
ASSETS		
Current assets:		
Cash and cash equivalents	$ 148,929	$ 19,141
Marketable securities	267,400	328,622
Interest receivable	2,370	3,096
Accounts receivable, net	5,729	2,174
Prepaid expenses and other current assets	11,088	12,546
Total current assets	435,516	365,579
Property and equipment, net	223,004	246,277
Long-term investments	23,300	20,695
Goodwill	34,780	34,780
Identifiable intangible assets, net	60,010	83,716
Deposits and other assets	36,108	29,146
	$ 812,718	$ 780,193
LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 6,635	$ 11,584
Deferred revenue	11,692	10,919
Accrued liabilities	15,281	13,974
Contract cancellation obligation	—	22,749
Accrued interest payable	1,341	2,061
Total current liabilities	34,949	61,287
Deferred rent	7,519	6,153
Convertible notes	463,630	200,000
Other long-term liabilities	25,626	—
Redeemable convertible preferred stock, $0.0001 par value; 5,000,000 shares authorized		
Series A-1 50,000 shares issued and outstanding at December 31, 2004 and December 31, 2003, respectively; liquidation preference $50,000 at December 31, 2004 and December 31, 2003, respectively	49,869	49,869
Series A-2 50,000 shares issued and outstanding at December 31, 2003; liquidation preference $50,000 at December 31, 2003; no shares outstanding at December 31, 2004	—	49,868
Commitments		
Stockholders' equity:		
Common stock, $0.0001 par value; 220,000,000 shares authorized; 89,146,380 and 88,262,457 shares issued and outstanding at December 31, 2004 and 2003, respectively	9	9
Additional paid-in capital	973,979	968,922
Accumulated other comprehensive income	9,391	8,861
Accumulated deficit	(752,254)	(564,776)
Total stockholders' equity	231,125	413,016
	$ 812,178	$ 780,193

See accompanying notes

ABGENIX, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Year ended December 31,		
	2004	**2003**	**2002**
Revenues:			
Contract revenue	$ 16,070	$ 16,852	$ 19,293
Contract manufacturing revenue	1,695	—	—
Total revenues	17,765	16,852	19,293
Operating expenses:			
Cost of goods manufactured	2,227	—	—
Research and development	124,758	98,159	128,494
Manufacturing start-up costs	25,430	72,473	—
Amortization of intangible assets, related to research and development	6,465	7,190	7,251
General and administrative	27,271	30,209	31,625
Impairment of intangible assets	17,241	1,443	—
Restructuring charge	—	—	1,751
Total operating expenses	203,392	209,474	169,121
Loss from operations	(185,627)	(192,622)	(149,828)
Other income (expenses):			
Interest and other income (expense), net	5,382	9,953	20,145
Interest expense	(7,233)	(5,784)	(4,830)
Impairment of investments	—	(7,892)	(74,385)
Total other expenses	(1,851)	(3,723)	(59,070)
Loss before income tax expense	(187,478)	(196,345)	(208,898)
Foreign income tax expense	—	84	—
Net loss	$(187,478)	$(196,429)	$(208,898)
Basic and diluted net loss per share	$ (2.11)	$ (2.23)	$ (2.39)
Shares used in computing basic and diluted net loss per share	88,710	87,930	87,237

See accompanying notes

ABGENIX, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands, except share and per share data)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Number of Shares	Amount				
Balance at December 31, 2001	86,835,165	$9	$961,456	$(11,046)	$(159,449)	$ 790,970
Change in unrealized gains on available-for-sale securities	—	—	—	15,202	—	15,202
Net loss	—	—	—	—	(208,898)	(208,898)
Comprehensive loss						(193,696)
Issuance of common stock at $29.79 per share in connection with the acquisition of Hesed Biomed	61,506	—	1,832	—	—	1,832
Assumption of warrants for common stock in connection with the acquisition of Hesed Biomed	2,680	—	49	—	—	49
Issuance of common stock upon exercise of stock options	548,367	—	725	—	—	725
Issuance of common stock pursuant to the employee stock purchase plan	207,624	—	1,759	—	—	1,759
Balance at December 31, 2002	87,655,342	9	965,821	4,156	(368,347)	601,639
Change in unrealized gains on available-for-sale securities	—	—	—	4,705	—	4,705
Net loss	—	—	—	—	(196,429)	(196,429)
Comprehensive loss						(191,724)
Issuance of common stock upon exercise of stock options	280,844	—	1,052	—	—	1,052
Issuance of common stock pursuant to the employee stock purchase plan	326,271	—	2,049	—	—	2,049
Balance at December 31, 2003	88,262,457	9	968,922	8,861	(564,776)	413,016
Change in unrealized gains on available-for-sale securities	—	—	—	530	—	530
Net loss	—	—	—	—	(187,478)	(187,478)
Comprehensive loss						(186,948)
Issuance of common stock upon exercise of stock options	437,267	—	2,103	—	—	2,103
Issuance of common stock pursuant to the employee stock purchase plan	446,656	—	2,954	—	—	2,954
Balance at December 31, 2004	89,146,380	$9	$973,979	$ 9,391	$(752,254)	$ 231,125

See accompanying notes

ABGENIX, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year ended December 31,		
	2004	2003	2002
Operating activities			
Net loss	$(187,478)	$(196,429)	$(208,898)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	30,540	28,492	12,978
Amortization of identified intangible assets	6,465	7,190	7,251
Impairment of identified intangible asset	17,241	1,443	—
Impairment of investments	—	7,892	74,385
Amortization of debt issuance costs	1,288	1,202	954
Loss on sale and disposal of equipment	1,065	29	—
Loss on early extinguishment of debt	1,016	—	—
Changes for certain assets and liabilities:			
Interest receivable	726	(1,092)	1,973
Accounts receivable	(3,555)	466	814
Prepaid expenses and other current assets	1,458	3,992	(2,064)
Deposits and other assets	(564)	1,435	(1,676)
Accounts payable	(4,949)	(9,973)	4,111
Deferred revenue	773	7,503	(8,335)
Accrued liabilities	1,609	5,144	(4,626)
Accrued interest payable	(720)	—	2,061
Contract cancellation obligation	(22,749)	22,749	—
Deferred rent	1,366	1,736	2,339
Other long-term liabilities	25,626	—	—
Net cash used in operating activities	(130,842)	(118,221)	(118,733)
Investing activities			
Purchases of marketable securities	(287,857)	(467,794)	(141,771)
Maturities of marketable securities	49,342	43,525	173,382
Sales of marketable securities	297,696	281,275	172,846
Purchases of property and equipment	(8,633)	(30,456)	(170,930)
Investment in note receivable	—	—	(2,750)
Payments for acquisition liabilities	—	—	(266)
Net cash provided by (used in) investing activities	50,548	(173,450)	30,511
Financing activities			
Net proceeds from issuance of convertible notes	291,000	—	194,000
Repurchase of convertible subordinated notes	(85,975)	—	—
Net proceeds from issuance of series A-1 redeemable convertible preferred stock	—	49,869	—
Net proceeds from issuance of series A-2 redeemable convertible preferred stock	—	49,868	—
Net proceeds from issuance of common stock	5,057	3,101	2,533
Net cash provided by financing activities	210,082	102,838	196,533
Net increase (decrease) in cash and cash equivalents	129,788	(188,833)	108,311
Cash and cash equivalents at the beginning of the year	19,141	207,974	99,663
Cash and cash equivalents at the end of the year	$ 148,929	$ 19,141	$ 207,974
Supplemental disclosures of cash flow information			
Cash paid during the year for interest, net of capitalized interest of $1,687, $2,470 and $1,924	$ 6,164	$ 4,583	$ 2,794

See accompanying notes

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Business and Organization

Abgenix, Inc. (Abgenix or the Company), is a biopharmaceutical company that focuses on discovery, development and manufacturing of human therapeutic antibody products for the treatment of a variety of disease conditions. The Company has proprietary technologies that facilitate rapid generation of highly specific, fully human antibody therapeutic product candidates that bind to disease targets appropriate for antibody therapy.

In November 2001, the Company acquired Hesed Biomed Inc. (Hesed Biomed). In November 2000, in two separate transactions, the Company acquired Abgenix Biopharma Inc. (Abgenix Biopharma, formerly known as ImmGenics Pharmaceuticals, Inc.) and IntraImmune Therapies, Inc. (IntraImmune).

Accounts denominated in foreign-currency have been remeasured using the U.S. dollar as the functional currency. The aggregate exchange loss included in determining net loss was $0.8 million, $1.7 million and $0.5 million in 2004, 2003 and 2002, respectively. Significant intercompany accounts and transactions have been eliminated.

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards (SFAS) No. 123(R), "Share-Based Payment", which is a revision of SFAS No. 123 and supersedes APB Opinion No. 25. SFAS No. 123(R) requires that all share-based payments to employees, including grants of employee stock options, be recognized in the financial statements based on their fair values. Pro forma disclosure previously permitted under SFAS No. 123 will no longer be an alternative. SFAS No. 123(R) does not change the accounting guidance for share-based payment transactions with parties other than employees provided in SFAS No. 123 as originally issued and EITF Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services."

SFAS No. 123(R), which is effective July 1, 2005, permits public companies to adopt its requirements using either the modified prospective or modified retrospective transition method. The Company expects to use the modified prospective transition method, which requires that compensation cost is recognized for all awards granted, modified or settled after the effective date as well as for all awards granted to employees prior to the effective date that remain unvested as of the effective date.

As permitted by SFAS No. 123, the Company currently accounts for its share-based payments to employees using APB Opinion No. 25's intrinsic value method and does not recognize compensation costs for its employee stock options. Accordingly, the Company expects that the adoption of SFAS No. 123(R)'s fair value method will have a significant impact on the Company's result of operations, although it will have no impact on the Company's overall financial position. The impact of adopting SFAS No. 123(R) cannot be predicted at this time because it will depend on levels of share-based payments granted in the future. However, had the Company adopted SFAS No. 123(R) in prior periods, the impact would approximate the impact of SFAS No. 123 as shown in the table below under the heading of "Stock-Based Compensation."

Cash Equivalents, Marketable Securities and Long-Term Investments

The Company considers all highly liquid investments with a maturity date of three months or less when purchased to be cash equivalents.

Marketable securities consist of highly liquid debt securities with a maturity of greater than three months when purchased and marketable equity securities. The Company's marketable securities have been classified as "available-for-sale," and are carried at fair value based on quoted market prices. The Company considers its investments in marketable debt securities as available for use in current operations. Accordingly, the Company has classified these investments as short-term, even though the stated maturity date may be one year or more beyond the current balance sheet date. Unrealized gains and losses are reported as accumulated other comprehensive income (loss), which is a separate component of stockholders' equity. Unrealized losses on available-for-sale securities that are deemed to be other than temporary are included in earnings.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk are principally cash equivalents, marketable securities and accounts receivable. The Company has established investment policies to limit its credit risk exposure by investing in highly liquid, high credit quality investment grade debt securities and maintaining a diversified portfolio. The Company's customers are primarily pharmaceutical and biotechnology companies, and the Company has not experienced any significant credit losses and does not generally require collateral on receivables.

Property and Equipment

The Company records property and equipment at cost and provides depreciation using the straight-line method over the estimated useful lives of the assets. Leasehold improvements are depreciated over the remaining life of the facility lease, manufacturing equipment is depreciated over 15 years, and all other assets are generally depreciated over two to five years.

Goodwill and Intangible Assets

As a result of its adoption of SFAS No. 142, "Goodwill and Other Intangible Assets," in 2002, the Company no longer amortizes goodwill but instead reviews goodwill for impairment on annual basis, or sooner if indications of impairment exist. Under the Company's accounting policy, the Company has adopted the beginning of the fourth quarter as an annual goodwill impairment test date. Following this approach, the Company compares the carrying values as of September 30 with the estimated fair value of the reporting unit to assess if there has been a potential impairment, and, if impairment is indicated, complete the measurement of impairment under the procedures established by SFAS No. 142. Because the Company has determined that it has one reporting unit under SFAS No. 142, its market capitalization is considered to be a reasonable proxy for the fair value of the reporting unit. The Company also considers whether current business and general market conditions suggest that the fair value of the reporting unit has likely declined below its carrying value.

Intangible assets held and used must be tested for impairment when events or changes in circumstances indicate that its carrying amount may not be recoverable. Factors that are considered important in determining whether impairment might exist include a significant change in the manner in which an asset is being used, a significant adverse change in legal factors or the business climate that could affect the value of an asset, including and adverse action or assessment by a regulator, and a current expectation that, more likely that not, an asset will be sold or otherwise disposed of before the end of its previously estimated useful life.

As of December 31, 2004, the Company has determined that no changes in circumstances have occurred that would indicate that an additional impairment of an intangible asset had occurred. If the Company were to determine in a future period that an impairment of intangible assets had occurred,

the impairment measurement procedures could result in a charge for the impairment of long-lived assets. As of December 31, 2004 the carrying value of the Company's intangible assets was $60.0 million.

Long-Lived Assets

The carrying value of the Company's long-lived assets is reviewed for impairment whenever events or changes in circumstances indicate that the asset may not be recoverable. An impairment loss would be recognized when estimated future cash flows expected to result from the use of the asset and its eventual disposition is less than its carrying amount. Long-lived assets include property and equipment, and identified intangible assets.

Revenue Recognition

The Company receives payments from customers for license, option, service and milestone fees, as well as for contract manufacturing the Company performs. These payments, which are generally non-refundable, are recognized as revenue or reported as deferred revenue until they meet the criteria for revenue recognition. The Company recognizes revenue when (1) persuasive evidence of the arrangement exists; (2) delivery has occurred or services have been rendered; (3) the price is fixed or determinable and (4) the collectibility is reasonably assured, in accordance with Securities and Exchange Commission Staff Accounting Bulletin No. 104, "Revenue Recognition". In addition, the Company has followed the following principles in recognizing revenue:

- Abgenix enters into revenue arrangements with multiple deliverables in order to meet its customer's needs. For example, the arrangements may include a combination of up-front fees, license payments, R&D services, milestone payments, future royalties, and manufacturing arrangements. Multiple element revenue agreements entered into on or after July 1, 2003 are evaluated under Emerging Issues Task Force No. 00-21, "Revenue Arrangements with Multiple Deliverables," to determine whether the delivered item has value to the customer on a stand-alone basis and whether objective and reliable evidence of the fair value of the undelivered item exists. Deliverables in an arrangement that do not meet the separation criteria in Issue 00-21 must be treated as one unit of accounting for purposes of revenue recognition. Generally, the revenue recognition guidance applicable to the last deliverable is followed for the combined unit of accounting. For certain arrangements, the period of time over which certain deliverables will be provided is not contractually defined. Accordingly, management is required to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes.
- Abgenix has joint development arrangements under which the collaborative partners share the costs of developing and commercializing antibody therapeutic product candidates equally. In periods where Abgenix incurs more costs under the arrangement than the collaborative partner, Abgenix records contract revenue for the services rendered. In periods where the collaborative partner incurs more costs under the arrangement than Abgenix, Abgenix records expense for the services received.
- Research and product license fees are generally recognized only after both the license period has commenced and the technology has been delivered.
- Option fees for granting options to obtain product licenses to develop a product are recognized when the option is exercised or when the option period expires, whichever occurs first.
- Fees the Company receives for research services the Company performs under its technology out-licensing agreements are generally recognized ratably over the entire period the Company

performs these services. Research services include process sciences services the Company performs under its production services agreements, such as cell line development.

- Incentive milestone payments are recognized as revenue when the specified milestone is achieved. Incentive milestone payments are triggered either by the results of our research efforts or by events external to Abgenix, such as regulatory approval to market a product. Incentive milestone payments are substantially at risk at the inception of the contract, and the values assigned thereto are commensurate with the type of milestone achieved. The Company has no future performance obligations related to an incentive milestone that has been achieved.
- Contract manufacturing fees the Company receives under its production services agreements are recognized when the manufacture of an antibody product candidate is complete, and the antibody product candidate is released and delivered, as defined in the relevant agreement.

Research and Development

Research and development expenses consist primarily of compensation and other expenses related to research and development personnel; costs associated with preclinical testing and clinical trials of the Company's product candidates, including the costs of manufacturing the product candidates; expenses for research and services rendered under co-development agreements; and facilities expenses. Expenses for research services rendered under co-development arrangements exceed fees received from such co-developers as reimbursements. All research and development costs are charged to expense when incurred.

Manufacturing Start-up Costs

Manufacturing start-up costs include certain costs associated with the Company's new manufacturing facility, including depreciation, outside contractor costs and personnel costs for activities such as quality assurance and quality control. In 2003, the manufacturing start-up costs included a cancellation fee for the negotiated cancellation of an agreement with an outside contractor, Lonza Biologics plc (Lonza). Effective June 30, 2003, the Company canceled the November 2000 agreement with Lonza for the exclusive use of a cell culture production suite because the Company determined that with the opening of its manufacturing facility, the Company no longer needed access to the Lonza facility.

Stock-Based Compensation

The Company accounts for stock-based awards to employees and directors using the intrinsic value method in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees.'' Accordingly, the Company does not recognize compensation expense for employee stock options granted at fair market value. For purposes of disclosures pursuant to SFAS 123 as amended by SFAS 148, the estimated fair value of options is amortized to expense on a straight-line basis over the options' vesting period. The following table illustrates what net loss would have been had

the Company accounted for its stock-based awards under the provisions of SFAS 123. Pro forma amounts may not be representative of future years.

	December 31,		
	2004	2003	2002
	(in thousands, except per share amounts)		
Net loss	$(187,478)	$(196,429)	$(208,898)
Stock-based employee compensation cost that would have been included in the determination of net loss if the fair value based method had been applied to all awards	(41,980)	(61,022)	(80,733)
Pro forma net loss as if the fair value based method had been applied to all awards	$(229,458)	$(257,451)	$(289,631)
Basic and diluted net loss per share	$ (2.11)	$ (2.23)	$ (2.39)
Pro forma basic and diluted loss per share as if the fair value based method had been applied to all awards	$ (2.59)	$ (2.93)	$ (3.32)

Net Loss Per Share

Basic net loss per share is calculated based on the weighted average number of shares outstanding during the period. The impact of common stock options, warrants and shares issuable upon the conversion of the convertible subordinated notes due 2007, the convertible senior notes due 2011, the convertible subordinated note due 2013 and the redeemable convertible preferred stock was excluded from the computation of diluted net loss per share, as their effect is antidilutive for the periods presented.

The following table sets forth potential shares of common stock that are not included in the computation of diluted net loss per share because to do so would be antidilutive for the year ended December 31, 2004 (in thousands):

Outstanding options	13,230
Warrants	16
Convertible subordinated notes due 2007	4,124
Convertible senior notes due 2011	23,401
Convertible subordinated note due 2013	4,958
Redeemable convertible preferred stock	4,958
	50,687

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Reclassifications

Certain prior-year balances have been reclassified to conform to the current-year presentation.

2. ACQUISITIONS

Hesed Biomed

In November 2001, the Company acquired Hesed Biomed, a privately held biotechnology company with intellectual property and technology in the field of catalytic antibodies. Abgenix acquired all of the common stock of Hesed Biomed for 537,436 shares of Abgenix common stock and warrants for the purchase of 18,731 shares of Abgenix common stock and cash. The total purchase price was valued at $21.6 million, including transaction costs. As a contingency for pre-acquisition liabilities of the former Hesed Biomed discovered after the acquisition date, 61,506 shares of the Company's common stock were not issued until November 2002. The value of these contingency shares at the time of acquisition was $1.9 million and was included in acquisition liabilities on the balance sheet at December 31, 2001. There were no acquisition liabilities remaining as of December 31, 2002. This acquisition was accounted for as the purchase of technology.

3. IDENTIFIED INTANGIBLE ASSETS

Identified intangible assets as of December 31, 2004 and 2003 consisted of the following (in thousands):

	Gross Assets	Accumulated Amortization	Net
As of December 31, 2004:			
Acquisition-related developed technology	$ 85,142	$26,264	$58,878
Other intangible assets	1,442	310	1,132
Identified intangible assets	$ 86,584	$26,574	$60,010
As of December 31, 2003:			
Acquisition-related developed technology	$106,183	$23,689	$82,494
Other intangible assets	1,442	220	1,222
Identified intangible assets	$107,625	$23,909	$83,716

Amortization of acquisition-related intangibles was $6.4 million, $7.1 million and $7.1 million for 2004, 2003 and 2002, respectively. Amortization of other intangible assets was $90,000, $113,000 and $185,000 for 2004, 2003 and 2002, respectively. All of the Company's acquired identified intangibles other than goodwill are subject to amortization.

Expected amortization expense related to identified intangible assets for each of the fiscal years after December 31, 2004 is as follows (in thousands):

	Year Ending December 31,						
	2005	2006	2007	2008	2009	Thereafter	Total
Acquisition-related intangibles	$5,674	$5,674	$5,674	$5,676	$5,676	$30,504	$58,878
Other intangible assets	$ 90	$ 90	$ 90	$ 90	$ 90	$ 682	$ 1,132

4. INVESTMENTS

Marketable Securities

The following is a summary of marketable securities at December 31, 2004 and 2003:

	2004			2003		
	Amortized Cost	Unrealized Gain/(Loss)	Estimated Fair Value	Amortized Cost	Unrealized Gain/(Loss)	Estimated Fair Value
		(in thousands)			(in thousands)	
U.S. corporate obligations	$101,318	$ (332)	$100,986	$115,636	$ 198	$115,834
Non-U.S. corporate obligations	2,567	(18)	2,549	6,240	59	6,299
Asset-backed securities	35,314	(87)	35,227	78,272	240	78,512
Obligations of the U.S. government and its agencies	136,155	(749)	135,406	134,329	392	134,721
Repurchase agreements	137,007	—	137,007	—	—	—
Municipal obligations	—	—	—	3,400	—	3,400
Money market funds	4,416	—	4,416	11,427	—	11,427
Marketable equity securities	12,723	10,577	23,300	12,723	7,972	20,695
Total	$429,500	$ 9,391	$438,891	$362,027	$8,861	$370,888
Classified as:						
Cash equivalents			$141,390			$ 14,824
Marketable securities			267,400			328,622
Deposits and other assets			6,801			6,747
Long-term investments			23,300			20,695
			$438,891			$370,888

The Company's available-for-sale debt securities have the following maturities at December 31, 2004 (in thousands):

Due in one year or less	$279,364
Due after one year but less than five years	131,811
	$411,175

The unrealized gains and losses as of December 31, 2004 and 2003 were reported as accumulated other comprehensive income/(loss), which is a separate component of stockholders' equity. Unrealized losses, which were primarily due to increase in interest rates, represented less than one percent of the total fair value of the Company's investment portfolio. The Company has concluded that unrealized losses are not other-than-temporary and that the Company has the intent and ability to hold temporarily impaired investments to maturities or call date. As of December 31, 2004, $274.2 million of marketable securities had a total unrealized loss of $1.2 million, and the majority of these marketable securities were purchased within the last 12 months.

The cost of securities sold is based on the specific identification basis. There was no material gross realized gain or loss in 2004, 2003 and 2002.

Other Investments

In August 2001, the Company entered into a $16.8 million loan agreement. The first disbursement of $14.0 million was made in October 2001 and the final disbursement of $2.8 million was made in

July 2002. The amount is included in deposits and other assets on the balance sheet. The loan bears interest at a rate of 8.5% per year and is payable monthly. The loan matures in August 2011 and the entire principal balance and accrued interest are due on the maturity date.

In 2001, the Company invested $15.0 million in equity securities of MDS Proteomics, a privately held company, in connection with a collaboration with that company. As of December 31, 2003 and June 30, 2002, the Company determined that an impairment of the investment had occurred and estimated that the value of the investment had declined to zero and $7.9 million, respectively. Accordingly, the Company recorded an impairment charge of $7.9 and $7.1 million, respectively, in 2003 and 2002. The amount of the charge was based on the difference between the estimated value as determined by management and the revised or original cost basis. At December 2002, the investment was recorded in long-term investments on the balance sheet.

5. RELATED PARTY TRANSACTIONS

At December 31, 2004 and 2003, the Company had notes receivable from certain officers and employees totaling $550,000 for both years, which are included in deposits and other assets on the balance sheet. The notes were issued in connection with employee relocation agreements. The notes begin to accrue interest beginning in May 2005 through June 2008 and bear interest at rates ranging from 2.34% to 6.70%. The notes are secured by personal assets, and have due dates ranging from June 2010 through June 2013, or 30 days from the date of termination of employment, if earlier.

6. BALANCE SHEET COMPONENTS

	December 31,	
	2004	2003
	(in thousands)	
Accounts receivable:		
Accounts receivable	$ 5,729	$ 2,726
Less: allowances	—	(552)
Accounts receivable, net	$ 5,729	$ 2,174
Property and equipment:		
Furniture, machinery and equipment	$ 91,239	$ 88,430
Leasehold improvements	156,090	155,208
	247,329	243,638
Less: Accumulated depreciation	(80,645)	(51,476)
Construction-in-progress	56,320	54,115
Property and equipment, net	$223,004	$246,277
Accrued liabilities:		
Accrued product development costs	$ —	$ 643
Accrued employee benefits	5,838	4,737
Accrued clinical costs	3,944	2,846
Other accrued liabilities	5,499	5,748
Accrued liabilities	$ 15,281	$ 13,974

7. CONVERTIBLE NOTES

Convertible notes consisted of the following (in thousands):

	December 31,	
	2004	2003
1.75% convertible senior notes due 2011	$300,000	$ —
3.5% convertible subordinated notes due 2007	113,750	200,000
Convertible subordinated note due 2013	49,880	—
	$463,630	$200,000

1.75% Convertible Senior Notes due 2011

On December 21, 2004, the Company issued $300.0 million principal amount of convertible senior notes in a private placement. The notes are senior in right to any existing indebtedness which is subordinated by its terms, including the Company's 3.5% convertible subordinated notes due 2007 and convertible subordinated note due 2013. The notes are convertible into shares of the Company's common stock at an initial conversion rate of 78.0153 shares per $1,000 principal amount of notes (which is equivalent to a conversion price of approximately $12.82 per share). The notes accrue interest at an annual rate of 1.75% payable on June 15 and December 15 of each year. The notes will mature on December 15, 2011 and are redeemable at the Company's option on or after December 20, 2009 at the specified redemption prices. In addition, the holders of the notes may require the Company to repurchase the notes, subject to certain conditions, if the Company undergoes certain changes in control. In addition, upon certain changes in control and subject to certain conditions, additional shares of common stock may become issuable to holders upon conversion of the notes. Holders of the notes may also require the Company to repurchase their notes for their principal amount plus accrued and unpaid interest upon the occurrence of an event of default. The Company received proceeds of $291.0 million from the issuance of the notes, net of initial purchasers' discount and commissions. As of December 31, 2004, the fair value of the notes was $327.5 million. The fair value was based on the quoted market price at December 31, 2004.

3.5% Convertible Subordinated Notes due 2007

In March 2002, the Company issued $200.0 million principal amount of convertible subordinated notes in a private placement. The notes are convertible into shares of Abgenix common stock at a conversion price of $27.58 per share subject to certain adjustments. The notes accrue interest at an annual rate of 3.5% and the Company is obligated to pay interest by March 15 and September 15 of each year. In December 2004, the Company repurchased a portion of the notes totaling $86.3 million. In connection with this repurchase, the Company recorded a loss on early extinguishment of debt of $1.0 million, which was included in the interest and other income (expense), net, in the Company's consolidated statements of operations. The notes will mature on March 15, 2007, and are redeemable at the Company's option on or after March 20, 2005, or earlier if the price of the Company's common stock exceeds specified levels. In addition, the holders of the notes may require the Company to repurchase the notes if the Company undergoes a change in control. Holders of the notes may also require the Company to repurchase their notes for their principal amount plus accrued and unpaid interest upon the occurrence of an event of default. As of December 31, 2004 and 2003, the fair value

of the notes was $113.2 million and $186.2 million, respectively. The fair value was based on the quoted market price at December 31, 2004 and 2003.

Convertible Subordinated Note due 2013

On February 19, 2004, the Company issued to AstraZeneca a convertible subordinated note with a principal amount of $50.0 million in connection with the redemption by AstraZeneca of the Series A-2 preferred stock. The note matures on October 19, 2013, and no interest is payable on the note, except that, in the event of a payment default by the Company, the note will bear interest at a rate equal to the 10-year U.S. treasury rate plus 3%, compounded annually. The note is senior to the redeemable convertible preferred stock and the common stock and is junior to all senior indebtedness, including the 1.75% convertible senior notes due 2011 and the 3.5% convertible subordinated notes due 2007.

The note has the following terms similar to that of the redeemable convertible preferred stock issued to AstraZeneca in October 2003: conversion rights, redemption rights and aggregate ownership limitation. The note contains the events of default that pertain to the redeemable convertible preferred stock and an additional event of default in the case of a cross-acceleration of $25 million or more of other indebtedness of the Company. See Note 9 for detail description of redeemable convertible preferred stock issued to AstraZeneca.

8. OTHER LONG-TERM LIABILITIES

In 2000, the Company entered into a joint development and commercialization agreement with Immunex Corporation, a wholly-owned subsidiary of Amgen Inc., for the co-development of ABX-EGF, now known as panitumumab, a fully human antibody directed against epidermal growth factor receptor (EGFr) the Company created. The parties amended this agreement in October 2003. Under the amended agreement, Amgen has decision-making authority for development and commercialization activities. As under the original agreement, the Company is obligated to pay 50% of the development and commercialization costs and is entitled to receive 50% of any profits from sales of panitumumab. Under the amended agreement, Amgen is required to make available in 2004 and 2005 up to $60.0 million in advances that the Company may use to fund a portion of its share of development and commercialization costs for panitumumab after the Company has contributed $20.0 million toward development costs in 2004. As of December 31, 2004, the Company has a carrying balance of $25.6 million under this facility consisting of $25.1 million in advances and $517,000 of interest accrued at the contract rate of 12% per annum. The Company drew an additional $9.0 million under this facility in February 2005. The amount of the advances, plus interest, may be repaid out of profits resulting from future product sales; however, the Company is generally not obligated to repay any portion of the outstanding balance if panitumumab does not reach commercialization.

9. REDEEMABLE CONVERTIBLE PREFERRED STOCK

In October 2003, in connection with a collaboration agreement, the Company entered into a securities purchase agreement with AstraZeneca. Pursuant to the agreement, the Company issued to AstraZeneca $50.0 million of Series A-1 and $50.0 million of Series A-2 convertible preferred stock which mature seven and 10-years, respectively, from the date of issuance. Net proceeds from these issuances were $99.7 million. Pursuant to its terms, the Series A-2 preferred stock was redeemed at the option of AstraZeneca on February 19, 2004 and the Company issued AstraZeneca a convertible subordinated note with a principal amount of $50.0 million, which matures 10 years from the initial issuance of the Series A-2 convertible preferred stock. Subject to various terms and conditions, if a certain milestone event is reached, the Company will have the option to issue to AstraZeneca up to

$30.0 million of Series A-3 preferred stock and if a further milestone event is reached, the Company will have the option to issue to AstraZeneca up to $30.0 million of Series A-4 preferred stock. Each of the Series A-3 preferred stock and the Series A-4 preferred stock will have a maturity date that is five years from issuance. Due to the mandatory redemption feature, the Company does not record the redeemable convertible preferred stock in stockholders' equity on its consolidated balance sheet. The carrying value of the redeemable convertible preferred stock approximates its fair value.

Conversion rights

The Company, subject to certain conditions, can convert each series of preferred stock into shares of common stock at a conversion price equal to the lower of (a) the average market price for the 10 days prior to the trading day immediately preceding the conversion date (provided that the average market price shall in no event be higher than 101% of the market price on the trading day immediately preceding the conversion date) or (b) $30.00 per share.

AstraZeneca may convert each series of preferred stock into shares of common stock at a conversion price of $30.00 per share, at any time prior to the earlier of (a) the redemption date or (b) the maturity date, as applicable.

Redemption rights and maturity

The Company must redeem all outstanding shares of its Series A-1 preferred stock, if any, at a cash redemption price per share equal to the liquidation preference by October 29, 2010, the mandatory redemption date.

The Company can, upon at least 15 days' notice to the holder, redeem the preferred stock for cash in an amount equal to its liquidation preference, at any time prior to maturity.

AstraZeneca has the right to require Abgenix to redeem all outstanding shares of the preferred stock at their liquidation preference, upon the occurrence of a change in control of Abgenix after the completion of a defined research period. At its option, and subject to certain conditions, Abgenix may deliver shares of its common stock in lieu of cash upon such an event.

AstraZeneca has the right to require Abgenix to redeem a specified portion of the outstanding shares of preferred stock upon the occurrence of (a) a material breach by Abgenix of a material obligation under the Collaboration Agreement between the Company and AstraZeneca or (b) a change in control of Abgenix or an acquisition by Abgenix in which the other party to the change in control or acquisition, as the case may be, is a competitor of AstraZeneca, in each case that occurs during a defined research period and results in AstraZeneca's termination of all research programs and future programs under the collaboration agreement. The amount that AstraZeneca may require Abgenix to redeem will be based upon the extent of completion of the research programs that are the subject of the collaboration between the Company and AstraZeneca. At its option, and subject to certain conditions, Abgenix may deliver shares of its common stock in lieu of cash upon such events.

Upon the occurrence of certain events of default, (1) the holders of the Series A-1 preferred stock shall have the right to make the entire liquidation value of the Series A-1 preferred stock due and payable and (2) if the event of default is a payment default, quarterly cash dividends shall begin to accrue on the Series A-1 preferred stock at a default rate equal to the 10-year U.S. treasury rate plus three percent (3%) compounded annually. Events of default for purposes of this provision include, but are not limited to, the following: (i) a failure to make a required payment, or a breach by the Company of any of the Company's other obligations under, the Series A-1 preferred stock, the convertible

subordinated note or any subordinated promissory note that may be issued by the Company in the circumstances described below under "Aggregate ownership limitation"; (ii) a breach of the Company of specified obligations under the securities purchase agreement with AstraZeneca; (iii) the securities purchase agreement, or any other agreement or instrument contemplated by the securities purchase agreement, is asserted by the Company not to be a legal, valid and binding instrument; and (iv) certain bankruptcy and insolvency events involving the Company.

Liquidation, Dividend and Voting rights

The Series A-1 preferred stock has a liquidation preference of $50 million. The Series A-1 preferred stock will receive dividends or distributions if and when declared on the common stock on an as-converted basis, but shall have no other rights to dividends, except upon an event of default that is a payment default.

Holders of preferred stock have the right to vote with the common stock on an as-converted basis. In addition, the preferred stock has a class vote on certain matters. Upon an event of default that is a payment default, the preferred stock will accrue quarterly a cumulative dividend, at a rate equal to the 10-year U.S. treasury rate plus 3%, compounded annually.

The preferred stock is subordinate and junior to all indebtedness and senior to the Company's common stock.

Aggregate ownership limitation

At no time may any holder of Series A-1 preferred stock beneficially own, following the conversion of the preferred stock more than 19.9% of the Company's common stock then outstanding. If any shares of common stock are issuable to a holder upon conversion of the preferred stock that would result in any holder (together with its affiliates) owning common stock in excess of the ownership threshold described above, then the Company will be required to redeem the shares in excess of the ownership threshold for a price equal to (1) the number of such excess shares times (2) the average market price of the common stock for the 30 consecutive days ending on the 15th trading day prior to the conversion date (such price, the "Excess Shares Redemption Price"). Upon such a redemption of the Series A-1 preferred stock, the Company will have the right, upon delivery of notice to the holder, to receive a loan from the holder in the form of a interest-free subordinated promissory note. The face amount of the promissory note shall be the Excess Shares Redemption Price.

10. COMMITMENTS

Facility Leases

The Company has several operating leases for its office, research and development and manufacturing facilities in California and British Columbia, Canada. The leases expire in the year 2010 through 2015 and each includes an option to extend, other than the leases for our facilities in Canada.

Future minimum payments under noncancelable operating leases at December 31, 2004 are as follows (in thousands):

Year ending December 31,	
2005	$ 13,848
2006	14,308
2007	14,843
2008	15,355
2009	15,858
Thereafter	56,545
Total lease payments	130,757
Less aggregate future minimum rentals to be received under sublease	1,921
	$128,836

Rent expense was $14.1 million, $14.4 million and $13.6 million for the years ended December 31, 2004, 2003 and 2002, respectively.

Purchase Commitments

As of December 31, 2004, the Company had committed approximately $2.5 million for the purchase of equipment and leasehold improvements for its manufacturing facility.

Letters of Credit and Capital Lease

In March 2000 and February 2001, the Company obtained stand-by letters of credit for $2.0 million and $3.0 million, respectively, from a commercial bank as security for its obligations under two facility leases. These were increased in January 2002 to $2.5 and $3.2 million, respectively, in connection with amendments to the Company's facility leases. In December 2003, the $3.2 million stand-by letter of credit increased to $3.5 million. The outstanding stand-by letters of credit are secured by an investment account, in which the Company maintains a balance of approximately $7.0 million.

License and Collaboration Agreements

In October 2003, the Company entered into a collaboration and license agreement with AstraZeneca UK Limited ("AstraZeneca") to provide for the joint discovery and development of therapeutic antibodies against up to 36 oncology targets to be commercialized exclusively worldwide by AstraZeneca. The agreement provides that the Company will conduct early stage preclinical research on behalf of AstraZeneca with respect to these targets. Under the agreement, the Company also may conduct clinical, process development and manufacturing activities for which AstraZeneca is to compensate the Company at competitive market rates. The collaboration agreement also includes a co-development component under which Abgenix will be able to generate additional antibody product candidates against up to 18 targets that AstraZeneca will have the option to co-develop with Abgenix. The companies will share development costs and responsibilities for any co-development candidates selected by AstraZeneca. During the three-year period of selection of targets for development the Company will work exclusively with AstraZeneca to generate and develop antibodies for therapeutic use in oncology subject to various exceptions, including among others for generation and development of antigens in accordance with existing collaborations, for antigens that the Company and AstraZeneca

decide not to pursue in the collaboration, and for certain process development and manufacturing services.

Product Manufacturing

In June 2003, the Company canceled its November 2000 agreement with Lonza Biologics plc ("Lonza") for the exclusive use of a cell culture production suite, because the Company determined that with the opening of its own manufacturing plant and due to changes in its portfolio of product candidates, it no longer needed access to the Lonza facility. Upon canceling the agreement, the Company became obligated to pay Lonza four equal installments of 4,250,000 British pounds on October 1, 2003, February 1, 2004, May 1, 2004 and August 1, 2004. The value of this obligation on the effective date of June 30, 2003 was approximately $28.0 million. In July 2004, the Company made the final installment payment to Lonza. As of December 31, 2004 the Company had no remaining obligations to Lonza.

11. COMPREHENSIVE INCOME/(LOSS)

Other comprehensive income/(loss) consists of unrealized gains or losses on available-for-sale securities. The components of comprehensive loss, net of tax, were as follows:

	December 31,		
	2004	2003	2002
		(in thousands)	
Net loss	$(187,478)	$(196,429)	$(208,898)
Other comprehensive income (loss):			
Unrealized holding gains (losses) arising during the period	530	4,705	(52,075)
Less: reclassification adjustment for losses recognized in net loss	—	—	67,277
Change in unrealized gains on securities	530	4,705	15,202
Comprehensive loss	$(186,948)	$(191,724)	$(193,696)

12. IMPAIRMENT OF IDENTIFIED INTANGIBLE ASSETS

In the quarter ended June 30, 2004, management determined that an impairment of the Company's acquired technology in the field of catalytic antibodies had occurred and that the estimated value had declined to zero. This technology, which includes intellectual property, was acquired in 2001 through the acquisition of Hesed Biomed, Inc. The Company decided to focus its resources on other research and development projects and decided to wind down its catalytic antibody program. Additionally, after assessing the associated patent position and the likelihood of sale or license of the technology to a third party, management further determined in the quarter ended June 30, 2004 that the possibility of generating positive future cash flows from the technology was remote. As a result of this determination, the Company recorded an impairment charge of $17.2 million in the second quarter of 2004.

In the quarter ended March 31, 2003, the Company decided to discontinue the development of anti-properdin antibodies. As a result, the Company recorded an impairment charge of $1.4 million for previously capitalized costs related to licenses and research funding for the development of therapeutic antibodies to the complement protein properdin, which the Company licensed from Gliatech, Inc. Such charge is included in 2003.

13. IMPAIRMENT OF INVESTMENTS

In 2001, the Company invested $15.0 million in equity securities of MDS Proteomics, a privately held company, in connection with its collaboration with that company. As of December 31, 2003 and June 30, 2002, the Company determined that an impairment of the investment had occurred and estimated that the value of the investment had declined to zero and $7.9 million, respectively. Accordingly, the Company recorded an impairment charges of $7.9 and $7.1 million, respectively, in the fourth quarter of 2003 and second quarter of 2002. The amount of the charge was based on the difference between the estimated value as determined by the management and the revised or original cost basis.

The Company purchased an aggregate amount of $80.0 million of common stock of CuraGen and ImmunoGen as strategic investments at various times in 1999 and 2000. In 2002, declines in the fair value of the CuraGen and ImmunoGen common stock were deemed by the Company management to be other than temporary. Accordingly, the Company recorded a total impairment charge for the year ended December 31, 2002 of $67.3 million. As of December 31, 2004, these investments were recorded at fair value in long-term investments on the balance sheet, and the net unrealized holding gains of $10.6 million are reported as a component of stockholders' equity. If the Company deems these investments further impaired at the end of any future period, the Company may incur an additional impairment charge on these investments.

14. RESTRUCTURING CHARGE

In October 2002, the Company announced a restructuring plan, which consisted primarily of a 15% reduction in employees. A restructuring charge of $1.8 million was recorded in 2002 to account for severance pay, medical benefits and other costs associated with this restructuring. Of the $1.8 million, $0.7 million was paid in 2002 and the remainder was paid in 2003.

15. INTEREST AND OTHER INCOME (EXPENSE), NET

Interest and other income (expense), net, consisted of the following:

	December 31,		
	2004	2003	2002
	(in thousands)		
Interest income	$ 6,376	$9,498	$19,373
Loss on early extinguishment of debt	(1,016)	—	—
Other income	22	455	772
Interest and other income (expense), net	$ 5,382	$9,953	$20,145

In December 2004, the Company recorded a loss on early extinguishment of debt of $1.0 million in connection with the repurchase of $86.3 million of the 3.5% convertible subordinated notes due 2007.

16. INCOME TAXES

No federal or state income tax expense or benefit was recorded for the years ended December 31, 2004, 2003 and 2002, as the Company incurred net operating losses during these periods and potential tax benefits associated with net operating loss carryforwards and other deferred tax assets were completely offset by a full valuation allowance. The Company recorded a foreign income tax expense of $84,000 in 2003 but did not incur any foreign income tax expense in 2004 and 2002.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets as of December 31, 2004 and 2003 are as follows:

	December 31,	
	2004	2003
	(in thousands)	
Deferred tax assets:		
Net operating loss carryforwards	$ 239,500	$ 165,500
Investment reserve	32,900	32,900
Capitalized research and development	21,300	17,000
Research credit carryforwards	28,000	24,100
Other	19,300	20,500
Total deferred tax assets	341,000	260,000
Valuation allowance	(325,600)	(237,500)
Net deferred tax assets	15,400	22,500
Deferred tax liabilities:		
Purchased intangibles	(11,200)	(19,300)
Other	(4,200)	(3,200)
Net deferred taxes	$ —	$ —

Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Accordingly, the net deferred tax assets have been fully offset by a valuation allowance. The valuation allowance increased by $88.1 million and $68.5 million during the years ended December 31, 2004 and 2003, respectively. Approximately $43.9 million of the valuation allowance for deferred tax assets relates to benefits of stock option deductions, the benefit of which will be credited to equity when realized. As of December 31, 2004, the Company had net operating loss carryforwards for federal and state income tax purposes of approximately $670.0 million and $194.0 million, respectively, which expire in the years 2006 through 2024. As of December 31, 2004, the company had federal and state research and development tax credit carryforwards of approximately $16.0 million and $18.0 million, respectively. The federal credits expire in the years 2006 through 2024. The state credits do not expire. Utilization of the Company's net operating loss and tax credit carryforwards may be subject to substantial annual limitation due to the ownership change limitations provided by Internal Revenue Code and similar state provisions. Such an annual limitation could result in the expiration of these carryforwards before utilization.

The Company has entered into intercompany agreements with its Canadian subsidiary, and such agreements could be unfavorably interpreted by the applicable taxing authorities, causing an increase in income tax expense and net loss. As a result, the Company has recorded a tax liability. The assessment of income tax implications of this intercompany relationship requires significant management judgment.

17. SEGMENT INFORMATION

The operations of the Company and its wholly owned subsidiaries constitute one business segment.

Information about customers who provided 10% or more of contract revenues for the period is as follows:

Year Ended	Number of Customers and Percentage of Contract Revenues for each of the Customers
December 31, 2004	3 customers, 26%, 24% and 23%, respectively
December 31, 2003	4 customers, 29%, 21%, 18% and 12%, respectively
December 31, 2002	4 customers, 44%, 17%, 12% and 10%, respectively

18. STOCKHOLDERS' EQUITY

Common Stock

Initial Public Offering—In July 1998, the Company completed an initial public offering of 10,000,000 shares of its common stock to the public, at a price of $2.00 per share. On July 27, 1998, the Company's underwriters exercised an option to purchase 1,500,000 additional shares of common stock at a price of $2.00 per share to cover over-allotments. The Company received net proceeds from the offerings of approximately $20.1 million. Upon the closing of the initial public offering, each of the outstanding 31,377,408 shares of redeemable convertible preferred stock was automatically converted into one share of common stock.

Collaborator or Private Placement—In January 1999, a collaborator acquired 1,981,424 shares of the Company's common stock for an aggregate purchase price of $8.0 million.

Follow-on Public Offering—In March 1999, the Company completed a follow-on public offering of 12,000,000 shares of its common stock to the public, at a price of $3.75 per share. On April 7, 1999 the Company's underwriters exercised an option to purchase 832,000 additional shares of common stock at a price of $3.75 per share to cover over-allotments. The Company received net proceeds from the offerings of approximately $44.5 million.

Private Placement—In November 1999, the Company completed a private placement of 7,112,000 shares of its common stock to qualified institutional and other accredited investors at a net price of $10.50 per share. The Company received net proceeds of $71.1 million.

Follow-on Public Offering—In February 2000, the Company completed a follow-on public offering in which the Company sold 8,640,000 shares and a stockholder sold 3,360,000 shares of the Company's common stock to the public at a price of $52.50 per share. On February 29, 2000, the Company's underwriters exercised an option to purchase 1,800,000 additional shares, of which 1,296,000 shares were sold by the Company and 504,000 shares were sold by a stockholder at a price of $52.50 per share. The Company received net proceeds from the offerings of $496.5 million after the underwriters' discount and estimated costs of offering.

Private Placement—In November 2000, the Company completed a private placement of 3,300,000 shares of its common stock to qualified institutional and other accredited investors at a net price of $70.00 per share. The Company received net proceeds of $221.0 million.

Acquisition for Common Stock—In November 2001, the Company acquired Hesed Biomed in exchange for 475,930 shares of common stock, valued at $29.79 per share. (See Note 2 above and **Warrants** below.)

Abgenix is authorized to issue up to 220,000,000 shares of common stock. At December 31, 2004, common stock issuable upon conversion or exercise is as follows (in thousands):

Stock option plans	17,805
Warrants	16
Employee stock purchase plans	785
Convertible subordinated notes due 2007	4,124
Convertible senior notes due 2011	23,401
Convertible subordinated note due 2013	1,667
Redeemable convertible preferred stock	1,666
	49,464

Stockholder Rights Plan

On June 2, 1999, the Company's Board of Directors declared a dividend of one right, or Right, to purchase one one-thousandth share of our Series A Participating Preferred Stock, or Series A Preferred, for each of our outstanding shares of common stock, the Common Shares. On June 14, 1999, the Company entered into a Preferred Shares Rights Agreement, or Rights Agreement, with ChaseMellon Shareholder Services, L.L.C., the predecessor to Mellon Investor Services LLC, as Rights Agent, which was amended and restated on November 19, 1999, and on May 9, 2002 and amended on October 29, 2003. The dividend was payable to stockholders of record as of the close of business on the record date, June 14, 1999. As amended, each Right entitles the registered holder to purchase from us one one-thousandth of a share of Series A Preferred at an exercise price of $175.00, the Purchase Price. Each one one-thousandth of a share of Series A Preferred has rights and preferences substantially equivalent to those of one Common Share.

The Rights will separate from the Common Shares and become exercisable upon the earlier of: (i) 10 days following a public announcement that a person or group has acquired 15% or more of the outstanding Common Shares, or (ii) 10 business days (or such later date as may be determined by our Board of Directors) following the announcement of a tender offer or exchange offer for 15% or more of the Common Shares. Unless the Rights are earlier redeemed by our Board of Directors at a price of $0.01 per Right, if a person or group acquires 15% or more of the Common Shares, each Right will entitle its holder to receive, upon exercise, Common Shares having a value equal to two times the Purchase Price. Similarly, unless the Rights are earlier redeemed, in the event that, after a person or group becomes the beneficial owner of 15% or more of the Common Shares, (i) the Company is acquired in a merger, or (ii) 50% or more of the Company's assets or earning power are sold, proper provision must be made so that each holder of a Right which has not been exercised will have the right to receive, upon exercise, shares of common stock of the acquiring company having a value equal to two times the Purchase Price. After the acquisition of 15% or more of the Common Shares but prior to such a merger or sale, the Board of Directors may exchange each Right for one Common Share.

In October 2003, pursuant to the securities purchase agreement between the Company and AstraZeneca, the Company amended its stockholder rights plan to prevent AstraZeneca from becoming an "Acquiring Person" for purposes of the rights plan as a result of (1) its acquisition of securities of Abgenix pursuant to the securities purchase agreement; (2) the beneficial ownership by AstraZeneca and its affiliates of the common stock of Abgenix issuable upon conversion of the securities issued pursuant to the securities purchase agreement; or (3) the mandatory conversion at the Company's option of the securities issued pursuant to the securities purchase agreement into shares of common stock. The Company agreed to keep this amendment in place for a "standstill period" designated in the

securities purchase agreement, provided that the Company's obligation to keep the rights plan amendment in place shall lapse if AstraZeneca breaches its standstill obligations in the securities purchase agreement. The Company has agreed to continue to keep the amendment in place after the termination of the standstill period for so long as AstraZeneca does not acquire voting securities of Abgenix that would cause AstraZeneca's level of ownership to exceed that in effect on the date of the termination of the standstill period.

Warrants

In connection with the acquisition of Hesed Biomed in November 2001, the Company assumed obligations under outstanding warrants for the purchase of 18,731 shares of common stock. At December 31, 2004, 16,051 shares of these warrants were outstanding and expire on various dates from October 2005 through February 2010. (See Note 2.)

19. STOCK OPTION AND BENEFIT PLANS

Incentive Stock Plans

The Company has three stock plans, which allow for the granting of incentive and non-qualified stock options to employees, outside directors and consultants of the Company. There are 26,365,000 shares of common stock authorized for issuance under the plans. The Company grants shares of common stock for issuance under the plans at no less than the fair value of the stock. Options granted under the plans generally have a term of seven or ten years and vest over four years.

Information with respect to activity under the plans is as follows:

	Option Shares Available for Grant	Option Shares Outstanding	Weighted Average Exercise Price
Balances at December 31, 2001	2,248,675	12,823,085	$30.46
Authorized	4,000,000	—	—
Options granted	(1,669,541)	1,669,541	$19.15
Options exercised	—	(548,367)	$ 1.32
Options canceled	1,185,278	(1,185,278)	$39.66
Balances at December 31, 2002	5,764,412	12,758,981	$29.38
Options granted	(2,365,473)	2,365,473	$ 9.32
Options exercised	—	(280,844)	$ 3.75
Options canceled	2,478,793	(2,478,793)	$34.03
Balances at December 31, 2003	5,877,732	12,364,817	$25.24
Options granted	(2,128,254)	2,128,254	$12.77
Options exercised	—	(437,267)	$ 4.81
Options canceled	826,142	(826,142)	$23.80
Balances at December 31, 2004	4,575,620	13,229,662	$23.52
Options exercisable at:			
December 31, 2002		8,259,644	$26.87
December 31, 2003		8,953,781	$26.78
December 31, 2004		10,203,794	$26.67

In addition to the amounts disclosed in the table above, in June 2001, the Company granted and immediately canceled 159,413 options under the 1999 stock option plan in relation to the cash buy-out of outstanding options held by Abgenix Biopharma employees.

The following table summarizes information about options outstanding at December 31, 2004:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number of Options	Weighted Average Exercise Price	Remaining Contractual Life, in Years	Number of Options	Weighted Average Exercise Price
$0.15-$2.50	946,535	$ 0.88	2.44	946,535	$ 0.88
$3.59-$10.99	4,455,510	$ 7.55	5.25	2,747,847	$ 6.54
$11.00-$31.81	4,283,542	$23.32	6.00	3,035,870	$26.08
$32.28-$42.00	1,956,497	$36.04	5.97	1,906,724	$36.06
$45.00-$59.93	637,378	$48.82	5.92	616,618	$48.95
$75.17-$80.81	950,200	$79.13	5.68	950,200	$79.13
	13,229,662	$23.52	5.46	10,203,794	$26.67

The weighted-average fair values of options granted during the years ended December 31, 2004, 2003 and 2002 were $9.43, $7.25 and $15.34 per share.

Pro Forma Information

Pro forma information regarding net loss and net loss per share is required by SFAS No. 123, and has been provided in Note 1. The information has been determined as if the Company had accounted for its employee stock options under the fair value method of that Statement. The fair value for these options was estimated at the date of grant using a Black-Scholes option pricing model with the following assumptions for 2004, 2003 and 2002, respectively: risk-free interest rate of 3.40%, 2.81% and 3.07%; no dividend yield in 2004, 2003 or 2002; volatility factor of 0.90, 1.00 and 1.05; and an expected life of the option of 5.63 years in 2004, 5.51 years in 2003 and 5.54 years in 2002. These same assumptions were applied in the determination of the option values related to stock options granted to non-employees, except for the option life for which the term of the consulting contracts, 1 to 5 years, were used. The value of non-employee options has been recorded in the financial statements.

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

Employee Stock Purchase Plans

The Company's employee stock purchase plan enables eligible employees to purchase common stock at 85% of the closing sale price on the first or the last day of each 6 month purchase period, whichever is lower. Employees may authorize periodic payroll deductions of up to 15% of eligible compensation for common stock purchases, with certain limitations. The number of shares which may be issued under the plan is 1,000,000, plus an annual increase equal to the lesser of 1,000,000, 1% of the Company's outstanding capitalization or a lesser amount determined by the Board. The maximum number of shares that can be issued over the 10-year term of the plan is 10,000,000. As of

December 31, 2004, 2,096,092 shares had been authorized under the plan and 1,460,934 shares had been issued.

The Company's Canadian employee stock purchase plan enables certain eligible employees to purchase common stock at the average market price on the first or the last day of each 6 month purchase period, whichever is lower. Eligible employees may authorize periodic payroll deductions of up to 15% of eligible compensation for common stock purchases, with certain limitations. The number of shares that may be issued under this plan is 200,000. As of December 31, 2004, 200,000 shares had been authorized under this plan and 50,104 shares had been issued.

Benefit Plan

The Company has available a 401(k) retirement plan in the United States. Eligible employees may contribute up to 100% of their compensation up to a maximum allowable under the Internal Revenue Code. The Company does not match contributions and therefore no expense has been recorded. The Company also has available a retirement plan in Canada. Eligible employees may contribute a percentage of their gross salary, up to the maximum dollar amount legislated by Canada Revenue Agency. After one year of employment, the Company matches employee contributions up to a maximum of 5% of the employee's gross salary.

20. CUSTOMER INDEMNIFICATION

The Company has certain agreements with customers and collaborators that contain indemnification provisions. In such provisions, the Company typically agrees to indemnify the customer or collaborator against certain types of third-party claims. The Company would accrue for known indemnification issues if a loss were probable and could be reasonably estimated. The Company would also accrue for estimated incurred but unidentified issues based on historical activity. There was no accrual for or expense related to indemnification issues as of December 31, 2004 and 2003.

21. QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

Unaudited quarterly financial information is as follows:

	Quarter Ended			
	Mar 31,	June 30,	Sep 30,	Dec 31,
	(in thousands, except per share data)			
2003				
Contract revenues	$ 6,156	$ 2,350	$ 1,957	$ 6,389
Impairment of intangible assets	1,443	—	—	—
Loss from operations	(35,279)	(67,955)	(43,953)	(45,435)
Impairment of investments	—	—	—	(7,892)
Net loss	(33,164)	(66,661)	(43,569)	(53,035)
Basic and diluted net loss per share	$ (0.38)	$ (0.76)	$ (0.50)	$ (0.60)
2004				
Contract revenues	$ 2,890	$ 4,189	$ 3,434	$ 5,557
Contract manufacturing revenues	—	1,325	—	370
Impairment of intangible assets	—	17,241	—	—
Loss from operations	(41,593)	(60,790)	(42,009)	(41,235)
Net loss	(41,566)	(60,623)	(42,420)	(42,869)
Basic and diluted net loss per share	$ (0.47)	$ (0.68)	$ (0.48)	$ (0.48)

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our principal executive officer and principal financial officer reviewed and evaluated our disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) as of the end of the period covered by this annual report on Form 10-K. Based on that evaluation, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures are effective in ensuring that all material information required to be included in this annual report on Form 10-K has been made known to them in a timely fashion.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f)). Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2004. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework*. Based on the assessment using those criteria, management believes that, as of December 31, 2004, our internal control over financial reporting was effective.

Our management's assessment of the effectiveness of our internal control over financial reporting as of December 31, 2004 has been audited by Ernst & Young LLP, our independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control Over Financial Reporting

There were no significant changes in the our internal control over financial reporting during the most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

Not applicable.

PART III

Item 10. Directors and Executive Officers of the Registrant

The information required by this item concerning the Company's directors, compliance with Section 16 (a) of the Securities Exchange Act of 1934 and the Company's code of ethics is incorporated by reference to the Company's Proxy Statement related to the 2005 Annual Meeting of Stockholders (the 2005 Proxy Statement.)

The information required by this item concerning the Company's executive officers is set forth in Part I of this Form 10-K.

Item 11. Executive Compensation

The information required by this item is incorporated by reference to the Company's 2005 Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management

The information required by this item is incorporated by reference to the Company's 2005 Proxy Statement.

Item 13. Certain Relationships and Related Transactions

The information required by this item is incorporated by reference to the Company's 2005 Proxy Statement.

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated by reference to the Company's 2005 Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedules

The following documents are filed as part of this Report:

1. Financial Statements

ABGENIX, INC., FINANCIAL STATEMENTS

Reports of Independent Registered Public Accounting Firm

Consolidated Balance Sheets

Consolidated Statements of Operations

Consolidated Statements of Stockholders' Equity

Consolidated Statements of Cash Flows

Notes to Consolidated Financial Statements

2. Financial Statement Schedules

All schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are inapplicable or the information has been disclosed in the financial statements, and therefore have been omitted.

3. Exhibits

Number	Description
3.1(29)	Amended and Restated Certificate of Incorporation of Abgenix, as currently in effect.
3.2(20)	Amended and Restated Bylaws of Abgenix, as currently in effect.
4.1(1)	Specimen Common Stock Certificate.
4.2(23)	Indenture dated March 4, 2002, between State Street Bank and Trust Company of California, N.A. and Abgenix, Inc.
4.3(21)	Amended and Restated Preferred Shares Rights Agreement, dated as of May 9, 2002, between Abgenix, Inc. and Mellon Investor Services, LLC, including the Certificate of Determination, the form of Rights Certificate and the Summary of Rights attached thereto as Exhibits A, B and C, respectively.

Number	Description
4.4(27)	Certificate of Designations, Preferences and Rights of Series A-1 Convertible Preferred Stock of Abgenix, Inc.
4.5(26)	Securities Purchase Agreement, dated as of October 15, 2003, by and between Abgenix, Inc. and AstraZeneca UK Limited.
4.6(28)	Amendment No. 1 to Amended and Restated Preferred Shares Rights Agreements, between Abgenix, Inc. and Mellon Investor Services LLC, dated October 29, 2003.
4.7(30)	Convertible Subordinated Note issued to AstraZeneca UK Limited.
4.8(33)	Indenture dated December 31, 2004, between U.S. Bank National Association and Abgenix, Inc.
4.9(33)	Registration Rights Agreement dated December 21, 2004 between Goldman, Sachs & Co. and Merrill Lynch & Co. and Abgenix, Inc.
10.1(1)	Form of Indemnification Agreement between Abgenix and each of its directors and officers.
10.2(29)	Amended and Restated 1996 Incentive Stock Plan.
10.3(1)	1998 Employee Stock Purchase Plan and form of agreement thereunder.
10.4(29)	Amended and Restated 1998 Director Option Plan.
10.5(22)	Amended and Restated 1999 Nonstatutory Stock Option Plan.
10.6(22)	Canadian Employee Stock Purchase Plan.
10.7(24)	Form of Change of Control Severance Agreement between Abgenix, Inc. and its officers.
10.8(32)	Employment Agreement, dated July 20, 2004, between Abgenix, Inc. and William R. Ringo.
10.9(32)	Change of Control Severance Agreement dated as of August 30, 2004, between Abgenix, Inc. and William R. Ringo.
10.10(32)	Resignation and Transition Agreement, dated August 30, 2004, between Abgenix, Inc. and Raymond M. Withy, Ph.D.
10.11(3)	Joint Venture Agreement dated June 12, 1991 between Cell Genesys and JT Immunotech USA Inc.
10.12(6)	Amendment No. 1 dated January 1, 1994 to Joint Venture Agreement.
10.13(9)	Amendment No. 2 dated June 28, 1996 to Joint Venture Agreement.
10.14(3)	Collaboration Agreement dated June 12, 1991 among Cell Genesys, Xenotech, Inc. and JT Immunotech USA Inc.
10.15(5)	Amendment No. 1 dated June 30, 1993 to Collaboration Agreement.
10.16(13)	Amendment No. 2 dated January 1, 1994 to Collaboration Agreement.
10.17(7)	Amendment No. 3 dated July 1, 1995 to Collaboration Agreement.
10.18(9)	Amendment No. 4 dated June 28, 1996 to Collaboration Agreement.
10.19(2)	Amendment No. 5 dated November 1997 to Collaboration Agreement.

Number	Description
10.20(3)	Limited Partnership Agreement dated June 12, 1991 among Cell Genesys, Xenotech, Inc. and JT Immunotech USA Inc.
10.21(6)	Amendment No. 2 dated January 1, 1994 to Limited Partnership Agreement.
10.22(8)	Amendment No. 3 dated July 1, 1995 to Limited Partnership Agreement.
10.23(10)	Amendment No. 4 dated June 28, 1996 to Limited Partnership Agreement.
10.24(4)	Field License dated June 12, 1991 among Cell Genesys, JT Immunotech USA Inc. and Xenotech, L.P.
10.25(10)	Amendment No. 1 dated March 22, 1996 to Field License.
10.26(10)	Amendment No. 2 dated June 28, 1996 to Field License.
10.27(3)	Expanded Field License dated June 12, 1991 among Cell Genesys, JT Immunotech USA Inc. and Xenotech, L.P.
10.28(10)	Amendment No. 1 dated June 28, 1996 to Expanded Field License.
10.29(9)	Master Research License and Option Agreement dated June 28, 1996 among Cell Genesys, Japan Tobacco Inc. and Xenotech, L.P.
10.30(2)	Amendment No. 1 dated November 1997 to the Master Research License and Option Agreement.
10.31(2)	Stock Purchase and Transfer Agreement dated July 15, 1996 by and between Cell Genesys and Abgenix.
10.32(1)	Governance Agreement dated July 15, 1996 between Cell Genesys and Abgenix.
10.33(1)	Amendment No. 1 dated October 13, 1997 to the Governance Agreement.
10.34(1)	Amendment No. 2 dated December 22, 1997 to the Governance Agreement.
10.35(2)	Patent Assignment Agreement dated July 15, 1996 by Cell Genesys in favor of Abgenix.
10.36(11)	Lease Agreement dated July 31, 1996 between John Arrillaga, Trustee, or his Successor Trustee, UTA dated 7/20/77 (Arrillaga Family Trust) as amended, and Richard T. Peery, Trustee, or his Successor Trustee, UTA dated 7/20/77 (Richard T. Peery Separate Property Trust) as amended, and Abgenix.
10.37(12)	Release and Settlement Agreement dated March 26, 1997 among Cell Genesys, Abgenix, Xenotech, L.P., Japan Tobacco Inc. and GenPharm International, Inc.
10.38(12)	Cross License Agreement effective as of March 26, 1997, among Cell Genesys, Abgenix, Xenotech, L.P., Japan Tobacco Inc. and GenPharm International, Inc.
10.39(12)	Interference Settlement Procedure Agreement, effective as of March 26, 1997, among Cell Genesys, Abgenix, Xenotech, L.P., Japan Tobacco Inc. and GenPharm International, Inc.
10.40(2)	Agreement dated March 26, 1997 among Xenotech, L.P., Xenotech, Inc., Cell Genesys, Abgenix, Japan Tobacco Inc. and JT Immunotech USA Inc.
10.41(1)	Excerpts from the Minutes of a Meeting of the Board of Directors of Abgenix, dated October 23, 1996.
10.42(1)	Excerpts from the Minutes of a Meeting of the Board of Directors of Abgenix, dated October 22, 1997.

Number	Description
10.43(2)	Exclusive Worldwide Product License dated November 1997 between Xenotech, L.P. and Abgenix.
+10.44(14)	Multi-Antigen Research License and Option Agreement by and between Abgenix, Inc. and Japan Tobacco Inc. effective December 31, 1999.
+10.45(14)	Amended and Restated Field License by and among Abgenix, Inc., JT America Inc. and Xenotech L.P. effective December 31, 1999.
10.46(14)	Agreement to Terminate the Collaboration Agreement by and among Abgenix, Inc., JT America Inc., and Xenotech L.P. effective December 31, 1999.
+10.47(14)	Agreement to Terminate the Interest of Japan Tobacco Inc. in the Master Research License and Option Agreement by and among Abgenix, Inc., Japan Tobacco Inc. and Xenotech L.P. effective December 31, 1999.
+10.48(14)	Amendment of the Expanded Field License by and among Abgenix, Inc., JT America Inc. and Xenotech L.P. effective December 31, 1999.
10.49(14)	Limited Partnership Interest and Stock Purchase Agreement between Abgenix, Inc. and JT America Inc. made December 20, 1999.
+10.50(14)	License Agreement by and between Abgenix, Inc. and Japan Tobacco Inc. effective December 31, 1999.
10.51(15)	Lease Agreement dated February 24, 2000 between Ardenwood Corporate Park Associates, a California Limited Partnership and Abgenix, Inc.
10.52(15)	Lease Agreement dated May 19, 2000 between Ardenwood Corporate Park Associates, a California Limited Partnership and Abgenix, Inc.
10.53(16)	Acquisition Agreement dated as of September 25, 2000 among Abgenix, Inc., Abgenix Canada Corporation and ImmGenics Pharmaceuticals Inc.
+10.54(17)	License Agreement among BR Centre Limited, Ingenix Biomedical Inc. and Dr. John W. Schrader, dated May 9, 1994.
+10.55(17)	License Agreement Amendment among BR Centre Limited, Ingenix Biomedical Inc. and Dr. John W. Schrader, dated May 9, 1994.
10.56(17)	Assignment Agreement among BR Centre Limited and The University of British Columbia Foundation, dated March 10, 1998.
10.57(18)	Lease Agreement dated February 8, 2001 between AMB Property, L.P., a Delaware limited partnership, and Abgenix, Inc.
10.58(19)	Lease dated September 1, 2001 among Townline Ventures 17 Ltd., Abgenix Biopharma Inc. and Abgenix, Inc.
+10.59(19)	License Agreement among Medical Research Council, Agricultural and Food Research Council Institute of Animal Physiology and Genetics Research of Babraham Hall, Marianne Bruggemann and Cell Genesys, Inc., dated March 29, 1994.
10.60(19)	First Amendment, dated as of November 30, 2001, to the Lease Agreement, dated as of February 8, 2001, between AMB Property, L.P. and Abgenix, Inc.
10.61(23)	First Amendment, dated August 31, 2001, to the Lease Agreement, dated February 24, 2000, between Ardenwood Corporate Park Associates, a California Limited Partnership, and Abgenix, Inc.

Number	Description
10.62(23)	First Amendment, dated August 31, 2001, to the Lease Agreement, dated May 19, 2000, between Ardenwood Corporate Park Associates, a California Limited Partnership, and Abgenix, Inc.
10.63(23)	Second Amendment, dated November 7, 2001, to the Lease Agreement, dated May 19, 2000, between Ardenwood Corporate Park Associates, a California Limited Partnership, and Abgenix, Inc.
10.64(23)	Amendment No. 1, dated January 22, 2002, to the Lease Agreement, dated July 31, 1996, between John Arrillaga, Trustee, or his Successor Trustee UTA dated 7/20/77 (John Arrillaga Survivors Trust) as amended, and Richard T. Peery, Trustee, or his Successor Trustee UTA dated 7/20/77 (Richard T. Peery Separate Property Trust) as amended, and Abgenix, Inc.
10.65(23)	Lease Agreement dated January 22, 2002 between John Arrillaga, Trustee, or his Successor Trustee UTA dated 7/20/77 (John Arrillaga Survivors Trust) as amended, and Richard T. Peery, Trustee, or his Successor Trustee UTA dated 7/20/77 (Richard T. Peery Separate Property Trust) as amended, and Abgenix, Inc.
10.66(25)	Sublease, dated as of July 31, 2003, by and between Protein Design Labs, Inc. and Abgenix, Inc.
+10.67(26)	Collaboration and License Agreement, dated as of October 15, 2003, by and between Abgenix, Inc. and AstraZeneca UK Limited.
+10.68(31)	Amendment No. 1 to Collaboration and License Agreement, dated as of March 19, 2004, by and between Abgenix, Inc. and AstraZeneca UK Limited.
12.1	Statement Re: Computation of Ratio
21.1(20)	List of subsidiaries.
23.1	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney. (See page 100)
31.1	Certification of William R. Ringo Pursuant to Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of H. Ward Wolff Pursuant to Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of William R. Ringo Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of H. Ward Wolff Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

+ Confidential treatment granted for portions of these exhibits. Omitted portions have been filed separately with the Commission.

(1) Incorporated by reference to the same exhibit filed with Abgenix's Registration Statement on Form S-1 (File No. 333-49415).

(2) Incorporated by reference to the same exhibit filed with Abgenix's Registration Statement on Form S-1 (File No. 333-49415), portions of which have been granted confidential treatment.

(3) Incorporated by reference to the same exhibit filed with Cell Genesys' Registration Statement on Form S-1 (File No. 33-46452), portions of which have been granted confidential treatment.

(4) Incorporated by reference to the same exhibit filed with Cell Genesys' Registration Statement on Form S-1 (File No. 33-46452).

(5) Incorporated by reference to the same exhibit filed with Cell Genesys' Quarterly Report on Form 10-Q for the quarter ended June 30, 1993, portions of which have been granted confidential treatment.

(6) Incorporated by reference to the same exhibit filed with Cell Genesys' Annual Report on Form 10-K for the year ended December 31, 1993, portions of which have been granted confidential treatment.

(7) Incorporated by reference to the same exhibit filed with Cell Genesys' Quarterly Report on Form 10-Q for the quarter ended June 30, 1995, portions of which have been granted confidential treatment.

(8) Incorporated by reference to the same exhibit filed with Cell Genesys' Quarterly Report on Form 10-Q for the quarter ended June 30, 1995.

(9) Incorporated by reference to the same exhibit filed with Cell Genesys' Quarterly Report on Form 10-Q for the quarter ended June 30, 1996, portions of which have been granted confidential treatment.

(10) Incorporated by reference to the same exhibit filed with Cell Genesys' Quarterly Report on Form 10-Q for the quarter ended June 30, 1996.

(11) Incorporated by reference to the same exhibit filed with Cell Genesys' Quarterly Report on Form 10-Q for the quarter ended September 30, 1996.

(12) Incorporated by reference to the same exhibit filed with Cell Genesys' Annual Report on Form 10-K for the year ended December 31, 1996, as amended, portions of which have been granted confidential treatment.

(13) Incorporated by reference to the same exhibit filed with Cell Genesys' Annual Report on Form 10-K for the year ended December 31, 1993.

(14) Incorporated by reference to the same exhibits filed with Abgenix's Current Report on Form 8-K filed with the Commission on January 27, 2000.

(15) Incorporated by reference to the same exhibits filed with Abgenix's Quarterly Report on Form 10-Q for the quarter ended June 30, 2000.

(16) Incorporated by reference to the same exhibits filed with Abgenix's Quarterly Report on Form 10-Q for the quarter ended September 30, 2000.

(17) Incorporated by reference to the same exhibits filed with Abgenix's Annual Report on Form 10-K for the year ended December 31, 2000.

(18) Incorporated by reference to the same exhibits filed with Abgenix's Quarterly Report on Form 10-Q for the quarter ended March 31, 2001.

(19) Incorporated by reference to the same exhibits filed with Abgenix's Registration Statement on Form S-1 (File Number 333-49858).

(20) Incorporated by reference to the same exhibits filed with Abgenix's Annual Report on Form 10-K for the year ended December 31, 2001.

(21) Incorporated by reference to the same exhibits filed with Abgenix's Amendment No. 2 to its Registration Statement on Form 8-A (File Number 000-24207).

(22) Incorporated by reference to the same exhibits filed with Abgenix's Registration Statement on Form S-8 (File Number 333-88232).

(23) Incorporated by reference to the same exhibits filed with Abgenix's Quarterly Report on Form 10-Q for the quarter ended March 31, 2002.

(24) Incorporated by reference to the same exhibits filed with Abgenix's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003.

(25) Incorporated by reference to the same exhibit filed with Abgenix's Quarterly Report on Form 10-Q for the quarter ended September 30, 2003.

(26) Incorporated by reference to exhibit 10.1 filed with Abgenix's Registration Statement on Form S-3 (File No. 333-112285).

(27) Incorporated by reference to the same exhibit filed with Abgenix's Quarterly Report on Form 10-Q for the quarter ended September 30, 2003.

(28) Incorporated by reference to the same exhibit filed with Abgenix's Amendment No. 3 to its Registration Statement on Form 8-A (File No. 000-24207).

(29) Incorporated by reference to the same exhibit filed with Abgenix's Annual Report on Form 10-K the year ended December 31, 2002.

(30) Incorporated by reference to the same exhibit filed with Abgenix's Annual Report on Form 10-K the year ended December 31, 2003.

(31) Incorporated by reference to the same exhibit filed with Abgenix's Quarterly Report on Form 10-Q for the quarter ended March 30, 2004.

(32) Incorporated by reference to the same exhibit filed with Abgenix's Quarterly Report on Form 10-Q for the quarter ended September 30, 2004.

(33) Incorporated by reference to the same exhibit filed with Abgenix's Current Report on Form 8-K filed December 22, 2004.

(b) Exhibits.

See Item 15(a)3 above.

(c) Financial Statement Schedule.

See Item 15(a)2 above.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, Abgenix has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Fremont, State of California, on the 15th day of March, 2005.

ABGENIX, INC.

By: /s/ WILLIAM R. RINGO

William R. Ringo
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints William R. Ringo and H. Ward Wolff, and each one of them, acting individually and without the other, as his attorney-in-fact, each with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes may do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ R. SCOTT GREER R. Scott Greer	Chairman of the Board	March 15, 2005
/s/ WILLIAM R. RINGO William R. Ringo	President and Chief Executive Officer (Principal Executive Officer)	March 15, 2005
/s/ H. WARD WOLFF H. Ward Wolff	Chief Financial Officer and Senior Vice President, Finance (Principal Financial and Accounting Officer)	March 15, 2005
/s/ M. KATHLEEN BEHRENS, PH.D. M. Kathleen Behrens, Ph.D.	Director	March 15, 2005
/s/ RAJU S. KUCHERLAPATI, PH.D. Raju S. Kucherlapati, Ph.D.	Director	March 15, 2005
/s/ KENNETH B. LEE, JR. Kenneth B. Lee, Jr.	Director	March 15, 2005

Signature	Title	Date
/s/ MARK B. LOGAN Mark B. Logan	Director	March 15, 2005
/s/ THOMAS G. WIGGANS Thomas G. Wiggans	Director	March 15, 2005
/s/ RAYMOND M. WITHY, PH.D Raymond M. Withy, Ph.D.	Director	March 15, 2005

ABGENIX, INC.
INDEX TO EXHIBITS*

EXHIBIT	ITEM
12.1	Statement Re: Computation of Ratio
23.1	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney (See page 100).
31.1	Certification of William R. Ringo Pursuant to Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of H. Ward Wolff Pursuant to Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of William R. Ringo Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of H. Ward Wolff Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

* Only exhibits actually filed are listed. Item 15(a)(3) of this Report on Form 10-K sets forth exhibits incorporated by reference.

EXHIBIT 31.1

CERTIFICATIONS

I, William R. Ringo, certify that:

1. I have reviewed this annual report on Form 10-K of Abgenix, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal controls over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of a report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: March 15, 2005

/s/ WILLIAM R. RINGO

William R. Ringo
President and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATIONS

I, H. Ward Wolff, certify that:

1. I have reviewed this annual report on Form 10-K of Abgenix, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal controls over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of a report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: March 15, 2005

/s/ H. WARD WOLFF

H. Ward Wolff
Chief Financial Officer and Senior Vice President
(Principal Financial and Accounting Officer)

EXHIBIT 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Abgenix, Inc. (the "Company") on Form 10-K for the fiscal year ended December 31, 2004, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

March 15, 2005

/s/ WILLIAM R. RINGO

William R. Ringo
President and Chief Executive Officer
(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to Abgenix, Inc. and will be retained by Abgenix, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Abgenix, Inc. (the "Company") on Form 10-K for the fiscal year ended December 31, 2004, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

March 15, 2005

/s/ H. WARD WOLFF

H. Ward Wolff
Chief Financial Officer and Senior Vice President
(Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906 has been provided to Abgenix, Inc. and will be retained by Abgenix, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

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CORPORATE DIRECTORY

BOARD OF DIRECTORS

R. Scott Greer
Chairman of the Board

William R. Ringo
Chief Executive Officer, President and Director

M. Kathleen Behrens, Ph.D.

Raju S. Kucherlapati, Ph.D.

Kenneth B. Lee, Jr.

Mark B. Logan

Thomas G. Wiggans

CORPORATE EXECUTIVE TEAM

William R. Ringo
Chief Executive Officer, President and Director

Kristen M. Anderson
Senior Vice President, Human Resources

Edward Bjurstrom
Interim Senior Vice President, Operations

C. Geoffrey Davis, Ph.D.
Chief Scientific Officer

Donald R. Joseph
Senior Vice President, General Counsel and Secretary

Gayle M. Mills
Senior Vice President, Business Development

Gisela Schwab, M.D.
Chief Medical Officer

H. Ward Wolff
Chief Financial Officer, Senior Vice President, Finance

CORPORATE HEADQUARTERS

6701 Kaiser Drive
Fremont, CA 94555
510.608.6500
www.abgenix.com

STOCK LISTING

The Company's common stock is traded over the counter on the Nasdaq stock market under the symbol ABGX.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Ernst & Young LLP
Palo Alto, CA

ANNUAL MEETING

The Annual Meeting of Shareholders will be held Monday, June 13, 2005 at 10:00 a.m., PT, at the Company's headquarters.

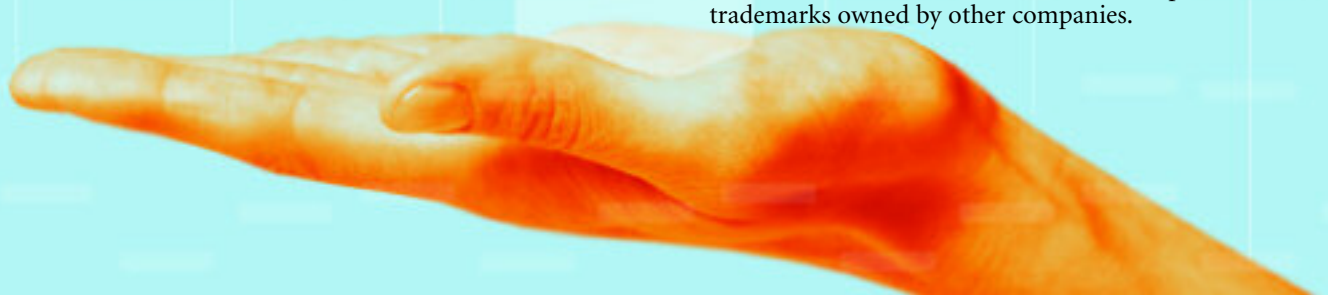
REGISTRAR AND TRANSFER AGENT

Mellon Investor Services LLC
85 Challenger Road
Ridgefield Park, NJ 07660
800.356.2017
www.melloninvestor.com

INVESTOR INFORMATION

Copies of the Company's Annual Report on Form 10-K can be obtained free of charge on or through our internet website at www.abgenix.com or by calling or writing Investor Relations at the Company's headquarters.

Certain statements in these materials, including information presented in the letter to shareholders, are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These include forward-looking statements about Abgenix's technologies, product development activities, clinical trials and clinical trial results, the potential submission of a biologic license application for panitumumab, collaborative arrangements, process sciences and manufacturing activities, projected financial and operating results, and achievement of milestone or similar payments or other revenues. All such statements are subject to a number of uncertainties that could cause actual results to differ materially from the statements made, including risks associated with conducting clinical trials, regulatory approval processes and meeting requirements for regulatory approval, the progress of research and product development programs, product manufacturing, competitive products and services, capital requirements, the extent and breadth of Abgenix's patent portfolio, and other factors set forth in Abgenix's public filings with the Securities and Exchange Commission. The forward-looking statements included in these materials are made only as of the date of publication and Abgenix does not undertake any obligation to update any forward-looking statements.



Abgenix

DELIVERING ON THE
PROMISE OF ANTIBODIES

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