LEXICON GENETICS INC/TX
Form 10-K
March 12, 2007

Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(Mark One)

þ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Fiscal Year Ended December 31, 2006

or

o **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: 000-30111
Lexicon Genetics Incorporated
(Exact Name of Registrant as Specified in its Charter)

Delaware	**76-0474169**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification Number)
8800 Technology Forest Place The Woodlands, Texas 77381 (Address of Principal Executive Offices and Zip Code)	**(281) 863-3000** (Registrant s Telephone Number, Including Area Code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	**Name of Each Exchange on which Registered**
Common Stock, par value $0.001 per share	Nasdaq Global Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act of 1933.
Yes o No þ

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934. Yes o No þ

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 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 þ No o

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. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Securities Exchange Act of 1934. (check one):

Accelerated filer þ Non-accelerated filer o

Large accelerated filer

o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes o No þ

The aggregate market value of voting stock held by non-affiliates of the registrant as of the last day of the registrant s most recently completed second quarter was approximately $241.3 million, based on the closing price of the common stock on the Nasdaq National Market on June 30, 2006 of $4.39 per share. For purposes of the preceding sentence only, all directors, executive officers and beneficial owners of ten percent or more of the registrant s common stock are assumed to be affiliates. As of March 6, 2007, 77,985,736 shares of common stock were outstanding.

Documents Incorporated by Reference

Certain sections of the registrant s definitive proxy statement relating to the registrant s 2007 annual meeting of stockholders, which proxy statement will be filed under the Securities Exchange Act of 1934 within 120 days of the end of the registrant s fiscal year ended December 31, 2006, are incorporated by reference into Part III of this annual report on Form 10-K.

Lexicon Genetics Incorporated
Table of Contents

Item		
	PART I	
1.	Business	1
1A.	Risk Factors	13
1B.	Unresolved Staff Comments	22
2.	Properties	22
3.	Legal Proceedings	22
4.	Submission of Matters to a Vote of Security Holders	22
	PART II	
5.	Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	23
6.	Selected Financial Data	25
7.	Management s Discussion and Analysis of Financial Condition and Results of Operations	26
7A.	Quantitative and Qualitative Disclosures About Market Risk	34
8.	Financial Statements and Supplementary Data	34
9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	34
9A.	Controls and Procedures	34
9B.	Other Information	35
	PART III	
10.	Directors, Executive Officers and Corporate Governance	36
11.	Executive Compensation	36
12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	36
13.	Certain Relationships and Related Transactions, and Director Independence	36
14.	Principal Accounting Fees and Services	36
	PART IV	
15.	Exhibits and Financial Statement Schedules	37
Signatures		40

Consent of Independent Registered Public Accounting Firm
Certification of CEO Pursuant to Section 302
Certification of CFO Pursuant to Section 302
Certification of CEO & CFO Pursuant to Section 906

The Lexicon name and logo, LexVision® and OmniBank® are registered trademarks and Genome5000, e-Biology and $10_{TO}10$ are trademarks of Lexicon Genetics Incorporated.

In this annual report on Form 10-K, Lexicon Genetics, Lexicon, we, us and our refer to Lexicon Genetics Incorporated.

Factors Affecting Forward Looking Statements

This annual report on Form 10-K contains forward-looking statements. These statements relate to future events or our future financial performance. We have attempted to identify forward-looking statements by terminology

including anticipate, believe, can, continue, could, estimate, expect, intend, may, plan, potential will or the negative of these terms or other comparable terminology. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks outlined under Item 1. Business Risk Factors, that may cause our or our industry s actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We are not under any duty to update any of the forward-looking statements after the date of this annual report on Form 10-K to conform these statements to actual results, unless required by law.

Table of Contents

PART I

Item 1. *Business*

Overview

Lexicon Genetics is a biopharmaceutical company focused on the discovery and development of breakthrough treatments for human disease. We use our proprietary gene knockout technology to knock out, or disrupt, the function of genes in mice and then employ an integrated platform of advanced medical technologies to systematically discover the physiological and behavioral functions and pharmaceutical utility of the genes we have knocked out and the potential drug targets encoded by the corresponding human genes. For targets that we believe have high pharmaceutical value, we engage in programs for the discovery and development of potential small molecule, antibody and protein drugs. We have advanced drug candidates from two of these programs into human clinical trials, with drug candidates from two additional programs in preclinical development and a number of additional programs in various stages of preclinical research. We believe that our systematic, target biology-driven approach to drug discovery will enable us to substantially expand our clinical pipeline, and we have initiated our $10_{TO}10$ program with the goal of advancing ten drug candidates into human clinical trials by the end of 2010.

We are presently conducting a Phase 1b clinical trial for our most advanced drug candidate, *LX6171*, an orally-delivered small molecule compound that we are developing as a potential treatment for cognitive impairment associated with disorders such as Alzheimer s disease, schizophrenia and vascular dementia. We are conducting a Phase 1a clinical trial for another drug candidate, *LX1031*, an orally-delivered small molecule compound that we are developing as a potential treatment for gastrointestinal disorders such as irritable bowel syndrome. We have advanced drug candidates from two other drug discovery programs, *LX2931* for autoimmune diseases such as rheumatoid arthritis and *LX1032* for gastrointestinal disorders, into preclinical development in preparation for regulatory filings for the commencement of clinical trials. We have compounds from a number of additional drug programs in various stages of preclinical research. Through the end of 2006, we had identified and validated in living mammals, or *in vivo,* more than 100 targets with promising profiles for drug discovery in the therapeutic areas of diabetes and obesity, cardiovascular disease, psychiatric and neurological disorders, cancer, immune system disorders and ophthalmic disease.

We are working both independently and through strategic collaborations and alliances to capitalize on our technology and drug target discoveries and to develop and commercialize drug candidates emerging from our drug discovery and development programs. We are working with Bristol-Myers Squibb Company to discover and develop new small molecule drugs in the neuroscience field. We are working with Genentech, Inc. to discover the functions of secreted proteins and potential antibody targets identified through Genentech s internal drug discovery research, and to develop new biotherapeutic drugs based on certain targets selected from the alliance. We are working with N.V. Organon to discover, develop and commercialize new biotherapeutic drugs based on another group of secreted proteins and potential antibody targets. We are working with Takeda Pharmaceutical Company Limited for the discovery of new drugs for the treatment of high blood pressure. In addition, we have established collaborations and license agreements with other leading pharmaceutical and biotechnology companies, research institutes and academic institutions under which we receive fees and, in some cases, are eligible to receive milestone and royalty payments, in return for granting access to some of our technologies and discoveries for use in the other organization s own drug discovery efforts.

Lexicon Genetics was incorporated in Delaware in July 1995, and commenced operations in September 1995. Our corporate headquarters are located at 8800 Technology Forest Place, The Woodlands, Texas 77381, and our telephone number is (281) 863-3000.

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 Securities Exchange Act of 1934 are made available free of charge on our corporate website located at *www.lexicon-genetics.com* as soon as reasonably practicable after the filing of those reports with the Securities and Exchange Commission. Information found on our website should not be considered part of this annual report on Form 10-K.

Our Drug Discovery and Development Process

Our drug discovery and development process begins with our Genome5000 program, in which we are using our gene knockout and evaluative technologies to discover the physiological and behavioral functions of 5,000 human genes through analysis of the corresponding mouse knockout models. The study of the effects of knocking

Table of Contents

out genes in mice has historically proven to be a powerful tool for understanding human genes because of the close similarity of gene function and physiology between mice and humans, with approximately 99% of all human genes having a counterpart in the mouse genome. Our Genome5000 efforts are focused on the discovery of the functions in mammalian physiology of proteins encoded by gene families that we consider to be pharmaceutically important. We have already completed our physiology- and behavior-based analysis of more than 80% of these 5,000 genes.

We use our patented gene trapping and gene targeting technologies to generate knockout mice mice whose DNA has been modified to disrupt, or knock out, the function of the altered gene by altering the DNA of genes in a special variety of mouse cells, called embryonic stem cells, which can be cloned and used to generate mice with the altered gene. We then study the physiology and behavior of the knockout mice using a comprehensive battery of advanced medical technologies, each of which has been adapted specifically for the analysis of mouse physiology. This systematic use of these evaluative technologies allows us to discover, *in vivo*, the physiological and behavioral functions of the genes we have knocked out and assess the prospective pharmaceutical utility of the potential drug targets encoded by the corresponding human genes.

We then engage in programs for the discovery of potential small molecule, antibody and protein drugs for those *in vivo*-validated drug targets that we consider to have high pharmaceutical value. We have established extensive internal small molecule drug discovery capabilities, in which we use our own sophisticated libraries of drug-like chemical compounds in high-throughput screening assays to identify hits, or chemical compounds demonstrating activity, against these targets. We then employ medicinal chemistry efforts to optimize the potency and selectivity of these hits and to identify lead compounds for potential development. We have also established substantial internal antibody and protein drug discovery capabilities, in which we use protein expansion and antibody technologies to generate and optimize molecules with appropriate characteristics for development. We have established extensive internal capabilities to characterize the absorption, distribution, metabolism and excretion of our potential drug candidates and otherwise evaluate their safety in mammalian models in preparation for preclinical and clinical development. In all of our drug discovery programs, we use the same physiological analysis technology platform that we use in the discovery of gene function to analyze the *in vivo* activity and safety profiles of drug candidates in mice as part of our preclinical research efforts.

Once we identify a potential drug candidate, we initiate formal preclinical development studies in preparation for regulatory filings for the commencement of human clinical trials. We have established internal expertise in each of the critical areas of preclinical and clinical development, including clinical trial design, study implementation and oversight, and regulatory affairs, with demonstrated experience by members of our clinical development team in the successful implementation of Phase 1, 2 and 3 clinical trials and regulatory approval for the commercialization of therapeutic products.

We believe that our systematic, biology-driven approach and the technology platform that makes it possible provide us with substantial advantages over alternative approaches to drug target discovery. In particular, we believe that the comprehensive nature of our approach allows us to uncover potential drug targets within the context of mammalian physiology that might be missed by more narrowly focused efforts. We also believe our approach is more likely to reveal those side effects that may be a direct result of inhibiting or otherwise modulating the drug target and may limit the utility of potential therapeutics directed at the drug target. We believe these advantages will contribute to better target selection and, therefore, to a greater likelihood of success for our drug discovery and development efforts.

Our Drug Pipeline

We have initiated our $10_{TO}10$ program with the goal of advancing ten drug candidates into human clinical trials by the end of 2010. To date, we have initiated clinical trials for two drug candidates, with drug candidates from two additional programs in preclinical development and a number of additional programs in various stages of preclinical research:

Table of Contents

LX6171 is an orally-delivered small molecule compound that we are developing for the potential treatment of disorders characterized by cognitive impairment, such as Alzheimer s disease, schizophrenia or vascular dementia. We initiated a Phase 1b clinical trial for *LX6171* in January 2007. The Phase 1b trial is a randomized, double-blind, placebo-controlled, multiple ascending-dose study in which *LX6171* is being studied in approximately 40 normal healthy volunteers, including a cohort of elderly subjects. *LX6171* was internally generated by our medicinal chemists, and its target was identified as part of our Genome5000 program as a selective and potent inhibitor of a membrane protein that is expressed exclusively in the central nervous system. We conducted a Phase 1a clinical trial for *LX6171* in September 2006, during which *LX6171* was well tolerated at all dose levels studied. In preclinical studies, *LX6171* demonstrated improved learning and memory in mice.

LX1031 is an orally-delivered small molecule compound that we are developing for the potential treatment of irritable bowel syndrome and other gastrointestinal disorders. We initiated a Phase 1a clinical trial for *LX1031* in January 2007. The Phase 1a trial is a randomized, double-blind, ascending single dose study in which *LX1031* is being studied in approximately 40 normal healthy volunteers. We have designed *LX1031* to act locally in the gastrointestinal tract by reducing the serotonin available for receptor activation, but without affecting serotonin levels in the brain or its central nervous system functions. We intend to use serotonin as a biomarker by which to evaluate the activity of *LX1031* in clinical trials. *LX1031* was internally generated by our medicinal chemists, and its target was identified as part of our Genome5000 program as a key control point for the regulation of peripheral serotonin levels. In preclinical studies, *LX1031* demonstrated a dose-dependent reduction of serotonin levels in the gastrointestinal tract of multiple species with no observed adverse effects across a broad range of medically-relevant parameters.

LX2931 is an orally-delivered small molecule compound that we are developing for the potential treatment of autoimmune diseases such as rheumatoid arthritis. We have commenced formal preclinical development for *LX2931* in preparation for the expected filing of an investigational new drug, or IND, application in 2007. In preclinical studies, *LX2931* reduced inflammatory response in mice and decreased lymphocyte counts in multiple species. *LX2931* was internally generated by our medicinal chemists, and its target was identified as part of our Genome5000 program as a potent inhibitor of T and B cell levels in the peripheral blood.

LX1032 is an orally-delivered small molecule compound that we are developing for the potential treatment of gastrointestinal disorders. We have commenced formal preclinical development for LX1032 in preparation for the expected filing of an IND application in 2007. *LX1032* modulates the same target as *LX1031*, but the two compounds are chemically distinct. *LX1032* was internally generated by our medicinal chemists and was specifically designed to achieve systemic exposure. *LX1032* may provide an additional therapeutic approach for functional and other gastrointestinal disorders that require systemic regulation of serotonin levels.

We have also advanced a number of additional drug programs into various stages of preclinical research in preparation for formal preclinical development studies. Through the end of 2006, we had identified and validated *in vivo* more than 100 targets with promising profiles for drug discovery in the therapeutic areas of diabetes and obesity, cardiovascular disease, psychiatric and neurological disorders, cancer, immune system disorders and ophthalmic disease.

Our Technology

The core elements of our technology platform include our patented technologies for the generation of knockout mice, our integrated platform of advanced medical technologies for the systematic and comprehensive biological analysis of *in vivo* behavior and physiology and our industrialized approach to medicinal chemistry and the generation of high-quality, drug-like compound libraries.

Table of Contents

Gene Knockout Technologies

Gene Targeting. Our gene targeting technology, which is covered by nine issued patents that we have licensed, enables us to generate highly specific alterations in targeted genes. The technology replaces DNA of a gene in a mouse embryonic stem cell through a process known as homologous recombination to disrupt the function of the targeted gene, permitting the generation of knockout mice. By using this technology in combination with one or more additional technologies, we are able to generate alterations that selectively disrupt, or conditionally regulate, the function of the targeted gene for the analysis of the gene s function in selected tissues, at selected stages in the animal s development or at selected times in the animal s life. We can also use this technology to replace the targeted gene with its corresponding human gene for use for preclinical research in our drug programs.

Gene Trapping. Our gene trapping technology, which is covered by nine issued patents that we own, is a high-throughput method of generating knockout mouse clones that we invented. The technology uses genetically engineered retroviruses that infect mouse embryonic stem cells *in vitro*, integrate into the chromosome of the cell and disrupt the function of the gene into which it integrates, permitting the generation of knockout mice. This process also allows us to identify and catalogue each embryonic stem cell clone by DNA sequence from the trapped gene and to select embryonic stem cell clones by DNA sequence for the generation of knockout mice. We have used our gene trapping technology in an automated process to create our OmniBank library of more than 270,000 frozen gene knockout embryonic stem cell clones, each identified by DNA sequence in a relational database. We estimate that our OmniBank library currently contains embryonic stem cell clones representing more than half of all genes in the mammalian genome and believe it is the largest library of its kind.

Physiological Analysis Technologies

We employ an integrated platform of advanced analytical technologies to rapidly and systematically discover the physiological and behavioral effects resulting from loss of gene function in the mouse knockouts we have generated using our gene trapping and gene targeting technologies and catalogue those effects in our comprehensive and relational LexVision database. These analyses include many of the most sophisticated diagnostic technologies and tests currently available, many of which might be found in a major medical center. Each of these technologies has been adapted specifically for the analysis of mouse physiology. This state-of-the-art technology platform enables us to assess the consequences of loss of gene function in a living mammal across a wide variety of parameters relevant to human disease.

We employ the same physiological analysis technology platform that we use in the discovery of gene function to analyze the *in vivo* efficacy and safety profiles of drug candidates in mice. We believe that this approach will allow us, at an early stage, to identify and optimize drug candidates for further preclinical and clinical development that demonstrate *in vivo* efficacy and to distinguish side effects caused by a specific compound from the target-related side effects that we defined using the same comprehensive series of tests.

Medicinal Chemistry Technology

We use solution-phase chemistry to generate diverse libraries of optically pure compounds that are targeted against the same pharmaceutically relevant gene families that we address in our Genome5000 program. These libraries are built using highly robust and scalable organic reactions that allow us to generate compound collections of great diversity and to specially tailor the compound collections to address various therapeutic target families. We design these libraries by analyzing the chemical structures of drugs that have been proven safe and effective against human disease and using that knowledge in the design of scaffolds and chemical building blocks for the generation of large numbers of new drug-like compounds. When we identify a hit against one of our *in vivo*-validated targets, we can rapidly reassemble these building blocks to create hundreds or thousands of variations around the structure of the initial compound, enabling us to accelerate our medicinal chemistry efforts.

Our medicinal chemistry operations are housed in a state-of-the-art 76,000 square foot facility in Hopewell, New Jersey. Our lead optimization chemistry groups are organized around specific discovery targets and work closely with their pharmaceutical biology counterparts in our facilities in The Woodlands, Texas. The medicinal chemists optimize lead compounds in order to select clinical candidates with the desired absorption, distribution, metabolism, excretion and physicochemical characteristics. We have the capability to profile our compounds using the same battery of *in vivo* assays that we use to characterize our drug targets. This provides us with valuable detailed

information relevant to the selection of the highest quality compounds for preclinical and clinical development.

Table of Contents

Our Commercialization Strategy

We are working both independently and through strategic collaborations and alliances with leading pharmaceutical and biotechnology companies, research institutes and academic institutions to capitalize on our technology and commercialize our drug programs. Consistent with this approach, we intend to develop and commercialize certain of our drug programs internally and retain exclusive rights to the benefits of such programs and to collaborate with third parties with respect to the development and commercialization of other drug programs.

Our collaboration and alliance strategy involves drug discovery alliances to discover and develop therapeutics based on our drug target discoveries, particularly when the alliance enables us to obtain access to technology and expertise that we do not possess internally or is complementary to our own. These strategic collaborations, as well as our licenses with pharmaceutical and biotechnology companies, research institutes and academic institutions, enable us to generate near-term cash and revenues in exchange for access to some of our technologies and discoveries for use by these third parties in their own drug discovery efforts. These collaborations and licenses also offer us the potential, in many cases, to receive milestone payments and royalties on products that our collaborators and licensees develop using our technology.

Drug Discovery Alliances

Bristol-Myers Squibb Company. We established a drug discovery alliance with Bristol-Myers Squibb in December 2003 to discover, develop and commercialize small molecule drugs in the neuroscience field. We initiated the alliance with a number of neuroscience drug discovery programs at various stages of development and are continuing to use our gene knockout technology to identify additional drug targets with promise in the neuroscience field. For those targets that are selected for the alliance, we and Bristol-Myers Squibb are working together, on an exclusive basis, to identify, characterize and carry out the preclinical development of small molecule drugs, and share equally both in the costs and in the work attributable to those efforts. As drugs resulting from the alliance enter clinical trials, Bristol-Myers Squibb will have the first option to assume full responsibility for clinical development and commercialization.

We received an upfront payment under the agreement and received research funding during the initial three years of the agreement. Bristol-Myers Squibb extended the target discovery term of the alliance in May 2006 for an additional two years in exchange for further research funding payments. We may receive additional cash payments if we exceed specified research productivity levels. We will also receive clinical and regulatory milestone payments for each drug target for which Bristol-Myers Squibb develops a drug under the alliance and royalties on sales of drugs commercialized by Bristol-Myers Squibb. The target discovery portion of the alliance has a term of five years, as extended.

Genentech, Inc. We established a drug discovery alliance with Genentech in December 2002 to discover novel therapeutic proteins and antibody targets. We and Genentech expanded the alliance in November 2005 for the advanced research, development and commercialization of new biotherapeutic drugs. Under the original alliance agreement, we used our target validation technologies to discover the functions of secreted proteins and potential antibody targets identified through Genentech s internal drug discovery research. In the expanded alliance, we are conducting additional, advanced research on a broad subset of those proteins and targets. We may develop and commercialize biotherapeutic drugs for up to six of these targets, with Genentech having exclusive rights to develop and commercialize biotherapeutic drugs for the other targets. Genentech retains an option on the potential development and commercialization of the biotherapeutic drugs that we develop from the alliance under a cost and profit sharing arrangement, while we have certain conditional rights to co-promote drugs on a worldwide basis. We retain certain other rights to discoveries made in the alliance, including non-exclusive rights, along with Genentech, for the development and commercialization of small molecule drugs addressing the targets included in the alliance.

We received upfront payments in connection with both the initiation of the original collaboration and its expansion and are entitled to receive performance payments for our work in the collaboration as it is completed. We are also entitled to receive milestone payments and royalties on sales of therapeutic proteins and antibodies for which Genentech obtains exclusive rights. Genentech is entitled to receive milestone payments and royalties on sales of therapeutic proteins and antibodies for which Lexicon obtains exclusive rights. The agreement, as extended, has an expected collaboration term of six years.

N.V. Organon. We established a drug discovery alliance with Organon in May 2005 to discover, develop and commercialize novel biotherapeutic drugs. In the collaboration, we are creating and analyzing knockout mice

Table of Contents

for up to 300 genes selected by the parties that encode secreted proteins or potential antibody targets, including two of our preexisting drug discovery programs. We and Organon will jointly select targets for further research and development and will equally share costs and responsibility for research, preclinical and clinical activities. We and Organon will jointly determine the manner in which collaboration products will be commercialized and will equally benefit from product revenue. If fewer than five development candidates are designated under the collaboration, our share of costs and product revenue will be proportionally reduced. We will receive a milestone payment for each development candidate in excess of five. Either party may decline to participate in further research or development efforts with respect to a collaboration product, in which case such party will receive royalty payments on sales of such collaboration product rather than sharing in revenue. Organon will have principal responsibility for manufacturing biotherapeutic products resulting from the collaboration for use in clinical trials and for worldwide sales.

We received an upfront payment under the agreement and are entitled to receive committed research funding during the first two years of the agreement. The target discovery portion of the alliance has an expected term of four years.

Takeda Pharmaceutical Company Limited. We established a drug discovery alliance with Takeda in July 2004 to discover new drugs for the treatment of high blood pressure. In the collaboration, we are using our gene knockout technology to identify drug targets that control blood pressure. Takeda will be responsible for the screening, medicinal chemistry, preclinical and clinical development and commercialization of drugs directed against targets selected for the alliance, and will bear all related costs. We received an upfront payment under the agreement and are entitled to receive research milestone payments for each target selected for therapeutic development. In addition, we are entitled to receive clinical development and product launch milestone payments for each product commercialized from the collaboration. We will also earn royalties on sales of drugs commercialized by Takeda. The target discovery portion of the alliance has a term of three years, subject to Takeda s option to extend the discovery portion of the alliance for an additional two years in exchange for further research funding payments.

Other Commercial Collaborations

Taconic Farms, Inc. We established a collaboration with Taconic Farms, Inc. in November 2005 for the marketing, distribution and licensing of certain lines of our knockout mice. Taconic is an industry leader in the breeding, housing, quality control and global marketing and distribution of rodent models for medical research and drug discovery. Under the terms of the collaboration, we are presently making available more than 1,000 distinct lines of knockout mice for use by pharmaceutical and biotechnology companies and other researchers. Taconic provides breeding services and licenses for these lines and distributes knockout mice to customers. We receive license fees and royalties from payments received by Taconic from customers obtaining access to such knockout mice.

Target Validation Collaborations. We have established target validation collaboration agreements with a number of leading pharmaceutical and biotechnology companies. Under these collaboration agreements, we generate and, in some cases, analyze knockout mice for genes requested by the collaborator. In addition, we grant non-exclusive licenses to the collaborator for use of the knockout mice in its internal drug discovery programs and, if applicable, analysis data that we generate under the agreement. Some of these agreements also provide for non-exclusive access to our OmniBank database. We receive fees for knockout mice under these agreements. In some cases, these agreements also provide for annual minimum commitments and the potential for royalties on products that our collaborators discover or develop using our technology.

LexVision Collaborations. The collaboration periods have terminated under each of our LexVision collaborations, pursuant to which our LexVision collaborators obtained non-exclusive access to our LexVision database of *in vivo*-validated drug targets for the discovery of small molecule compounds. We remain entitled to receive milestone payments and royalties on products those LexVision collaborators develop using our technology.

Academic, Non-Profit and Government Arrangements

Texas Institute for Genomic Medicine. In July 2005, we received an award from the Texas Enterprise Fund for the creation of a knockout mouse embryonic stem cell library containing 350,000 cell lines using our proprietary gene trapping technology. We are creating the library for the Texas Institute for Genomic Medicine, or TIGM, a newly formed non-profit institute whose founding members are Texas A&M University, the Texas A&M University

Table of Contents

System Health Science Center and us. TIGM researchers may also access specific cells from our current OmniBank library of 270,000 mouse embryonic stem cell lines and will have certain rights to utilize our gene targeting technologies. In addition, we will equip TIGM with the bioinformatics software required for the management and analysis of data relating to the library. The Texas Enterprise Fund also made an award to the Texas A&M University System for the creation of facilities and infrastructure to house the library.

National Institutes of Health. In October 2005, we entered into a three-year contract to provide selected knockout mouse lines and related phenotypic data to the United States National Institutes of Health, or NIH. Under the contract, NIH may select lines of knockout mice and related phenotypic data from among lines that we have elected to make available. These materials are related to genes that we have already knocked out and analyzed. NIH will make materials acquired from us under the contract available to researchers at academic and other non-profit research institutions, and we retain the sole right to provide these materials to commercial entities. We are entitled to receive staged payments from NIH following delivery and acceptance of materials under the contract.

The Wellcome Trust. In November 2006, we entered into a contract to provide selected knockout mouse lines and related phenotypic data to the National Research Center for Environment and Health GmbH, or GSF, under terms substantially similar to those under which knockout mouse lines and related phenotypic data are available to NIH. Under the contract, the Wellcome Trust Limited, in its capacity as trustee of The Wellcome Trust, will work with GSF to select lines of knockout mice and related phenotypic data from among lines that we have elected to make available and has separately agreed to provide a grant to GSF to obtain such knockout mice and phenotypic data. These materials are related to genes that we have already knocked out and analyzed. GSF will make materials acquired from us under the contract available to researchers at academic and other non-profit research institutions, and we retain the sole right to provide these materials to commercial entities. We are entitled to receive staged payments from GSF following delivery and acceptance of materials under the contract.

e-Biology Collaboration Program. We provide access to our OmniBank database through the Internet to subscribing researchers at academic and non-profit research institutions. Our bioinformatics software allows subscribers to mine our OmniBank database for genes of interest, and we permit subscribers to acquire OmniBank knockout mice or embryonic stem cells on a non-exclusive basis in our e-Biology collaboration program. We receive fees for knockout mice or embryonic stem cells provided to collaborators in this program and, with participating institutions, rights to license inventions or to receive royalties on products discovered using our materials. In all cases we retain rights to use the same OmniBank knockout mice in our own gene function research and with commercial collaborators. We have entered into more than 250 agreements under our e-Biology collaboration program with researchers at leading institutions throughout the world.

Technology Licenses

We have granted non-exclusive, internal research-use sublicenses under certain of our gene targeting patent rights to a total of 15 leading pharmaceutical and biotechnology companies. Many of these agreements extend for the life of the patents. Others have terms of one to three years, in some cases with provisions for subsequent renewals. We typically receive up-front license fees and, in some cases, receive additional license fees or milestone payments on products that the sublicensee discovers or develops using our technology.

Our Executive Officers

Our executive officers and their ages and positions are listed below.

Name	Age	Position with the Company
Arthur T. Sands, M.D., Ph.D.	45	President and Chief Executive Officer and Director
Julia P. Gregory	54	Executive Vice President, Corporate Development and Chief Financial Officer
Alan J. Main, Ph.D.	53	Executive Vice President of Pharmaceutical Research
Jeffrey L. Wade, J.D.	42	Executive Vice President and General Counsel
Brian P. Zambrowicz, Ph.D.	44	Executive Vice President and Chief Scientific Officer

Lance K. Ishimoto, Ph.D., J.D.	47	Senior Vice President of Intellectual Property
James R. Piggott, Ph.D.	52	Senior Vice President of Pharmaceutical Biology
Philip M. Brown, M.D., J.D.	45	Vice President of Clinical Development

Table of Contents

Arthur T. Sands, M.D., Ph.D. co-founded our company and has been our president and chief executive officer and a director since September 1995. At Lexicon, Dr. Sands pioneered the development of large-scale gene knockout technology for use in drug discovery. Before founding Lexicon, Dr. Sands served as an American Cancer Society postdoctoral fellow in the Department of Human and Molecular Genetics at Baylor College of Medicine. Dr. Sands is a member of the board of directors of the Texas Institute for Genomic Medicine. He received his B.A. in economics and political science from Yale University and his M.D. and Ph.D. from Baylor College of Medicine.

Julia P. Gregory has been our executive vice president, corporate development and chief financial officer since August 2003 and served as our executive vice president and chief financial officer from February 2000 until August 2003. From 1998 to February 2000, Ms. Gregory served as the head of investment banking for Punk, Ziegel & Company, a specialty investment banking firm focusing on technology and healthcare and, from 1996 to February 2000, as the head of the firm s life sciences practice. From 1980 to 1996, Ms. Gregory was an investment banker, primarily with Dillon, Read & Co., Inc., where she represented life sciences companies beginning in 1986. Ms. Gregory is a member of the board of directors and the scientific advisory board of the Estee Lauder Foundation s Institute for the Study of Aging, Inc. and a member of the International Council for George Washington University s Elliott School of International Affairs. She received her B.A. in international affairs from George Washington University and her M.B.A. from the Wharton School of the University of Pennsylvania.

Alan J. Main, Ph.D. has been our executive vice president of pharmaceutical research since February 2007 and served as our senior vice president, Lexicon Pharmaceuticals from July 2001 until February 2007. Dr. Main was president and chief executive officer of Coelacanth Corporation, a leader in using proprietary chemistry technologies to rapidly discover new chemical entities for drug development, from January 2000 until our acquisition of Coelacanth in July 2001. Dr. Main was formerly senior vice president, U.S. Research at Novartis Pharmaceuticals Corporation, where he worked for 20 years before joining Coelacanth. Dr. Main holds a B.S. from the University of Aberdeen, Scotland and a Ph.D. in organic chemistry from the University of Liverpool, England and completed postdoctoral studies at the Woodward Research Institute.

Jeffrey L. Wade, J.D. has been our executive vice president and general counsel since February 2000 and was our senior vice president and chief financial officer from January 1999 to February 2000. From 1988 through December 1998, Mr. Wade was a corporate securities and finance attorney with the law firm of Andrews & Kurth L.L.P., for the last two years as a partner, where he represented companies in the biotechnology, information technology and energy industries. Mr. Wade is a member of the boards of directors of the Texas Healthcare and Bioscience Institute, the Texas Institute for Genomic Medicine and the Texas Life Science Center for Innovation and Commercialization. He received his B.A. and J.D. from the University of Texas.

Brian P. Zambrowicz, Ph.D. co-founded our company and has been our executive vice president and chief scientific officer since February 2007. Dr. Zambrowicz served as our executive vice president of research from August 2002 until February 2007, senior vice president of genomics from February 2000 to August 2002, vice president of research from January 1998 to February 2000 and senior scientist from April 1996 to January 1998. From 1993 to April 1996, Dr. Zambrowicz served as a National Institutes of Health postdoctoral fellow at the Fred Hutchinson Cancer Center in Seattle, Washington, where he studied gene trapping and gene targeting technology. Dr. Zambrowicz is a member of the board of directors of the Texas Institute for Genomic Medicine. He received his B.S. in biochemistry from the University of Wisconsin. He received his Ph.D. from the University of Washington, where he studied tissue-specific gene regulation using transgenic mice.

Lance K. Ishimoto, J.D., Ph.D. has been our senior vice president of intellectual property since February 2004. Dr. Ishimoto served as our vice president of intellectual property from July 1998 to February 2004. From 1994 to July 1998, Dr. Ishimoto was a biotechnology patent attorney at the Palo Alto, California office of the law firm of Pennie & Edmonds LLP. Dr. Ishimoto received his B.A. and Ph.D. from the University of California at Los Angeles, where he studied molecular mechanisms of virus assembly and the regulation of virus ultrastructure. After receiving his Ph.D., Dr. Ishimoto served as a National Institutes of Health postdoctoral fellow at the University of Washington School of Medicine. He received his J.D. from Stanford University.

James R. Piggott, Ph.D. has been our senior vice president of pharmaceutical biology since January 2000. From 1990 through October 1999, Dr. Piggott worked for ZymoGenetics, Inc., a subsidiary of Novo Nordisk, a company

focused on the discovery, development and commercialization of therapeutic proteins for the treatment of human disease, most recently as senior vice president-research biology from 1997 to October 1999. Dr. Piggott s pharmaceutical research experience also includes service at the Smith Kline & French Laboratories Ltd. unit of

Table of Contents

SmithKline Beecham plc and the G.D. Searle & Co. unit of Monsanto Company. Dr. Piggott received his B.A. and Ph.D. from Trinity College, Dublin.

Philip M. Brown, M.D., J.D. has been our vice president of clinical development since April 2003. Dr. Brown served as vice president of clinical development for Encysive Pharmaceuticals Inc. (formerly Texas Biotechnology Corporation), a biopharmaceutical company, from June 2000 until April 2003, and was senior medical director within the organization from December 1998 until June 2000. From July 1994 to December 1998, Dr. Brown served as associate vice president of medical affairs for Pharmaceutical Research Associates, a clinical research organization. He has conducted numerous clinical trials as an investigator in a variety of therapeutic areas, as well as managed programs from IND through NDA and product commercialization. He is a fellow of the American College of Legal Medicine and serves as an adjunct faculty member at the Massachusetts General Hospital, Institute of Health Professions in Boston. He received his B.A. from Hendrix College, his M.D. from Texas Tech University School of Medicine, and his J.D. from the University of Texas.

Patents and Proprietary Rights

We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that those rights are covered by valid and enforceable patents or are effectively maintained as trade secrets. Accordingly, patents and other proprietary rights are an essential element of our business. We seek patent protection for the genes, proteins, drug targets and potential drug candidates that we discover. Specifically, we seek patent protection for:

- the sequences of genes that we believe to be novel, including full-length human genes and partial human and mouse gene sequences, the proteins they encode and their predicted utility as a drug target or therapeutic protein;
- the utility of genes and the drug targets or therapeutic proteins they encode based on our discoveries of their biological functions using knockout mice;
- drug discovery assays for our *in vivo*-validated targets;
- chemical compounds and their use in treating human diseases and conditions; and
- various enabling technologies in the fields of mutagenesis, embryonic stem cell manipulation and transgenic or knockout mice.

We own or have exclusive rights to nine issued United States patents that are directed to our gene trapping technology, 89 issued United States patents that are directed to full-length sequences of potential drug targets identified in our gene discovery programs, and five issued United States patents that are directed to specific knockout mice and discoveries of the functions of genes made using knockout mice. We have licenses under 93 additional United States patents, and corresponding foreign patents and patent applications, directed to gene targeting, gene trapping and genetic manipulation of mouse embryonic stem cells. These include patents to which we hold exclusive rights in certain fields, including a total of nine United States patents directed to the use of gene targeting technologies known as positive-negative selection and isogenic DNA targeting, as well as patents directed to the use of site specific genetic recombination technology known as Cre/lox technology.

We have filed or have exclusive rights to more than 400 pending patent applications in the United States Patent and Trademark Office, the European Patent Office, the national patent offices of other foreign countries or under the Patent Cooperation Treaty, directed to our gene trapping technology, the DNA sequences of genes, the uses of specific drug targets, drug discovery assays, and other products and processes. Collectively, these patent applications are directed to, among other things, approximately 200 full-length human gene sequences, more than 50,000 partial human gene sequences, and more than 45,000 knockout mouse clones and corresponding mouse gene sequence tags. Patents typically have a term of no longer than 20 years from the date of filing.

As noted above, we hold rights to a number of these patents and patent applications under license agreements with third parties. In particular, we license our principal gene targeting technologies from GenPharm International, Inc. and our Cre/lox technology from DuPont Pharmaceuticals Company, now a subsidiary of Bristol-Myers Squibb.

Many of these licenses are nonexclusive, although some are exclusive in specified fields. Most of the licenses, including those licensed from GenPharm and DuPont, have terms that extend for the life of the licensed patents. In the case of our license from GenPharm, the license generally is exclusive in specified fields, subject to specific rights held by third parties, and we are permitted to grant sublicenses.

Table of Contents

All of our employees, consultants and advisors are required to execute a proprietary information agreement upon the commencement of employment or consultation. In general, the agreement provides that all inventions conceived by the employee or consultant, and all confidential information developed or made known to the individual during the term of the agreement, shall be our exclusive property and shall be kept confidential, with disclosure to third parties allowed only in specified circumstances. We cannot assure you, however, that these agreements will provide useful protection of our proprietary information in the event of unauthorized use or disclosure of such information.

Competition

The biotechnology and pharmaceutical industries are highly competitive and characterized by rapid technological change. We face significant competition in each of the aspects of our business from numerous for-profit companies, many of which have substantially greater financial, scientific and human resources than we do. In addition, a large number of universities and other not-for-profit institutions, many of which are funded by the U.S. and foreign governments, are also conducting research to discover genes and their functions.

Many of our competitors in drug discovery and development have substantially greater research and product development capabilities and financial, scientific, marketing and human resources than we do. As a result, our competitors may succeed in developing products earlier than we do, obtaining approvals from the FDA or other regulatory agencies for those products more rapidly than we do, or developing products that are more effective than those we propose to develop. Similarly, our collaborators face similar competition from other competitors who may succeed in developing products more quickly, or developing products that are more effective, than those developed by our collaborators. We expect that competition in this field will intensify.

Government Regulation

Regulation of Pharmaceutical Products

The development, manufacture and sale of any pharmaceutical or biological products developed by us or our collaborators will be subject to extensive regulation by United States and foreign governmental authorities, including federal, state and local authorities. In the United States, new drugs are subject to regulation under the Federal Food, Drug and Cosmetic Act and the regulations promulgated thereunder, or the FDC Act, and biological products are subject to regulation both under certain provisions of the FDC Act and under the Public Health Services Act and the regulations promulgated thereunder, or the PHS Act. The FDA regulates, among other things, the development, preclinical and clinical testing, manufacture, safety, efficacy, record keeping, reporting, labeling, storage, approval, advertising, promotion, sale, distribution and export of drugs and biologics. The process of obtaining FDA approval has historically been costly and time-consuming.

The standard process required by the FDA before a pharmaceutical or biological product may be marketed in the United States includes:

- preclinical laboratory and animal tests performed under the FDA s current Good Laboratory Practices regulations;
- submission to the FDA of an Investigational New Drug application, or IND, which must become effective before human clinical trials may commence;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug or biologic in our intended application;
- for drugs, submission of a New Drug Application, or NDA, and, for biologics, submission of a Biologic License Application, or BLA, with the FDA; and
- FDA approval of the NDA or BLA prior to any commercial sale or shipment of the product.

Among other things, the FDA reviews an NDA to determine whether a product is safe and effective for its intended use and a BLA to determine whether a product is safe, pure and potent and the facility in which it is manufactured, processed, packed, or held meets standards designed to assure the product s continued safety, purity and

potency.

Table of Contents

In addition to obtaining FDA approval for each product, each drug or biologic manufacturing establishment must be inspected and approved by the FDA. All manufacturing establishments are subject to inspections by the FDA and by other federal, state and local agencies and must comply with current Good Manufacturing Practices requirements. Non-compliance with these requirements can result in, among other things, total or partial suspension of production, failure of the government to grant approval for marketing and withdrawal, suspension or revocation of marketing approvals.

Preclinical studies can take several years to complete, and there is no guarantee that an IND based on those studies will become effective to even permit clinical testing to begin. Once clinical trials are initiated, they take years to complete. In addition, the FDA may place a clinical trial on hold or terminate it if, among other reasons, the agency concludes that clinical subjects are being exposed to an unacceptable health risk. After completion of clinical trials of a new drug or biologic product, FDA marketing approval of the NDA or BLA must be obtained. An NDA or BLA, depending on the submission, must contain, among other things, information on chemistry, manufacturing controls and potency and purity, non-clinical pharmacology and toxicology, human pharmacokinetics and bioavailability and clinical data. The process of obtaining approval requires substantial time and effort and there is no assurance that the FDA will accept the NDA or BLA for filing and, even if filed, that approval will be granted. The FDA s approval of an NDA or BLA can take years and can be delayed if questions arise. Limited indications for use or other conditions could also be placed on any approvals that could restrict the commercial applications of products.

Once the FDA approves a product, a manufacturer must provide certain updated safety and efficacy information. Product changes as well as certain changes in a manufacturing process or facility would necessitate additional FDA review and approval. Other post-approval changes may also necessitate further FDA review and approval. Additionally, a manufacturer must meet other requirements including those related to adverse event reporting and record keeping.

Violations of the FDC Act, the PHS Act or regulatory requirements may result in agency enforcement action, including voluntary or mandatory recall, license suspension or revocation, product seizure, fines, injunctions and civil or criminal penalties.

In addition to regulatory approvals that must be obtained in the United States, a drug or biological product is also subject to regulatory approval in other countries in which it is marketed. The conduct of clinical trials of drugs and biological products in countries other than the United States is likewise subject to regulatory oversight in such countries. The requirements governing the conduct of clinical trials, product licensing, pricing, and reimbursement vary widely from country to country. No action can be taken to market any drug or biological product in a country until the regulatory authorities in that country have approved an appropriate application. FDA approval does not assure approval by other regulatory authorities. The current approval process varies from country to country, and the time spent in gaining approval varies from that required for FDA approval. In some countries, the sale price of a drug or biological product must also be approved. The pricing review period often begins after marketing approval is granted. Even if a foreign regulatory authority approves a drug or biological product, it may not approve satisfactory prices for the product.

Other Regulations

In addition to the foregoing, our business is and will be subject to regulation under various state and federal environmental laws, including the Occupational Safety and Health Act, the Resource Conservation and Recovery Act and the Toxic Substances Control Act. These and other laws govern our use, handling and disposal of various biological, chemical and radioactive substances used in and wastes generated by our operations. We believe that we are in material compliance with applicable environmental laws and that our continued compliance with these laws will not have a material adverse effect on our business. We cannot predict, however, whether new regulatory restrictions on the production, handling and marketing of biotechnology products will be imposed by state or federal regulators and agencies or whether existing laws and regulations will adversely affect us in the future.

Research and Development Expenses

In 2006, 2005 and 2004, respectively, we incurred expenses of $106.7 million, $93.6 million and $90.6 million in company-sponsored as well as collaborative research and development activities, including $4.4 million, ($21,000) and $0.4 million of stock-based compensation expense in 2006, 2005 and 2004, respectively.

11

Table of Contents

Employees and Consultants

We believe that our success will be based on, among other things, achieving and retaining scientific and technological superiority and identifying and retaining capable management. We have assembled a highly qualified team of scientists as well as executives with extensive experience in the biotechnology industry.

As of February 28, 2007, we employed 585 persons, of whom 139 hold M.D., Ph.D. or D.V.M. degrees and another 91 hold other advanced degrees. We believe that our relationship with our employees is good.

Table of Contents

Item 1A. ***Risk Factors***

The following risks and uncertainties are important factors that could cause actual results or events to differ materially from those indicated by forward-looking statements. The factors described below are not the only ones we face and additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations.

Risks Related to Our Need for Additional Financing and Our Financial Results

We will need additional capital in the future and, if it is unavailable, we will be forced to significantly curtail or cease operations. If it is not available on reasonable terms we will be forced to obtain funds by entering into financing agreements on unattractive terms.

As of December 31, 2006, we had cash, cash equivalents and short-term investments (net of restricted cash and investments) of $79.6 million. We anticipate that our existing capital resources and the cash and revenues we expect to derive from drug discovery alliances, collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice, government grants and contracts and technology licenses will enable us to fund our currently planned operations for at least the next twelve months. Our currently planned operations for that time period consist of the continuation of our efforts to discover the physiological functions of 5,000 human genes that we consider to be pharmaceutically important, the expansion of our medicinal chemistry, biotherapeutics and preclinical research operations and the initiation and conduct of additional clinical trials. However, we caution you that we may generate less cash and revenues or incur expenses more rapidly than we currently anticipate.

Although difficult to accurately predict, the amount of our future capital requirements will be substantial and will depend on many factors, including:

- our ability to obtain additional funds from alliances, collaborations, government grants and contracts and technology licenses;
- the amount and timing of payments under such agreements;
- the level and timing of our research and development expenditures;
- future results from clinical trials that we initiate;
- the cost and timing of regulatory approvals of products that we successfully develop; and
- market acceptance of products that we successfully develop and commercially launch.

Our capital requirements will increase substantially to the extent we advance potential therapeutics into clinical development. Our capital requirements will also be affected by any expenditures we make in connection with license agreements and acquisitions of and investments in complementary products and technologies. For all of these reasons, our future capital requirements cannot easily be quantified.

If our capital resources are insufficient to meet future capital requirements, we will have to raise additional funds to continue our currently planned operations. If we raise additional capital by issuing equity securities, our then-existing stockholders will experience dilution and the terms of any new equity securities may have preferences over our common stock. We cannot be certain that additional financing, whether debt or equity, will be available in amounts or on terms acceptable to us, if at all. We may be unable to raise sufficient additional capital on reasonable terms; if so, we will be forced to significantly curtail or cease operations or obtain funds by entering into financing agreements on unattractive terms.

We have a history of net losses, and we expect to continue to incur net losses and may not achieve or maintain profitability.

We have incurred net losses since our inception, including net losses of $54.3 million for the year ended December 31, 2006, $36.3 million for the year ended December 31, 2005 and $47.2 million for the year ended December 31, 2004. As of December 31, 2006, we had an accumulated deficit of $351.7 million. We are unsure when

we will become profitable, if ever. The size of our net losses will depend, in part, on the rate of growth, if any, in our revenues and on the level of our expenses.

Table of Contents

We derive substantially all of our revenues from drug discovery alliances, collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice, government grants and contracts and technology licenses, and will continue to do so for the foreseeable future. Our future revenues from alliances, collaborations and government grants and contracts are uncertain because our existing agreements have fixed terms or relate to specific projects of limited duration. Our future revenues from technology licenses are uncertain because they depend, in part, on securing new agreements. Our ability to secure future revenue-generating agreements will depend upon our ability to address the needs of our potential future collaborators, granting agencies and licensees, and to negotiate agreements that we believe are in our long-term best interests. We may determine that our interests are better served by retaining rights to our discoveries and advancing our therapeutic programs to a later stage, which could limit our near-term revenues. Given the early-stage nature of our operations, we do not currently derive any revenues from sales of pharmaceutical products.

A large portion of our expenses is fixed, including expenses related to facilities, equipment and personnel. In addition, we expect to spend significant amounts to enhance our core technologies and fund our research and development activities, including the conduct of clinical trials and the advancement of additional potential therapeutics into clinical development. As a result, we expect that our operating expenses will continue to increase significantly as additional drug programs progress into human clinical trials and, consequently, we will need to generate significant additional revenues to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

Our operating results have been and likely will continue to fluctuate, and we believe that period-to-period comparisons of our operating results are not a good indication of our future performance.

Our operating results and, in particular, our ability to generate additional revenues are dependent on many factors, including:

- our ability to establish new collaborations and alliances, government grants and contracts, and technology licenses, and the timing of such arrangements;
- the expiration or other termination of collaborations and alliances, which may not be renewed or replaced;
- the success rate of our discovery efforts leading to opportunities for new collaborations, alliances and licenses, as well as milestone payments and royalties;
- the timing and willingness of our collaborators to commercialize pharmaceutical products that would result in milestone payments and royalties; and
- general and industry-specific economic conditions, which may affect our and our collaborators research and development expenditures.

Because of these and other factors, including the risks and uncertainties described in this section, our operating results have fluctuated in the past and are likely to do so in the future. Due to the likelihood of fluctuations in our revenues and expenses, we believe that period-to-period comparisons of our operating results are not a good indication of our future performance.

Risks Related to Our Business

We are an early-stage company, and we may not successfully develop or commercialize any therapeutics that we have identified.

Our business strategy of using our technology platform and, specifically, the discovery of the functions of genes using knockout mice to select promising drug targets and developing and commercializing drugs based on our discoveries, in significant part through collaborations and alliances, is unproven. Our success will depend upon our ability to successfully develop potential therapeutics for drug targets we consider to have pharmaceutical value, whether on our own or through collaborations, and to select an appropriate commercialization strategy for each potential therapeutic we choose to pursue.

Biotechnology and pharmaceutical companies have successfully developed and commercialized only a limited number of genomics-derived pharmaceutical products to date. We have not proven our ability to develop or commercialize therapeutics or drug targets that we identify. We do not know that any pharmaceutical products

Table of Contents

based on our drug target discoveries can be successfully commercialized. In addition, we may experience unforeseen technical complications in the processes we use to discover and develop potential therapeutics. These complications could materially delay or limit the use of our resources, substantially increase the anticipated cost of generating them or prevent us from implementing our processes at appropriate quality and throughput levels.

Clinical testing of our drug candidates in humans is an inherently risky and time-consuming process that may fail to demonstrate safety and efficacy, which could result in the delay, limitation or prevention of regulatory approval.

In order to obtain regulatory approvals for the commercial sale of any products that we may develop, we will be required to complete extensive clinical trials in humans to demonstrate the safety and efficacy of our drug candidates. We or our collaborators may not be able to obtain authority from the United States Food and Drug Administration, or FDA, or other equivalent foreign regulatory agencies to initiate or complete any clinical trials. In addition, we have limited internal resources for making regulatory filings and dealing with regulatory authorities.

Clinical trials are inherently risky and the results from preclinical testing of a drug candidate that is under development may not be predictive of results that will be obtained in human clinical trials. In addition, the results of early human clinical trials may not be predictive of results that will be obtained in larger scale, advanced stage clinical trials. A number of companies in the pharmaceutical industry have suffered significant setbacks in advanced clinical trials, even after achieving positive results in earlier trials. Negative or inconclusive results from a preclinical study or a clinical trial could cause us, one of our collaborators or the FDA to terminate a preclinical study or clinical trial or require that we repeat it. Furthermore, we, one of our collaborators or a regulatory agency with jurisdiction over the trials may suspend clinical trials at any time if the subjects or patients participating in such trials are being exposed to unacceptable health risks or for other reasons.

Any preclinical or clinical test may fail to produce results satisfactory to the FDA or foreign regulatory authorities. Preclinical and clinical data can be interpreted in different ways, which could delay, limit or prevent regulatory approval. The FDA or institutional review boards at the medical institutions and healthcare facilities where we sponsor clinical trials may suspend any trial indefinitely if they find deficiencies in the conduct of these trials. Clinical trials must be conducted in accordance with the FDA s current Good Clinical Practices. The FDA and these institutional review boards have authority to oversee our clinical trials, and the FDA may require large numbers of test subjects. In addition, we must manufacture, or contract for the manufacture of, the product candidates that we use in our clinical trials under the FDA s current Good Manufacturing Practices.

The rate of completion of clinical trials is dependent, in part, upon the rate of enrollment of patients. Patient accrual is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the study, the nature of the study, the existence of competitive clinical trials and the availability of alternative treatments. Delays in planned patient enrollment may result in increased costs and prolonged clinical development, which in turn could allow our competitors to bring products to market before we do and impair our ability to commercialize our products or potential products.

We or our collaborators may not be able to successfully complete any clinical trial of a potential product within any specified time period. In some cases, we or our collaborators may not be able to complete the trial at all. Moreover, clinical trials may not show our potential products to be both safe and effective. Thus, the FDA and other regulatory authorities may not approve any products that we develop for any indication or may limit the approved indications or impose other conditions.

We are dependent upon our collaborations with major pharmaceutical companies. If we are unable to achieve milestones under those collaborations or if our collaborators efforts fail to yield pharmaceutical products on a timely basis, our business will suffer.

We have derived a substantial majority of our revenues to date from collaborative drug discovery alliances with a limited number of major pharmaceutical companies. Revenues from our drug discovery alliances depend upon continuation of the collaborations, the achievement of milestones and payment of royalties we earn from any future products developed under the collaborations. If our relationship terminates with any of our collaborators, our reputation in the business and scientific community may suffer and revenues will be negatively impacted to the extent such losses are not offset by additional collaboration agreements. If we are unable to achieve milestones or our collaborators are unable to successfully develop products from which royalties are payable, we will not earn the

revenues contemplated by those drug discovery alliances. In addition, some of our alliances are exclusive and preclude us from entering into additional collaborative arrangements with other parties in the field of exclusivity.

Table of Contents

We have limited or no control over the resources that any collaborator may devote to the development and commercialization of products under our alliances. Any of our present or future collaborators may not perform their obligations as expected. These collaborators may breach or terminate their agreements with us or otherwise fail to conduct product discovery, development or commercialization activities successfully or in a timely manner. Further, our collaborators may elect not to develop pharmaceutical products arising out of our collaborative arrangements or may not devote sufficient resources to the development, approval, manufacture, marketing or sale of these products. If any of these events occurs, we may not be able to develop or commercialize potential pharmaceutical products.

Conflicts with our collaborators could jeopardize the success of our collaborative agreements and harm our product development efforts.

We may pursue opportunities in specific disease and therapeutic modality fields that could result in conflicts with our collaborators, if any of our collaborators takes the position that our internal activities overlap with those activities that are exclusive to our collaboration. Moreover, disagreements could arise with our collaborators over rights to our intellectual property or our rights to share in any of the future revenues of compounds or therapeutic approaches developed by our collaborators. Any conflict with or among our collaborators could result in the termination of our collaborative agreements, delay collaborative research or development activities, impair our ability to renew or obtain future collaborative agreements or lead to costly and time consuming litigation. Conflicts with our collaborators could also have a negative impact on our relationship with existing collaborators, materially impairing our business and revenues. Some of our collaborators are also potential competitors or may become competitors in the future. Our collaborators could develop competing products, preclude us from entering into collaborations with their competitors or terminate their agreements with us prematurely. Any of these events could harm our product development efforts.

If we are unable to internally establish drug development and commercialization capabilities or arrange for the provision of such functions by third parties, our ability to develop and commercialize pharmaceutical products would be significantly impaired.

Our ability to develop and commercialize pharmaceutical products on our own will depend on our ability to internally develop preclinical, clinical, regulatory and sales and marketing capabilities, or enter into arrangements with third parties to provide these functions. It will be expensive and will require significant time for us to develop these capabilities internally. We may not be successful in developing these capabilities or entering into agreements with third parties on favorable terms, or at all. Further, our reliance upon third parties for these capabilities could reduce our control over such activities and could make us dependent upon these parties. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, our drug development activities may be delayed, suspended or terminated. Such a failure by these third parties, or our inability to develop or contract for these capabilities, would significantly impair our ability to develop and commercialize pharmaceutical products.

We lack the capability to manufacture materials for preclinical studies, clinical trials or commercial sales and will rely on third parties to manufacture our potential products, which may harm or delay our product development and commercialization efforts.

We currently do not have the manufacturing capabilities or experience necessary to produce materials for preclinical studies, clinical trials or commercial sales and intend to rely on collaborators and third-party contractors to produce such materials. We will rely on selected manufacturers to deliver materials on a timely basis and to comply with applicable regulatory requirements, including the current Good Manufacturing Practices of the FDA, which relate to manufacturing and quality control activities. These manufacturers may not be able to produce material on a timely basis or manufacture material at the quality level or in the quantity required to meet our development timelines and applicable regulatory requirements. In addition, there are a limited number of manufacturers that operate under the FDA s current Good Manufacturing Practices and that are capable of producing such materials, and we may experience difficulty finding manufacturers with adequate capacity for our needs. If we are unable to contract for the production of sufficient quantity and quality of materials on acceptable terms, our product development and commercialization efforts may be delayed. Moreover, noncompliance with the FDA s current Good Manufacturing Practices can result in, among other things, fines, injunctions, civil and criminal penalties, product recalls or seizures, suspension of

production, failure to obtain marketing approval and withdrawal, suspension or revocation of marketing approvals.

Table of Contents

We face substantial competition in our drug discovery and product development efforts.

We face significant competition in our drug discovery and product development efforts from other biotechnology and pharmaceutical companies, as well as from universities and other not-for-profit institutions. In particular, certain competing companies such as Human Genome Sciences, Inc., Millennium Pharmaceuticals, Inc. and Exelixis, Inc. utilize a genetics-based approach to target discovery and validation that is similar to our own. Many of our competitors have substantially greater financial, scientific and human resources than we do. As a result, our competitors may succeed in developing products earlier than we do, obtaining regulatory approvals faster than we do and developing products that are more effective or safer than any that we may develop.

We may engage in future acquisitions, which may be expensive and time consuming and from which we may not realize anticipated benefits.

We may acquire additional businesses, technologies and products if we determine that these businesses, technologies and products complement our existing technology or otherwise serve our strategic goals. If we do undertake any transactions of this sort, the process of integrating an acquired business, technology or product may result in operating difficulties and expenditures and may not be achieved in a timely and non-disruptive manner, if at all, and may absorb significant management attention that would otherwise be available for ongoing development of our business. If we fail to integrate acquired businesses, technologies or products effectively or if key employees of an acquired business leave, the anticipated benefits of the acquisition would be jeopardized. Moreover, we may never realize the anticipated benefits of any acquisition, such as increased revenues and earnings or enhanced business synergies. Future acquisitions could result in potentially dilutive issuances of our equity securities, the incurrence of debt and contingent liabilities and amortization expenses related to intangible assets, which could materially impair our results of operations and financial condition.

If we lose our key personnel or are unable to attract and retain additional personnel, we may be unable to successfully develop and commercialize our own products.

We are highly dependent on the principal members of our management and scientific staff. We do not carry key man insurance on any key personnel and the loss of any of these personnel could negatively impact our business, financial condition or results of operations and could inhibit our product development and commercialization efforts. Although we have entered into employment agreements with some of our key personnel, these employment agreements are all at will. In addition, not all key personnel have employment agreements.

Recruiting and retaining qualified scientific personnel to perform future research and development work will be critical to our success. Competition for experienced scientists is intense. Failure to recruit and retain scientific personnel on acceptable terms could prevent us from achieving our business objectives.

Any contamination among our knockout mouse population could negatively affect the reliability of our scientific research or cause us to incur significant remedial costs.

Our generation and analysis of knockout mice are conducted in a specific pathogen-free environment. Any contamination of our knockout mouse population could distort or compromise the quality of our research and negatively impact the reliability of our scientific discoveries. Although we have expended substantial resources in order to secure our facilities from such risk, in the event such a contamination were to occur, our drug discovery efforts could be significantly harmed or delayed and our reputation within the scientific community could be eroded. In addition, we may incur significant remedial costs relating to the elimination of any pathogens present in our facilities.

Because all of our target validation operations are located at a single facility, the occurrence of a disaster could significantly disrupt our business.

Our OmniBank mouse clone library and its backup are stored in liquid nitrogen freezers located at our facility in The Woodlands, Texas, and our knockout mouse research operations are carried out entirely at the same facility. While we have developed redundant and emergency backup systems to protect these resources and the facilities in which they are stored, they may be insufficient in the event of a severe fire, flood, hurricane, tornado, mechanical failure or similar disaster. If such a disaster significantly damages or destroys the facility in which these resources are maintained, our business could be disrupted until we could regenerate the affected resources and, as a

Table of Contents

result, our stock price could decline. Our business interruption insurance may not be sufficient to compensate us in the event of a major interruption due to such a disaster.

We use hazardous chemicals and radioactive and biological materials in our business; any disputes relating to improper handling, storage or disposal of these materials could be time consuming and costly.

Our research and development processes involve the use of hazardous materials, including chemicals and radioactive and biological materials. Our operations also produce hazardous waste products. We cannot eliminate the risk of accidental contamination or discharge or any resultant injury from these materials. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of these materials. We could be subject to civil damages in the event of an improper or unauthorized release of, or exposure of individuals to, these hazardous materials. In addition, claimants may sue us for injury or contamination that results from our use or the use by third parties of these materials, and our liability may exceed our total assets. Compliance with environmental laws and regulations may be expensive, and current or future environmental regulations may impair our research, development or production efforts. We do not currently maintain insurance coverage that would cover these types of environmental liabilities.

Risks Related to Our Industry

Our ability to patent our inventions is uncertain because patent laws and their interpretation are highly uncertain and subject to change.

The patent positions of pharmaceutical and biotechnology companies generally are highly uncertain and involve complex legal and factual questions that will determine who has the right to develop or use a particular technology or product. No clear policy has emerged regarding the scope of protection provided in gene, drug target and biopharmaceutical patents. In addition, certain uses of technologies and products covered by some of these patents may be subject to statutory exemptions from infringement under applicable law. The biopharmaceutical patent situation outside the United States is similarly uncertain. Changes in, or different interpretations of, patent laws in the United States or other countries might allow others to use our inventions or to develop and commercialize any technologies or products that we may develop without any compensation to us. We anticipate that these uncertainties will continue for a significant period of time.

If we are unable to adequately protect our intellectual property, third parties may be able to use our technology, which could negatively impact our ability to compete in the market.

Our success will depend, in part, upon our ability to obtain patents and maintain adequate protection of the intellectual property related to our technologies and future products. We will be able to protect our intellectual property rights from unauthorized use by third parties only to the extent that our technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets.

Pending patent applications do not provide protection against competitors because they are not enforceable until they issue as patents. Further, the disclosures contained in our current and future patent applications may not be sufficient to meet statutory requirements for patentability. Once issued, patents still may not provide commercially meaningful protection. If anyone infringes upon our or our collaborators patent rights, enforcing these rights may be difficult, costly and time-consuming and, as a result, it may not be cost-effective or otherwise expedient to pursue litigation to enforce those patent rights. Others may be able to design around these patents or develop unique products providing effects similar to any products that we may develop. Other companies or institutions may challenge our or our collaborators patents or independently develop similar products that could result in an interference proceeding in the United States Patent and Trademark Office or a legal action.

Patent applications can take many years to issue and there may be currently pending patent applications of our competitors that later result in issued patents covering our discoveries. If any such patents are issued to other entities, we will be unable to obtain patent protection for the same or similar discoveries that we make. Moreover, we may be blocked from using or developing some of our existing or proposed technologies and products, or may be required to obtain a license that may not be available on reasonable terms, if at all. Further, others may discover uses for our technologies or therapeutic products other than those covered in our issued or pending patents, and these other uses may be separately patentable. Even if we have a patent claim on a particular technology or therapeutic product, the holder of a patent covering the use of that technology or therapeutic product could exclude us from selling a product

that is based on the same use of that product.

Table of Contents

Additionally, significant aspects of our intellectual property are not protected by patents. As a result, we seek to protect the proprietary nature of this intellectual property as trade secrets through proprietary information agreements and other measures. While we have entered into proprietary information agreements with all of our employees, consultants, advisers and collaborators, we may not be able to prevent the disclosure of our trade secrets. In addition, other companies or institutions may independently develop substantially equivalent information and techniques.

We may be involved in patent litigation and other disputes regarding intellectual property rights and may require licenses from third parties for our discovery and development and planned commercialization activities. We may not prevail in any such litigation or other dispute or be able to obtain required licenses.

Our discovery and development efforts as well as our potential products and those of our collaborators may give rise to claims that they infringe the patents of others. This risk will increase as the biotechnology industry expands and as other companies and institutions obtain more patents covering the sequences, functions and uses of genes and the drug targets they encode. We are aware that other companies and institutions have conducted research on many of the same targets that we have identified and have filed patent applications potentially covering many of the genes and encoded drug targets that are the focus of our drug discovery programs. In some cases, patents have issued from these applications. In addition, many companies and institutions have well-established patent portfolios directed to common techniques, methods and means of developing, producing and manufacturing pharmaceutical products. Other companies or institutions could bring legal actions against us or our collaborators for damages or to stop us or our collaborators from engaging in certain discovery or development activities or from manufacturing and marketing any resulting therapeutic products. If any of these actions are successful, in addition to our potential liability for damages, these entities would likely require us or our collaborators to obtain a license in order to continue engaging in the infringing activities or to manufacture or market the resulting therapeutic products or may force us to terminate such activities or manufacturing and marketing efforts.

We may need to pursue litigation against others to enforce our patents and intellectual property rights and may be the subject of litigation brought by third parties to enforce their patent and intellectual property rights. In addition, we may become involved in litigation based on intellectual property indemnification undertakings that we have given to certain of our collaborators. Patent litigation is expensive and requires substantial amounts of management attention. The eventual outcome of any such litigation is uncertain and involves substantial risks.

We believe that there will continue to be significant litigation in our industry regarding patent and other intellectual property rights. We have expended and many of our competitors have expended and are continuing to expend significant amounts of time, money and management resources on intellectual property litigation. If we become involved in future intellectual property litigation, it could consume a substantial portion of our resources and could negatively affect our results of operations.

We use intellectual property that we license from third parties. If we do not comply with these licenses, we could lose our rights under them.

We rely, in part, on licenses to use certain technologies that are important to our business, such as certain gene targeting technology licensed from GenPharm International, Inc. and conditional knockout technology licensed from DuPont Pharmaceuticals Company, now a subsidiary of Bristol-Myers Squibb Company. We do not own the patents that underlie these licenses. Most of these licenses, however, including those licensed from GenPharm and DuPont, have terms that extend for the life of the licensed patents. Our rights to use these technologies and practice the inventions claimed in the licensed patents are subject to our abiding by the terms of those licenses and the licensors not terminating them. We are currently in compliance with all requirements of these licenses. In many cases, we do not control the filing, prosecution or maintenance of the patent rights to which we hold licenses and rely upon our licensors to prosecute infringement of those rights. The scope of our rights under our licenses may be subject to dispute by our licensors or third parties.

We have not sought patent protection outside of the United States for some of our inventions, and some of our licensed patents only provide coverage in the United States. As a result, our international competitors could be granted foreign patent protection with respect to our discoveries.

We have decided not to pursue patent protection with respect to some of our inventions outside the United States, both because we do not believe it is cost-effective and because of confidentiality concerns. Accordingly, our

international competitors could develop, and receive foreign patent protection for, genes or gene sequences, uses of

those genes or gene sequences, gene products and drug targets, assays for identifying potential therapeutic products, potential therapeutic products and methods of treatment for which we are seeking United States patent protection. In addition, most of our gene trapping patents and our licensed gene targeting patents cover only the United States and do not apply to discovery activities conducted outside of the United States or, in some circumstances, to importing into the United States products developed using this technology.

Our industry is subject to extensive and uncertain government regulatory requirements, which could significantly hinder our ability, or the ability of our collaborators, to obtain, in a timely manner or at all, regulatory approval of potential therapeutic products, or to commercialize such products.

Our drug candidates, as well as the activities associated with their research, development and commercialization, are subject to extensive regulation by the FDA or other equivalent foreign regulatory agencies. Our failure to obtain regulatory approval for a drug candidate would prevent us from commercializing that drug candidate. The regulatory approval process is expensive, time-consuming and can vary substantially depending on the modality, complexity and novelty of the drug candidate. The regulatory process includes extensive preclinical studies and human clinical trials, which can take many years and may require substantial expenditures. Such preclinical studies or clinical trials may fail to produce results satisfactory to the FDA or other equivalent foreign regulatory agencies. Even if we obtain regulatory approval, the FDA or other equivalent foreign regulatory agency may impose restrictions as to the approved use and labeling of our product or the types of patients to which we can market and sell our product. We have limited internal resources with respect to the regulatory process and have only limited experience in the preparation and filing of the applications necessary to obtain regulatory approval.

If our potential products receive regulatory approval, we or our collaborators will remain subject to extensive and rigorous ongoing regulation.

If we or our collaborators obtain initial regulatory approvals from the FDA or foreign regulatory authorities for any products that we may develop, we or our collaborators will be subject to extensive and rigorous ongoing domestic and foreign government regulation of, among other things, the research, development, testing, manufacture, labeling, promotion, advertising, distribution and marketing of our products and product candidates. The failure to comply with these requirements or the identification of safety problems during commercial marketing could lead to the need for product marketing restrictions, product withdrawal or recall or other voluntary or regulatory action, which could delay further marketing until the product is brought into compliance. The failure to comply with these requirements may also subject us or our collaborators to stringent penalties.

Moreover, several of our product development areas involve relatively new technology and have not been the subject of extensive product testing in humans. The regulatory requirements governing these products and related clinical procedures remain uncertain and the products themselves may be subject to substantial review by foreign governmental regulatory authorities that could prevent or delay approval in those countries. Regulatory requirements ultimately imposed on any products that we may develop could limit our ability to test, manufacture and, ultimately, commercialize such products.

The uncertainty of pharmaceutical pricing and reimbursement may decrease the commercial potential of any products that we or our collaborators may develop and affect our ability to raise capital.

Our ability and the ability of our collaborators to successfully commercialize pharmaceutical products will depend, in part, on the extent to which reimbursement for the cost of such products and related treatment will be available from government health administration authorities, private health coverage insurers and other organizations. The pricing, availability of distribution channels and reimbursement status of newly approved pharmaceutical products is highly uncertain. As a result, adequate third-party coverage may not be available for us to maintain price levels sufficient for realization of an appropriate return on our investment in product discovery and development.

In certain foreign markets, pricing or profitability of healthcare products is subject to government control. In the United States, there have been, and we expect that there will continue to be, a number of federal and state proposals to implement similar governmental control. In addition, an increasing emphasis on managed care in the United States has increased and will continue to increase the pressure on pharmaceutical pricing. While we cannot predict the adoption of any such legislative or regulatory proposals or the effect such proposals or managed care efforts may have on our business, the announcement of such proposals or efforts could harm our ability to raise capital, and the adoption of

such proposals or efforts could harm our results of operations. Further, to the extent that

Table of Contents

such proposals or efforts harm other pharmaceutical companies that are our prospective collaborators, our ability to establish corporate collaborations would be impaired. In addition, third-party payers are increasingly challenging the prices charged for medical products and services. We do not know whether consumers, third-party payers and others will consider any products that we or our collaborators develop to be cost-effective or that reimbursement to the consumer will be available or will be sufficient to allow us or our collaborators to sell such products on a profitable basis.

We may be sued for product liability.

We or our collaborators may be held liable if any product that we or our collaborators develop, or any product that is made with the use or incorporation of any of our technologies, causes injury or is found otherwise unsuitable during product testing, manufacturing, marketing or sale. Although we currently have and intend to maintain product liability insurance, this insurance may become prohibitively expensive or may not fully cover our potential liabilities. Our inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or inhibit the commercialization of products developed by us or our collaborators. If we are sued for any injury caused by our or our collaborators products, our liability could exceed our total assets.

Public perception of ethical and social issues may limit or discourage the use of our technologies, which could reduce our revenues.

Our success will depend, in part, upon our ability to develop products discovered through our knockout mouse technologies. Governmental authorities could, for ethical, social or other purposes, limit the use of genetic processes or prohibit the practice of our knockout mouse technologies. Claims that genetically engineered products are unsafe for consumption or pose a danger to the environment may influence public perceptions. The subject of genetically modified organisms, like knockout mice, has received negative publicity and aroused public debate in some countries. Ethical and other concerns about our technologies, particularly the use of genes from nature for commercial purposes and the products resulting from this use, could reduce the likelihood of maintaining market acceptance of our technologies.

Table of Contents

Item 1B. ***Unresolved Staff Comments***

None.

Item 2. ***Properties***

We currently own approximately 300,000 square feet of space for our corporate offices and laboratories in buildings located in The Woodlands, Texas, a suburb of Houston, Texas, and lease approximately 76,000 square feet of space for offices and laboratories near Princeton, New Jersey.

Our facilities in The Woodlands, Texas include two state-of-the art animal facilities totaling approximately 100,000 square feet. These facilities, completed in 1999 and 2002, respectively, were custom designed for the generation and analysis of knockout mice and are accredited by AAALAC International (Association for Assessment and Accreditation of Laboratory Animal Care). These facilities enable us to maintain in-house control over our entire *in vivo* validation process, from the generation of embryonic stem cell clones through the completion of *in vivo* analysis, in a specific pathogen free environment. We believe these facilities, which are among the largest and most sophisticated of their kind in the world, provide us with significant strategic and operational advantages relative to our competitors. Because of the size and sophistication of our facilities, it would require the investment of significant resources over an extended period of time for any competitor to develop facilities with the scale, efficiency and productivity with respect to the analysis of the functionality of genes that our facilities provide.

In April 2004, we purchased our facilities in The Woodlands, Texas from the lessor under our previous synthetic lease agreement. In connection with such purchase, we repaid the $54.8 million funded under the synthetic lease with proceeds from a $34.0 million third-party mortgage financing and $20.8 million in cash. The mortgage loan has a ten-year term with a 20-year amortization and bears interest at a fixed rate of 8.23%. As a result of the refinancing, all restrictions on the cash and investments that had secured the obligations under the synthetic lease were eliminated.

In May 2002, our subsidiary Lexicon Pharmaceuticals (New Jersey), Inc. entered into a lease for a 76,000 square-foot facility in Hopewell, New Jersey. The term of the lease extends until June 30, 2013. The lease provides for an escalating yearly base rent payment of $1.3 million in the first year, $2.1 million in years two and three, $2.2 million in years four to six, $2.3 million in years seven to nine and $2.4 million in years ten and eleven. We are the guarantor of the obligations of our subsidiary under the lease.

We believe that our facilities are well-maintained, in good operating condition and acceptable for our current operations.

Item 3. ***Legal Proceedings***

None.

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

None.

Table of Contents

PART II

Item 5. ***Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***

Our common stock is quoted on The Nasdaq Global Market under the symbol LEXG. The following table sets forth, for the periods indicated, the high and low sales prices for our common stock as reported on The Nasdaq Global Market.

	High	Low
2005		
First Quarter	$8.00	$4.90
Second Quarter	$5.20	$4.15
Third Quarter	$6.50	$3.82
Fourth Quarter	$4.47	$3.19
2006		
First Quarter	$5.83	$3.60
Second Quarter	$5.85	$4.01
Third Quarter	$4.52	$3.65
Fourth Quarter	$4.40	$3.40

As of February 28, 2007, there were approximately 226 holders of record of our common stock.

We have never paid cash dividends on our common stock. We anticipate that we will retain all of our future earnings, if any, for use in the expansion and operation of our business and do not anticipate paying cash dividends in the foreseeable future.

Equity Compensation Plan Information

The following table presents aggregate summary information as of December 31, 2006 regarding the common stock that may be issued upon exercise of options, warrants and rights under all of our existing equity compensation plans, including our 2000 Equity Incentive Plan, 2000 Non-Employee Directors Stock Option Plan and Coelacanth Corporation 1999 Stock Option Plan.

Plan Category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted average exercise price per share of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders [1]	15,740,947	$ 6.0072	1,685,527 [3][4][5]
Equity compensation plans not approved by security holders [2]	73,271	2.3026	
Total	15,814,218	$ 5.9900	1,685,527

(1) Consists of shares of our common stock

issuable upon the exercise of options granted under our 2000 Equity Incentive Plan and 2000 Non-Employee Directors Stock Option Plan or remaining available for issuance under those plans.

(2) Consists of shares of our common stock issuable upon the exercise of options granted under the Coelacanth Corporation 1999 Stock Option Plan, which we assumed in connection with our July 2001 acquisition of Coelacanth Corporation, but does not include warrants to purchase 16,483 shares of common stock at a weighted average exercise price of $11.93 per share, which we also assumed in connection with our acquisition of Coelacanth.

(3) Includes 1,389,527 shares available for future

issuance under our 2000 Equity Incentive Plan, some or all of which may be awarded as stock bonuses.

(4) Our 2000 Equity Incentive Plan provides that on each January 1, the number of shares available for issuance under the plan will be automatically increased by the greater of (i) five percent of our outstanding shares on a fully-diluted basis or (ii) the number of shares that could be issued under awards granted under the plan during the prior year. Our board of directors may provide for a lesser increase in the number of shares available for issuance under the plan.

(5) Our 2000 Non-Employee Directors Stock Option Plan provides that on the day following each annual meeting of stockholders,

the number of shares available for issuance under the plan will be automatically increased by the greater of (i) 0.3% of our outstanding shares on a fully-diluted basis or (ii) the number of shares that could be issued under options granted under the plan during the prior year. Our board of directors may provide for a lesser increase in the number of shares available for issuance under the plan.

Table of Contents

Performance Graph

The following performance graph compares the performance of our common stock to the Nasdaq Composite Index and the Nasdaq Biotechnology Index for the period beginning December 31, 2001 and ending December 31, 2006. The graph assumes that the value of the investment in our common stock and each index was $100 at December 31, 2001, and that all dividends were reinvested.

	December 31,					
	2001	**2002**	**2003**	**2004**	**2005**	**2006**
Lexicon Genetics Incorporated	100	41	51	67	32	31
Nasdaq Composite Index	100	68	103	112	113	124
Nasdaq Biotechnology Index	100	55	80	85	87	88

The foregoing stock price performance comparisons shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference by any general statement incorporating by reference this annual report on Form 10-K into any filing under the Securities Act of 1933 or under the Securities Exchange Act of 1934, except to the extent that we specifically incorporate such comparisons by reference.

Table of Contents

Item 6. ***Selected Financial Data***

The statement of operations data for the years ended December 31, 2006, 2005 and 2004 and the balance sheet data as of December 31, 2006 and 2005 have been derived from our audited financial statements included elsewhere in this annual report on Form 10-K. The statements of operations data for the years ended December 31, 2003 and 2002, and the balance sheet data as of December 31, 2004, 2003 and 2002 have been derived from our audited financial statements not included in this annual report on Form 10-K. Our historical results are not necessarily indicative of results to be expected for any future period. The data presented below has been derived from financial statements that have been prepared in accordance with accounting principles generally accepted in the United States and should be read with our financial statements, including the notes, and with Management s Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this annual report on Form 10-K.

	Year Ended December 31,				
	2006	2005	2004	2003	2002
	(in thousands, except per share data)				
Statements of Operations Data:					
Revenues	$ 72,798	$ 75,680	$ 61,740	$ 42,838	$ 35,200
Operating expenses:					
Research and development, including stock-based compensation of $4,394 in 2006, ($21) in 2005, $426 in 2004, $5,048 in 2003 and $5,155 in 2002	106,695	93,625	90,586	82,198	74,859
General and administrative, including stock-based compensation of $2,636 in 2006, $0 in 2005, $412 in 2004, $5,067 in 2003 and $5,113 in 2002	21,334	18,174	18,608	23,233	23,234
Total operating expenses	128,029	111,799	109,194	105,431	98,093
Loss from operations	(55,231)	(36,119)	(47,454)	(62,593)	(62,893)
Interest and other income, net	801	(77)	282	1,471	3,223
Loss before taxes and cumulative effect of a change in accounting principle	(54,430)	(36,196)	(47,172)	(61,122)	(59,670)
Income tax provision	119	(119)			
Loss before cumulative effect of a change in accounting principle	(54,311)	(36,315)	(47,172)	(61,122)	(59,670)
Cumulative effect of a change in accounting principle [(1)]				(3,076)	
Net loss	$ (54,311)	$ (36,315)	$ (47,172)	$ (64,198)	$ (59,670)
Net loss per common share basic and diluted:					
Loss before cumulative effect of a change in accounting principle	$ (0.81)	$ (0.57)	$ (0.74)	$ (1.08)	$ (1.14)
Cumulative effect of a change in accounting principle				(0.05)	
Net loss per common share, basic and diluted	$ (0.81)	$ (0.57)	$ (0.74)	$ (1.13)	$ (1.14)
Shares used in computing net loss per common share, basic and diluted	66,876	63,962	63,327	56,820	52,263

	As of December 31,				
	2006	2005	2004	2003	2002
			(in thousands)		
Balance Sheet Data:					
Cash, cash equivalents and investments, including restricted cash and investments of $430 in 2006 $430 in 2005, $430 in 2004, $57,514 in 2003 and $57,710 in 2002	$ 79,999	$ 99,695	$ 87,558	$ 161,001	$ 123,096
Working capital	39,586	48,584	60,038	139,739	111,833
Total assets	190,266	218,714	211,980	284,199	201,772
Long-term debt, net of current portion	31,372	32,189	32,940	56,344	4,000
Accumulated deficit	(351,741)	(297,430)	(261,115)	(213,943)	(149,745)
Stockholders equity	85,501	85,802	121,594	166,216	169,902

(1) Upon adoption of FASB Interpretation No. 46, or FIN 46, Consolidation of Variable Interest Entities An Interpretation of ARB No. 51, the Company consolidated the assets of the variable interest entity, which were comprised of property and improvements funded under a synthetic lease. These assets had a carrying value of $54.8 million, net of accumulated depreciation of $3.1 million on December 31, 2003. The Company also consolidated the variable interest

entity s debt of $52.3 million and non-controlling interests of $2.5 million, which amounts are included in long-term debt and other long-term liabilities, respectively. Additionally, the Company recorded a cumulative effect of a change in accounting principle equal to the accumulated depreciation of $3.1 million for the period from the date the buildings were placed in service under the synthetic lease through December 31, 2003. In April 2004, Lexicon purchased the facilities subject to the synthetic lease, repaying the amounts funded under the synthetic lease with proceeds from a mortgage financing and cash.

Table of Contents

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

The following discussion and analysis should be read with Selected Financial Data and our financial statements and notes included elsewhere in this annual report on Form 10-K.

Overview

We are a biopharmaceutical company focused on the discovery and development of breakthrough treatments for human disease. We use our proprietary gene knockout technology to knock out, or disrupt, the function of genes in mice and then employ an integrated platform of advanced medical technologies to systematically discover the physiological and behavioral functions and pharmaceutical utility of the genes we have knocked out and the potential drug targets encoded by the corresponding human genes. For targets that we believe have high pharmaceutical value, we engage in programs for the discovery and development of potential small molecule, antibody and protein drugs. We have advanced drug candidates from two of these programs into human clinical trials, with drug candidates from two additional programs in preclinical development and a number of additional programs in various stages of preclinical research. We believe that our systematic, target biology-driven approach to drug discovery will enable us to substantially expand our clinical pipeline and we have initiated our $10_{TO}10$ program with the goal of advancing ten drug candidates into human clinical trials by the end of 2010.

We are working both independently and through strategic collaborations and alliances to capitalize on our technology and drug target discoveries and to develop and commercialize drug candidates emerging from our drug discovery and development programs. We have established alliances with Bristol-Myers Squibb Company to discover and develop novel small molecule drugs in the neuroscience field; with Genentech, Inc. for the discovery of therapeutic proteins and antibody targets and the development of antibody and protein drugs based on those targets; with N.V. Organon for the discovery of another group of therapeutic proteins and antibody targets and the development and commercialization of antibody and protein drugs based on those targets; and with Takeda Pharmaceutical Company Limited to discover new drugs for the treatment of high blood pressure. In addition, we have established collaborations and license agreements with other leading pharmaceutical and biotechnology companies, research institutes and academic institutions under which we receive fees and, in some cases, are eligible to receive milestone and royalty payments, in return for granting access to some of our technologies and discoveries for use in the other organization s own drug discovery efforts.

We derive substantially all of our revenues from drug discovery alliances, target validation collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice, academic, non-profit and government arrangements, and technology licenses. To date, we have generated a substantial portion of our revenues from a limited number of sources.

Our operating results and, in particular, our ability to generate additional revenues are dependent on many factors, including our success in establishing collaborations, alliances and technology licenses, expirations of our collaborations and alliances, the success rate of our discovery efforts leading to opportunities for new collaborations, alliances and licenses, as well as milestone payments and royalties, the timing and willingness of collaborators to commercialize products which may result in royalties, and general and industry-specific economic conditions which may affect research and development expenditures. Our future revenues from collaborations, alliances and academic, non-profit and government arrangements are uncertain because our existing agreements have fixed terms or relate to specific projects of limited duration. Our future revenues from technology licenses are uncertain because they depend, in large part, on securing new agreements. Our ability to secure future revenue-generating agreements will depend upon our ability to address the needs of our potential future collaborators, granting agencies and licensees, and to negotiate agreements that we believe are in our long-term best interests. We may determine that our interests are better served by retaining rights to our discoveries and advancing our therapeutic programs to a later stage, which could limit our near-term revenues. Because of these and other factors, our operating results have fluctuated in the past and are likely to do so in the future, and we do not believe that period-to-period comparisons of our operating results are a good indication of our future performance.

Since our inception, we have incurred significant losses and, as of December 31, 2006, we had an accumulated deficit of $351.7 million. Our losses have resulted principally from costs incurred in research and development, general and administrative costs associated with our operations, and non-cash stock-based compensation expenses

associated with stock options granted to employees and consultants. Research and development expenses consist primarily of salaries and related personnel costs, material costs, facility costs, depreciation on property and equipment, legal expenses resulting from intellectual property prosecution and other

Table of Contents

expenses related to our drug discovery and development programs, the development and analysis of knockout mice and our other target validation research efforts, and the development of compound libraries. General and administrative expenses consist primarily of salaries and related expenses for executive and administrative personnel, professional fees and other corporate expenses including information technology, facilities costs and general legal activities. In connection with our ongoing target validation research efforts and the expansion of our drug discovery and development programs, we expect to incur increasing research and development and general and administrative costs. As a result, we will need to generate significantly higher revenues to achieve profitability.

As of December 31, 2006 we had net operating loss carryforwards of approximately $267.4 million. We also had research and development tax credit carryforwards of approximately $14.4 million. The net operating loss and credit carryforwards will expire at various dates beginning in 2011, if not utilized. Utilization of the net operating losses and credits may be significantly limited due to a change in ownership as defined by 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. We recorded a $119,000 income tax provision representing alternative minimum tax payable based on estimated taxable income for the year ended December 31, 2005. This amount was subsequently reversed in 2006.

Critical Accounting Policies

Revenue Recognition

We recognize revenues when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable, and collectibility is reasonably assured. Payments received in advance under these arrangements are recorded as deferred revenue until earned.

Upfront fees under our drug discovery alliances are recognized as revenue on a straight-line basis over the estimated period of service, generally the contractual research term, to the extent they are non-refundable. Research funding under these alliances is recognized as services are performed to the extent they are non-refundable, either on a straight-line basis over the estimated service period, generally the contractual research term; or as contract research costs are incurred. Milestone-based fees are recognized upon completion of specified milestones according to contract terms. Payments received under target validation collaborations and government grants and contracts are recognized as revenue as we perform our obligations related to such research to the extent such fees are non-refundable. Non-refundable technology license fees are recognized as revenue upon the grant of the license when performance is complete and there is no continuing involvement.

Revenues recognized from multiple element contracts are allocated to each element of the arrangement based on the relative fair value of the elements. The determination of fair value of each element is based on objective evidence. When revenues for an element are specifically tied to a separate earnings process, revenue is recognized when the specific performance obligation associated with the element is completed. When revenues for an element are not specifically tied to a separate earnings process, they are recognized ratably over the term of the agreement.

A change in our revenue recognition policy or changes in the terms of contracts under which we recognize revenues could have an impact on the amount and timing of our recognition of revenues.

Research and Development Expenses

Research and development expenses consist of costs incurred for company-sponsored as well as collaborative research and development activities. These costs include direct and research-related overhead expenses and are expensed as incurred. Patent costs and technology license fees for technologies that are utilized in research and development and have no alternative future use are expensed when incurred.

We have initiated a Phase 1b clinical trial for our most advanced drug program, *LX6171* for cognitive impairment associated with disorders such as Alzheimer s disease, schizophrenia and vascular dementia. We have also initiated a Phase 1a clinical trial for another of our drug programs, *LX1031* for gastrointestinal disorders such as irritable bowel syndrome. We have advanced two other drug programs, *LX2931* for autoimmune diseases such as multiple sclerosis and rheumatoid arthritis and *LX1032* for gastrointestinal disorders, into preclinical development in preparation for regulatory filings for the commencement of clinical trials and a number of additional drug programs into various stages of preclinical research. The drug development process takes many years to complete. The cost

Table of Contents

and length of time varies due to many factors, including the type, complexity and intended use of the drug candidate. We estimate that drug development activities are typically completed over the following periods:

Phase	Estimated Completion Period
Preclinical development	1-2 years
Phase 1 clinical trials	1-2 years
Phase 2 clinical trials	1-2 years
Phase 3 clinical trials	2-4 years

We expect research and development costs to increase in the future as our drug programs advance in preclinical development and clinical trials. Due to the variability in the length of time necessary for drug development, the uncertainties related to the cost of these activities and ultimate ability to obtain governmental approval for commercialization, accurate and meaningful estimates of the ultimate costs to bring our potential drug candidates to market are not available.

We record our research and development costs by type or category, rather than by project. Significant categories of costs include personnel, facilities and equipment costs, laboratory supplies and third-party and other services. In addition, a significant portion of our research and development expenses is not tracked by project as it benefits multiple projects. Consequently, fully-loaded research and development cost summaries by project are not available.

Stock-Based Compensation

On January 1, 2006, we adopted Statement of Financial Accounting Standards Board No. 123 (Revised), Share-Based Payment, SFAS No. 123(R). This statement requires companies to recognize compensation expense in the statement of operations for share-based payments, including stock options issued to employees, based on their fair values on the date of the grant, with the compensation expense recognized over the period in which an employee is required to provide service in exchange for the stock award. We adopted this statement using the modified prospective transition method, which applies the compensation expense recognition provisions to new awards and to any awards modified, repurchased or canceled after the January 1, 2006 adoption date. Additionally, for any unvested awards outstanding at the adoption date, we will recognize compensation expense over the remaining vesting period. Stock-based compensation expense is recognized on a straight-line basis. The adoption of SFAS No. 123(R) resulted in stock-based compensation expense of $7.0 million for the year ended December 31, 2006, or $0.11 per share. There is no impact on cash flows from operating activities or financing activities. As of December 31, 2006, stock-based compensation cost for all outstanding unvested options was $11.6 million, which is expected to be recognized over a weighted-average period of 1.2 years.

Prior to the adoption of SFAS No. 123(R), our stock-based compensation plans were accounted for under the recognition and measurement provisions of Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees, and Related Interpretations, APB No. 25. Under the intrinsic value method described in APB No. 25, no compensation expense was recorded because the exercise price of the employee stock options equaled the market price of the underlying stock on the date of grant.

We record expense for options issued to non-employee consultants at fair value and re-measures the fair value at each reporting date. We reversed stock-based compensation expense of $21,000 during the year ended December 31, 2005 and recognized $0.8 million during 2004, which was primarily related to option grants made prior to Lexicon s April 2000 initial public offering.

The fair value of stock options is estimated at the date of grant using the Black-Scholes method. The Black-Scholes option-pricing model requires the input of subjective assumptions. For purposes of determining the fair value of stock options granted subsequent to the adoption of SFAS No. 123(R), the Company segregated its options into two homogeneous groups, based on exercise and post-vesting employment termination behaviors, resulting in a change in the assumptions used for expected option lives and forfeitures. Expected volatility is based on the historical volatility in the Company s stock price. The following weighted-average assumptions were used for options granted in the years ended December 31, 2006, 2005 and 2004, respectively:

28

Table of Contents

	Expected Volatility	Risk-free Interest Rate	Expected Term	Estimated Forfeitures	Dividend Rate
December 31, 2006:					
Employees	69%	4.6%	7	18%	0%
Officers and non-employee directors	69%	4.7%	9	3%	0%
December 31, 2005:					
Employees, officers and non-employee directors	72%	4.2%	7	3%	0%
December 31, 2004:					
Employees, officers and non-employee directors	92%	3.7%	7	3%	0%

Goodwill Impairment

Goodwill is not amortized, but is tested at least annually for impairment at the reporting unit level. We have determined that the reporting unit is the single operating segment disclosed in our current financial statements. Impairment is the condition that exists when the carrying amount of goodwill exceeds its implied fair value. The first step in the impairment process is to determine the fair value of the reporting unit and then compare it to the carrying value, including goodwill. We determined that the market capitalization approach is the most appropriate method of measuring fair value of the reporting unit. Under this approach, fair value is calculated as the average closing price of our common stock for the 30 days preceding the date that the annual impairment test is performed, multiplied by the number of outstanding shares on that date. A control premium, which is representative of premiums paid in the marketplace to acquire a controlling interest in a company, is then added to the market capitalization to determine the fair value of the reporting unit. If the fair value exceeds the carrying value, no further action is required and no impairment loss is recognized. Additional impairment assessments may be performed on an interim basis if we encounter events or changes in circumstances that would indicate that, more likely than not, the carrying value of goodwill has been impaired. There was no impairment of goodwill in 2006.

Recent Accounting Pronouncement

In July 2006, the FASB issued FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109 (FIN 48). FIN 48 clarifies the accounting for uncertainty in income taxes recognized in a company s financial statements and prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in an income tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. FIN 48 is effective for the Company as of January 1, 2007. The Company is currently evaluating the effect, if any, of this statement on its financial condition and results of operations.

In September 2006, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 157, Fair Value Measurements (SFAS No. 157). The statement defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. This statement applies under other accounting pronouncements that require or permit fair value measurements, the FASB having previously concluded in those accounting pronouncements that fair value is the relevant measurement attribute. Accordingly, this statement does not require any new fair value measurements. SFAS No. 157 is effective January 1, 2008. The Company is currently evaluating the impact of this statement on its financial condition and results of operation.

Results of Operations Comparison of Years Ended December 31, 2006, 2005 and 2004

Revenues

Total revenues and dollar and percentage changes as compared to the prior year are as follows (dollar amounts are presented in millions):

	Year Ended December 31,

	2006	2005	2004
Total revenues	$72.8	$ 75.7	$61.7
Dollar increase (decrease)	$ (2.9)	$ 14.0	
Percentage increase (decrease)	(4%)	23%	

Table of Contents

Years Ended December 31, 2006 and 2005

Collaborative research Revenue from collaborative research decreased 2% in 2006 to $68.4 million, primarily as a result of the achievement of two performance milestone payments under our Genentech alliance in 2005. This decrease was offset in part by a milestone achieved under our Takeda alliance, as well as increased revenues from The National Institutes of Health, Texas Enterprise Fund and Organon alliance.

Subscription and license fees Revenue from subscriptions and license fees decreased 28% in 2006 to $4.4 million due to lower technology license fees from Deltagen.

Years Ended December 31, 2005 and 2004

Collaborative research Revenue from collaborative research increased 40% in 2005 to $69.6 million, primarily due to the commencement in May 2005 of our alliance with Organon, our completion of two performance milestones under our alliance with Genentech, and our award from the Texas Enterprise Fund. Revenue in 2004 included performance milestone payments under our Genentech and Takeda alliances as well as revenues recognized under our therapeutic protein discovery alliance with Incyte, for which the collaboration period ended in June 2004.

Subscription and license fees Revenue from subscriptions and license fees decreased 49% in 2005 to $6.1 million due to the expiration of Bristol-Myers Squibb s and Incyte s subscriptions to our LexVision database in December 2004 and June 2004, respectively. This was offset in part by higher technology license fees in the current year.

In 2006, Bristol-Myers Squibb, Organon and Takeda represented 35%, 21% and 12% of revenues, respectively. In 2005, Bristol-Myers Squibb, Genentech and Organon represented 34%, 30% and 16% of revenues, respectively. In 2004, Bristol-Myers Squibb, Genentech and Incyte represented 43%, 26% and 8% of revenues, respectively.

Research and Development Expenses

Research and development expenses and dollar and percentage changes as compared to the prior year are as follows (dollar amounts are presented in millions):

	Year Ended December 31,		
	2006	**2005**	**2004**
Total research and development expense	$106.7	$93.6	$90.6
Dollar increase	$ 13.1	$ 3.0	
Percentage increase	14%	3%	

Research and development expenses consist primarily of salaries and other personnel-related expenses, facility and equipment costs, laboratory supplies, third-party and other services and stock-based compensation expenses.

Years Ended December 31, 2006 and 2005

Personnel Personnel costs increased 11% in 2006 to $51.3 million, primarily due to increased personnel for the expansion of our drug discovery programs and to support the research performed in connection with our award from the Texas Enterprise Fund, merit-based pay increases and increased medical claims costs for employees. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.

Facilities and equipment Facilities and equipment costs increased 1% in 2006 to $21.2 million.

Laboratory supplies Laboratory supplies expense increased 9% in 2006 to $14.8 million, primarily due to research performed in connection with our award from the Texas Enterprise Fund.

Third-party and other services Third-party and other services increased 36% in 2006 to $9.9 million, primarily due an increase in third-party pre-clinical and clinical research costs. Third-party and other

Table of Contents

services include third-party research, technology licenses, legal and patent fees and subscriptions to third-party databases.

Stock-based compensation Stock-based compensation expense increased $4.4 million, as a result of our adoption of SFAS No. 123(R), Share Based Payment, on January 1, 2006.

Other Other costs decreased 8% in 2006 to $5.1 million.

Years Ended December 31, 2005 and 2004

Personnel Personnel increased 7% in 2005 to $46.3 million, primarily due to increased personnel to support the expansion of our drug discovery programs and merit-based pay increases for employees.

Facilities and equipment Facilities and equipment costs increased 4% in 2005 to $21.0 million, primarily due to an increase in utility costs.

Laboratory supplies Laboratory supplies expense decreased 4% in 2005 to $13.5 million, primarily due to decreased purchases of specialty reagents and compounds.

Third-party and other services Third-party and other services decreased 4% in 2005 to $7.2 million, primarily due to the termination of our subscription to a third-party database offset, in part, by an increase in third-party research costs.

Stock-based compensation Stock-based compensation expense decreased $0.4 million in 2005 due to the fact that all deferred stock compensation related to options grants made prior to our April 2000 initial public offering was fully amortized as of January 31, 2004.

Other Other costs increased by 11% in 2005 to $5.6 million.

General and Administrative Expenses

General and administrative expenses and dollar and percentage changes as compared to the prior year are as follows (dollar amounts are presented in millions):

	Year Ended December 31,		
	2006	**2005**	**2004**
Total general and administrative expense	$21.3	$18.2	$18.6
Dollar increase (decrease)	$ 3.1	$ (0.4)	
Percentage increase (decrease)	17%	(2%)	

General and administrative expenses consist primarily of personnel costs to support our research activities, facility and equipment costs, professional fees such as legal fees, and stock-based compensation expenses.

Years Ended December 31, 2006 and 2005

Personnel Personnel costs increased 9% in 2006 to $11.8 million, primarily due to merit-based pay increases and increased medical claims costs for employees. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.

Facilities and equipment Facilities and equipment costs were $3.1 million in 2006, consistent with the prior year.

Professional fees Professional fees decreased 15% in 2006 to $1.6 million primarily due to decreased consulting costs.

Stock-based compensation Stock-based compensation expense increased $2.6 million as a result of our adoption of SFAS No. 123(R), Share Based Payment, on January 1, 2006.

Other Other costs decreased 7% to $2.2 million.

Table of Contents

Years Ended December 31, 2005 and 2004

Personnel Personnel costs increased 2% in 2005 to $10.8 million.

Facilities and equipment Facilities and equipment costs were $3.1 million in 2005, consistent with the prior year.

Professional fees Professional fees decreased 10% in 2005 to $1.9 million, primarily due to decreased litigation costs.

Stock-based compensation Stock-based compensation expense decreased $0.4 million in 2005 due to the fact that all deferred stock compensation related to options grants made prior to our April 2000 initial public offering was fully amortized as of January 31, 2004.

Other Other costs were $2.4 million in 2005, consistent with the prior year.

Interest Income, Interest Expense and Other Income, Net

Interest Income. Interest income increased 38% in 2006 to $3.7 million from $2.6 million in 2005, and increased 61% in 2005 from $1.6 million in 2004, primarily due to higher interest rates.

Interest Expense. Interest expense was $3.3 million in 2006, consistent with the prior year, and increased 23% in 2005 from $2.7 million in 2004. In April 2004, we purchased our facilities in The Woodlands, Texas from the lessor under our previous synthetic lease agreement, using the proceeds from a $34.0 million mortgage and cash. Interest expense increased in 2005 as compared to 2004 as a result of a full year of interest expense under the mortgage.

Other Income. Other income decreased 28% in 2006 to $0.4 million from $0.6 million in 2005, and decreased 57% in 2005 from $1.3 million in 2004. Other income in 2004 included a settlement with our former insurance provider for a disputed claim under our insurance policy.

Net Loss and Net Loss per Common Share

Net Loss and Net Loss per Common Share. Net loss increased to $54.3 million in 2006 from $36.3 million in 2005 and decreased from $47.2 million in 2004. Net loss per common share increased to $0.81 in 2006 from $0.57 in 2005 and decreased from $0.74 in 2004.

Liquidity and Capital Resources

We have financed our operations from inception primarily through sales of common and preferred stock, contract and milestone payments to us under our drug discovery alliance, target validation, database subscription, and license agreements, government grants and contracts, and financing obtained under debt and lease arrangements. From our inception through December 31, 2006, we had received net proceeds of $336.9 million from issuances of common and preferred stock, including $203.2 million of net proceeds from the initial public offering of our common stock in April 2000, $50.1 million from our July 2003 common stock offering and $37.5 million from our October 2006 common stock offering. In addition, from our inception through December 31, 2006, we received $398.1 million in cash payments from drug discovery alliances, target validation collaborations, database subscription and technology license fees, sales of compound libraries and reagents and government grants and contracts, of which $341.6 million had been recognized as revenues through December 31, 2006.

As of December 31, 2006, we had $80.0 million in cash, cash equivalents and short-term investments, as compared to $99.7 million as of December 31, 2005. We used cash of $56.9 million in operations in 2006. This consisted primarily of the net loss for the year of $54.3 million offset by non-cash charges of $10.6 million related to depreciation expense, $7.0 million related to stock-based compensation expense and $0.6 million related to amortization of intangible assets other than goodwill; a $23.6 million decrease in deferred revenue; and changes in other operating assets and liabilities of $2.8 million. Investing activities provided cash of $24.5 million, primarily due to net maturities of short-term investments of $28.0 million. This was offset by purchases of property and equipment of $3.5 million. Financing activities provided cash of $40.7 million in the year ended December 31, 2006, due primarily to net proceeds of $37.5 million from our registered direct offering of common stock in October 2006 and $3.6 million from our sale of common stock to Azimuth Opportunity Ltd. in September 2006, as well as

Table of Contents

proceeds of $0.4 million from stock option exercises. This was offset by $0.8 million in principal repayments on our mortgage loan.

In June 2006, we entered into an agreement with Azimuth Opportunity Ltd. under which we may offer and sell, and Azimuth is committed to purchase, up to $75 million of our common stock, or the number of shares which is one less than twenty percent of the issued and outstanding shares of our common stock as of the effective date of the agreement, whichever is fewer. At our sole discretion, we may initiate up to 24 draw downs during the approximately 18-month term of the agreement by delivering notice to Azimuth. Each draw down notice will specify (a) the aggregate dollar amount of our common stock, not to exceed $6,000,000, to be sold to Azimuth during such draw down and (b) the minimum threshold price at which we will sell such shares, which will not be less than $3.00 per share. Azimuth will be required to purchase a pro rata portion of the shares for each trading day during a pricing period of 10 consecutive trading days on which the daily volume weighted average price for our common stock exceeds the minimum threshold price. The per share purchase price for these shares will equal the daily volume weighted average price of our common stock on such date, less a discount ranging from 3.75% to 5.5%, depending on the minimum threshold price. In connection with any such draw down, at our sole discretion, we may also grant Azimuth the right, during the relevant draw down pricing period, to purchase additional shares of our common stock by specifying in the draw down notice an optional aggregate dollar amount and a minimum threshold price for such optional shares. The per share purchase price for these optional shares will equal the greater of the daily volume weighted average price of our common stock on the day Azimuth notifies us of its election to exercise such right or the minimum threshold price for such optional shares, less a discount ranging from 3.75% to 5.5%. Upon each sale of common stock to Azimuth, we will pay to Reedland Capital Partners, an Institutional Division of Financial West Group, a placement fee equal to one percent of the aggregate dollar amount received by us from such sale.

In September 2006, we issued 1,000,000 shares of our common stock to Azimuth under this agreement at a purchase price of approximately $3.67 per share. After deducting offering expenses, we received net proceeds from the sale of approximately $3.6 million.

In October 2006, we completed the registered direct offering and sale of 10,582,011 shares of our common stock to selected institutional investors at a price of $3.78 per share, resulting in net proceeds of $37.5 million, after deducting placement agent fees of $2.4 million and estimated offering expenses of $0.1 million. We currently intend to use the net proceeds for research and development and general corporate purposes, including preclinical and clinical development of our lead programs, capital expenditures and working capital needs, but may use a portion of the net proceeds to acquire or invest in businesses, products and technologies that are complementary to our own.

In April 2004, we obtained a $34.0 million mortgage on our facilities in The Woodlands, Texas. The mortgage loan has a ten-year term with a 20-year amortization and bears interest at a fixed rate of 8.23%. In May 2002, our subsidiary Lexicon Pharmaceuticals (New Jersey), Inc. signed a ten-year lease for a 76,000 square-foot facility in Hopewell, New Jersey. The term of the lease extends until June 30, 2013. The lease provides for an escalating yearly base rent payment of $1.3 million in the first year, $2.1 million in years two and three, $2.2 million in years four to six, $2.3 million in years seven to nine and $2.4 million in years ten and eleven. We are the guarantor of the obligations of our subsidiary under the lease.

In December 2002, we borrowed $4.0 million under a note agreement with Genentech. The note accrued interest at an annual rate of 8%, compounded quarterly, and was payable, at any time, at our option, in cash, in shares of our common stock valued at the then-current market value, or in a combination of cash and shares, subject to certain limitations. On November 30, 2005, the note agreement was amended to extend the maturity date of the loan by one year to December 31, 2006. On December 31, 2006, we repaid the note by issuing 1,511,670 shares of our common stock to Genentech.

Table of Contents

Including the lease and debt obligations described above, we had incurred the following contractual obligations as of December 31, 2006:

	Payments due by period (in millions)				
Contractual Obligations	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Debt	$ 32.2	$ 0.8	$ 1.8	$ 2.2	$ 27.4
Interest payment obligations	17.5	2.6	5.1	4.8	5.0
Operating leases	16.2	2.4	4.9	5.0	3.9
Total	$ 65.9	$ 5.8	$ 11.8	$ 12.0	$ 36.3

Our future capital requirements will be substantial and will depend on many factors, including our ability to obtain alliance, collaboration and technology license agreements, the amount and timing of payments under such agreements, the level and timing of our research and development expenditures, market acceptance of our products, the resources we devote to developing and supporting our products and other factors. Our capital requirements will also be affected by any expenditures we make in connection with license agreements and acquisitions of and investments in complementary technologies and businesses. We expect to devote substantial capital resources to continue our research and development efforts, to expand our support and product development activities, and for other general corporate activities. We believe that our current unrestricted cash and investment balances and cash and revenues we expect to derive from drug discovery alliances, target validation collaborations, government grants and contracts, and technology licenses will be sufficient to fund our operations for at least the next twelve months. During or after this period, if cash generated by operations is insufficient to satisfy our liquidity requirements, we will need to sell additional equity or debt securities or obtain additional credit arrangements. Additional financing may not be available on terms acceptable to us or at all. The sale of additional equity or convertible debt securities may result in additional dilution to our stockholders.

Disclosure about Market Risk

We are exposed to limited market and credit risk on our cash equivalents which have maturities of three months or less at the time of purchase. We maintain a short-term investment portfolio which consists of U.S. government agency debt obligations, investment grade commercial paper, corporate debt securities and certificates of deposit that mature three to twelve months from the time of purchase and auction rate securities that mature greater than twelve months from the time of purchase, which we believe are subject to limited market and credit risk. We currently do not hedge interest rate exposure or hold any derivative financial instruments in our investment portfolio.

We have operated primarily in the United States and substantially all sales to date have been made in U.S. dollars. Accordingly, we have not had any material exposure to foreign currency rate fluctuations.

Item 7A. ***Quantitative and Qualitative Disclosures About Market Risk***

See Disclosure about Market Risk under Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations for quantitative and qualitative disclosures about market risk.

Item 8. ***Financial Statements and Supplementary Data***

The financial statements required by this Item are incorporated under Item 15 in Part IV of this report.

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

None.

Item 9A. ***Controls and Procedures***

Our chief executive officer and chief financial officer have concluded that our disclosure controls and procedures (as defined in rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) are sufficiently effective to ensure that the information required to be disclosed by us in the reports we file under the Securities Exchange Act is gathered, analyzed and disclosed with adequate timeliness, accuracy and completeness, based on an evaluation of such

controls and procedures as of the end of the period covered by this report.

Table of Contents

Subsequent to our evaluation, there were no significant changes in internal controls or other factors that could significantly affect internal controls, including any corrective actions with regard to significant deficiencies and material weaknesses.

Management Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act).

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

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2006. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control-Integrated Framework.*

Based on such assessment using those criteria, management believes that, as of December 31, 2006, our internal control over financial reporting is effective.

Our independent auditors have issued an audit report on our assessment of our internal control over financial reporting which appears on page F-2 and is incorporated under Item 15 in Part IV of this report.

Item 9B. ***Other Information***

None.

Table of Contents

PART III

Item 10. ***Directors, Executive Officers and Corporate Governance***

The information required by this Item is hereby incorporated by reference from (a) the information appearing under the captions Election of Directors, Stock Ownership of Certain Beneficial Owners and Management, Corporate Governance and Executive and Director Compensation in our definitive proxy statement which involves the election of directors and is to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934 within 120 days of the end of our fiscal year on December 31, 2006 and (b) the information appearing under Item 1 in Part I of this report.

Item 11. ***Executive Compensation***

The information required by this Item is hereby incorporated by reference from the information appearing under the captions Corporate Governance and Executive and Director Compensation in our definitive proxy statement which involves the election of directors and is to be filed with the Commission pursuant to the Securities Exchange Act of 1934 within 120 days of the end of our fiscal year on December 31, 2006. Notwithstanding the foregoing, in accordance with the instructions to Item 407(e)(5) of Regulation S-K, the information contained in our proxy statement under the sub-heading Compensation Committee Report shall not be deemed to be filed as part of or incorporated by reference into this annual report on Form 10-K.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

The information required by this Item is hereby incorporated by reference from (a) the information appearing under the caption Stock Ownership of Certain Beneficial Owners and Management in our definitive proxy statement which involves the election of directors and is to be filed with the Commission pursuant to the Securities Exchange Act of 1934 within 120 days of the end of our fiscal year on December 31, 2006 and (b) the information appearing under Item 5 in Part II of this report.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence***

The information required by this is hereby incorporated by reference from the information appearing under the caption Corporate Governance in our definitive proxy statement which involves the election of directors and is to be filed with the Commission pursuant to the Securities Exchange Act of 1934 within 120 days of the end of our fiscal year on December 31, 2006.

Item 14. ***Principal Accounting Fees and Services***

The information required by this Item as to the fees we pay our principal accountant is hereby incorporated by reference from the information appearing under the caption Ratification and Approval of Independent Auditors in our definitive proxy statement which involves the election of directors and is to be filed with the Commission pursuant to the Securities Exchange Act of 1934 within 120 days of the end of our fiscal year on December 31, 2006.

Table of Contents

PART IV

Item 15. ***Exhibits and Financial Statement Schedules***

(a) Documents filed as a part of this report:

1. Consolidated Financial Statements

	Page
Report of Independent Registered Public Accounting Firm	F-1
Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets	F-3
Consolidated Statements of Operations	F-4
Consolidated Statements of Stockholders Equity	F-5
Consolidated Statements of Cash Flows	F-6
Notes to Consolidated Financial Statements	F-7

2. Financial Statement Schedules

All other financial statement schedules are omitted because they are not applicable or not required, or because the required information is included in the financial statements or notes thereto.

3. Exhibits

Exhibit No.	Description
3.1	Restated Certificate of Incorporation (filed as Exhibit 3.1 to the Company s Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
3.2	Restated Bylaws (filed as Exhibit 3.2 to the Company s Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
10.1	Restated Employment Agreement with Arthur T. Sands, M.D., Ph.D. (filed as Exhibit 10.1 to the Company s Annual Report on Form 10-K for the period ended December 31, 2005 and incorporated by reference herein).
10.2	Employment Agreement with Jeffrey L. Wade, J.D. (filed as Exhibit 10.3 to the Company s Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
10.3	Employment Agreement with Brian P. Zambrowicz, Ph.D. (filed as Exhibit 10.4 to the Company s Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
10.4	Employment Agreement with Julia P. Gregory (filed as Exhibit 10.5 to the Company s Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
10.5	Employment Agreement with Alan Main, Ph.D. (filed as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the period ended September 30, 2001 and incorporated by reference herein).
10.6	Consulting Agreement with Alan S. Nies, M.D. dated February 19, 2003, as amended (filed as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the period ended March 31,

2004 and incorporated by reference herein).

10.7 Consulting Agreement with Robert J. Lefkowitz, M.D. dated March 31, 2003 (filed as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the period ended March 31, 2003 and incorporated by reference herein).

Table of Contents

Exhibit No.	Description
10.8	Form of Indemnification Agreement with Officers and Directors (filed as Exhibit 10.7 to the Company s Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
10.9	Summary of Non-Employee Director Compensation (filed as Exhibit 10.11 to the Company s Annual Report on Form 10 K for the period ended December 31, 2005 and incorporated by reference herein).
10.10	Summary of 2007 Named Executive Officer Cash Compensation (filed as Exhibit 10.1 to the Company s Current Report on Form 8-K dated February 13, 2007 and incorporated by reference herein).
10.11	2000 Equity Incentive Plan (filed as Exhibit 10.10 to the Company s Annual Report on Form 10-K for the period ended December 31, 2004 and incorporated by reference herein).
10.12	2000 Non-Employee Directors Stock Option Plan (filed as Exhibit 10.14 to the Company s Annual Report on Form 10-K for the period ended December 31, 2005 and incorporated by reference herein).
10.13	Coelacanth Corporation 1999 Stock Option Plan (filed as Exhibit 99.1 to the Company s Registration Statement on Form S-8 (Registration No. 333-66380) and incorporated by reference herein).
10.14	Form of Stock Option Agreement with Officers under the 2000 Equity Incentive Plan (filed as Exhibit 10.2 to the Company s Quarterly Report on Form 10-Q for the period ended September 30, 2004 and incorporated by reference herein).
10.15	Form of Stock Option Agreement with Chairman of Board of Directors under the 2000 Equity Incentive Plan (filed as Exhibit 10.17 to the Company s Annual Report on Form 10-K for the period ended December 31, 2005 and incorporated by reference herein).
10.16	Form of Stock Option Agreement with Directors under the 2000 Non-Employee Directors Stock Option Plan (filed as Exhibit 10.3 to the Company s Quarterly Report on Form 10-Q for the period ended September 30, 2004 and incorporated by reference herein).
10.17	Collaboration and License Agreement, dated December 17, 2003, with Bristol-Myers Squibb Company (filed as Exhibit 10.15 to the amendment to the Company s Annual Report on Form 10-K/A for the period ended December 31, 2003, as filed on July 16, 2004, and incorporated by reference herein).
10.18	First Amendment, dated May 30, 2006, to Collaboration and License Agreement, dated December 17, 2003, with Bristol-Myers Squibb Company (filed as Exhibit 10.2 to the Company s Quarterly Report on Form 10-Q for the period ended June 30, 2006, and incorporated by reference herein).

10.19	Collaboration Agreement, dated July 27, 2004, with Takeda Pharmaceutical Company Limited (filed as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the period ended September 30, 2004 and incorporated by reference herein).
10.20	Collaboration and License Agreement, dated May 16, 2005, with N.V. Organon and (only with respect to Section 9.4 thereof) Intervet Inc. (filed as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the period ended June 30, 2005 and incorporated by reference herein).
10.21	Second Amended and Restated Collaboration and License Agreement, dated November 30, 2005, with Genentech, Inc. (filed as Exhibit 10.22 to the Company s Annual Report on Form 10-K for the period ended December 31, 2005 and incorporated by reference herein).

Table of Contents

Exhibit No.	Description
10.22	Economic Development Agreement dated July 15, 2005, with the State of Texas and the Texas A&M University System (filed as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the period ended September 30, 2005 and incorporated by reference herein).
10.23	Collaboration and License Agreement, dated July 15, 2005, with the Texas A&M University System and the Texas Institute for Genomic Medicine (filed as Exhibit 10.2 to the Company s Quarterly Report on Form 10-Q for the period ended September 30, 2005 and incorporated by reference herein).
10.24	Common Stock Purchase Agreement, dated June 12, 2006, with Azimuth Opportunity Ltd. (filed as Exhibit 10.1 to the Company s Current Report on Form 8-K dated June 12, 2006 and incorporated by reference herein).
10.25	Loan and Security Agreement, dated April 21, 2004, between Lex-Gen Woodlands, L.P. and iStar Financial Inc. (filed as Exhibit 10.18 to the Company s Annual Report on Form 10-K for the period ended December 31, 2004 and incorporated by reference herein).
10.26	Lease Agreement, dated May 23, 2002, between Lexicon Pharmaceuticals (New Jersey), Inc. and Townsend Property Trust Limited Partnership (filed as Exhibit 10.2 to the Company s Quarterly Report on Form 10-Q for the period ended June 30, 2002 and incorporated by reference herein).
21.1	Subsidiaries (filed as Exhibit 21.1 to the Company s Annual Report on Form 10-K for the year ended December 31, 2004 and incorporated by reference herein).
*23.1	Consent of Independent Registered Public Accounting Firm
*24.1	Power of Attorney (contained in signature page)
*31.1	Certification of CEO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*31.2	Certification of CFO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*32.1	Certification of CEO and CFO Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* Filed herewith.

Confidential treatment has been requested for a portion of this exhibit. The confidential portions of this exhibit have

been omitted and filed separately with the Securities and Exchange Commission.

Table of Contents

Signatures

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

Lexicon Genetics Incorporated

Date: March 12, 2007

By: /s/ Arthur T. Sands
Arthur T. Sands, M.D., Ph.D.
President and Chief Executive Officer

Date: March 12, 2007

By: /s/ Julia P. Gregory
Julia P. Gregory
Executive Vice President, Corporate Development and Chief Financial Officer

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Julia P. Gregory and Jeffrey L. Wade, or either of them, each with the power of substitution, his or her attorney-in-fact, to sign any amendments to this Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, here ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ Arthur T. Sands Arthur T. Sands, M.D., Ph.D.	President and Chief Executive Officer (Principal Executive Officer)	March 12, 2007
/s/ Julia P. Gregory Julia P. Gregory	Executive Vice President, Corporate Development and Chief Financial Officer (Principal Financial and Accounting Officer)	March 12, 2007
/s/ Samuel L. Barker Samuel L. Barker, Ph.D.	Chairman of the Board of Directors	March 12, 2007
/s/ Robert J. Lefkowitz Robert J. Lefkowitz, M.D.	Director	March 12, 2007
/s/ Barry Mills Barry Mills, J.D., Ph.D.	Director	March 12, 2007
/s/ Alan S. Nies	Director	March 12, 2007

Alan S. Nies, M.D.		
/s/ Frank P. Palantoni	Director	March 12, 2007
Frank P. Palantoni		
/s/ Clayton S. Rose	Director	March 12, 2007
Clayton S. Rose		
/s/ Kathleen M. Wiltsey	Director	March 12, 2007
Kathleen M. Wiltsey		

Table of Contents

Report of Independent
Registered Public Accounting Firm

To the Board of Directors and Stockholders
of Lexicon Genetics Incorporated:

We have audited the accompanying consolidated balance sheets of Lexicon Genetics Incorporated and subsidiaries as of December 31, 2006 and 2005 and the related consolidated statements of operations, stockholders equity, and cash flows for each of the three years in the period ended December 31, 2006. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with 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 Lexicon Genetics Incorporated and subsidiaries at December 31, 2006 and 2005, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 2 to the consolidated financial statements, in fiscal 2006, Lexicon Genetics Incorporated and subsidiaries changed its method of accounting for stock-based compensation in accordance with guidance provided in the Statement of Financial Standards No. 123(R), Share-Based Payment.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Lexicon Genetics Incorporated s internal control over financial reporting as of December 31, 2006, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 2, 2007 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Houston, Texas
March 2, 2007

Table of Contents

Report of Independent
Registered Public Accounting Firm

To the Board of Directors and Stockholders
of Lexicon Genetics Incorporated:

We have audited management s assessment, included in the accompanying Management s Report on Internal Control Over Financial Reporting, that Lexicon Genetics Incorporated maintained effective internal control over financial reporting as of December 31, 2006, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Lexicon Genetics Incorporated 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 Lexicon Genetics Incorporated maintained effective internal control over financial reporting as of December 31, 2006, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, Lexicon Genetics Incorporated maintained, in all material respects, effective internal control over financial reporting as of December 31, 2006, 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 Lexicon Genetics Incorporated and subsidiaries as of December 31, 2006 and 2005, and the related consolidated statements of operations, stockholders equity, and cash flows for each of the three years in the period ended December 31, 2006 of Lexicon Genetics Incorporated and subsidiaries and our report dated March 2, 2007 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Houston, Texas
March 2, 2007

Table of Contents

Lexicon Genetics Incorporated
Consolidated Balance Sheets
(In thousands, except par value)

	As of December 31, 2006	2005
Assets		
Current assets:		
Cash and cash equivalents	$ 30,226	$ 21,970
Short-term investments, including restricted investments of $430	49,773	77,725
Accounts receivable, net of allowances of $35 and $45, respectively	1,186	2,608
Prepaid expenses and other current assets	4,367	3,744
Total current assets	85,552	106,047
Property and equipment, net of accumulated depreciation and amortization of $56,905 and $47,926, respectively	78,192	85,265
Goodwill	25,798	25,798
Intangible assets, net of amortization of $6,000 and $5,360, respectively		640
Other assets	724	964
Total assets	$ 190,266	$ 218,714
Liabilities and Stockholders Equity		
Current liabilities:		
Accounts payable	$ 6,513	$ 6,883
Accrued liabilities	7,325	6,787
Current portion of deferred revenue	31,312	39,042
Current portion of long-term debt	816	4,751
Total current liabilities	45,966	57,463
Deferred revenue, net of current portion	26,688	42,540
Long-term debt	31,372	32,189
Other long-term liabilities	739	720
Total liabilities	104,765	132,912
Commitments and contingencies		
Stockholders equity:		
Preferred stock, $.01 par value; 5,000 shares authorized; no shares issued and outstanding		
Common stock, $.001 par value; 120,000 shares authorized; 77,804 and 64,554 shares issued and outstanding, respectively	78	64
Additional paid-in capital	437,180	383,222
Deferred stock compensation		(2)
Accumulated deficit	(351,741)	(297,430)
Accumulated other comprehensive loss	(16)	(52)

Total stockholders equity	85,501	85,802
Total liabilities and stockholders equity	$ 190,266	$ 218,714

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

Table of Contents

Lexicon Genetics Incorporated
Consolidated Statements of Operations
(In thousands, except per share amounts)

	Year Ended December 31,		
	2006	**2005**	**2004**
Revenues:			
Collaborative research	$ 68,373	$ 69,567	$ 49,736
Subscription and license fees	4,425	6,113	12,004
Total revenues	72,798	75,680	61,740
Operating expenses:			
Research and development, including stock-based compensation of $4,394, $(21), and $426, respectively	106,695	93,625	90,586
General and administrative, including stock-based compensation of $2,636, $0, and $412 respectively	21,334	18,174	18,608
Total operating expenses	128,029	111,799	109,194
Loss from operations	(55,231)	(36,119)	(47,454)
Interest income	3,653	2,645	1,638
Interest expense	(3,253)	(3,280)	(2,660)
Other income, net	401	558	1,304
Loss before taxes	(54,430)	(36,196)	(47,172)
Income tax provision	119	(119)	
Net loss	$ (54,311)	$ (36,315)	$ (47,172)
Net loss per common share, basic and diluted	$ (0.81)	$ (0.57)	$ (0.74)
Shares used in computing net loss per common share, basic and diluted	66,876	63,962	63,327

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

Table of Contents

Lexicon Genetics Incorporated
Consolidated Statements of Stockholders Equity
(In thousands)

	Common Stock Shares	Common Stock Par Value	Additional Paid-In Capital	Deferred Stock Compensation	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders Equity
Balance at December 31, 2003	62,827	$ 63	$ 380,995	$ (899)	$ (213,943)	$	$ 166,216
Deferred stock compensation, net of reversals			(41)	41			
Amortization of deferred stock compensation				838			838
Exercise of common stock options	664		1,712				1,712
Net and comprehensive loss					(47,172)		(47,172)
Balance at December 31, 2004	63,491	63	382,666	(20)	(261,115)		121,594
Deferred stock compensation, net of reversals			(39)	39			
Amortization of deferred stock compensation				(21)			(21)
Exercise of common stock options	1,063	1	595				596
Net loss					(36,315)		(36,315)
Unrealized loss on investments						(52)	(52)
Comprehensive loss							(36,367)
Balance at December 31, 2005	64,554	64	383,222	(2)	(297,430)	(52)	85,802
Stock-based compensation			7,030	2			7,032
Direct placement of common stock, net of offering costs	11,582	12	41,084				41,096
Common stock issued for note repayment	1,512	2	5,489				5,491
	156		355				355

Exercise of common stock options							
Net loss				(54,311)			(54,311)
Unrealized gain on investments					36		36
Comprehensive loss							(54,275)
Balance at December 31, 2006	77,804	$ 78	$ 437,180	$	$ (351,741)	$ (16)	$ 85,501

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

Table of Contents

Lexicon Genetics Incorporated
Consolidated Statements of Cash Flows
(In thousands)

	Year Ended December 31,		
	2006	**2005**	**2004**
Cash flows from operating activities:			
Net loss	$ (54,311)	$ (36,315)	$ (47,172)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation	10,561	10,456	10,834
Amortization of intangible assets, other than goodwill	640	1,200	1,200
Stock-based compensation	7,030	(21)	838
(Gain) loss on disposal of property and equipment	35	10	(11)
Changes in operating assets and liabilities:			
Decrease in receivables	1,423	3,789	174
(Increase) decrease in prepaid expenses and other current assets	(623)	1,049	(860)
(Increase) decrease in other assets	240	57	(841)
Increase (decrease) in accounts payable and other liabilities	1,678	(773)	3,682
Increase (decrease) in deferred revenue	(23,582)	43,990	(10,100)
Net cash provided by (used in) operating activities	(56,909)	23,442	(42,256)
Cash flows from investing activities:			
Purchases of property and equipment	(3,579)	(11,281)	(11,811)
Proceeds from disposal of property and equipment	56	123	91
Decrease in restricted cash			14,372
Purchase of short-term investments	(67,688)	(175,235)	(178,355)
Sale of short-term investments	95,676	170,404	216,182
Net cash provided by (used in) investing activities	24,465	(15,989)	40,479
Cash flows from financing activities:			
Proceeds from issuance of common stock	41,451	596	1,712
Proceeds from debt borrowings			34,000
Repayment of debt borrowings	(751)	(691)	(52,713)
Repayment of other long-term liabilities			(2,466)
Net cash provided by (used in) financing activities	40,700	(95)	(19,467)
Net increase (decrease) in cash and cash equivalents	8,256	7,358	(21,244)
Cash and cash equivalents at beginning of year	21,970	14,612	35,856
Cash and cash equivalents at end of year	$ 30,226	$ 21,970	$ 14,612
Supplemental disclosure of cash flow information:			
Cash paid for interest	$ 2,725	$ 2,783	$ 1,985
Supplemental disclosure of noncash investing and financing activities:			

Unrealized gain (loss) on investments	$ 36	$ (52)	$
Deferred stock compensation, net of reversals	$ 2	$ 39	$ 41
Retirement of property and equipment	$ 1,673	$ 4,554	$ 963
Issuance of common stock to repay note and accrued interest	$ 5,491	$	$

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

Table of Contents

Lexicon Genetics Incorporated
Notes to Consolidated Financial Statements
December 31, 2006

1. Organization and Operations

Lexicon Genetics Incorporated (Lexicon or the Company) is a Delaware corporation incorporated on July 7, 1995. Lexicon was organized to discover the functions and pharmaceutical utility of genes and use those gene function discoveries in the discovery and development of pharmaceutical products for the treatment of human disease. Lexicon has financed its operations from inception primarily through sales of common and preferred stock, payments received under collaboration and alliance agreements, database subscription agreements, government grants and contracts, technology licenses, and financing obtained under debt and lease arrangements. The Company s future success is dependent upon many factors, including, but not limited to, its ability to discover and develop pharmaceutical products for the treatment of human disease, discover additional promising candidates for drug discovery and development using its gene knockout technology, establish additional collaboration and license agreements, achieve milestones under such agreements, obtain and enforce patents and other proprietary rights in its discoveries, comply with federal and state regulations, and maintain sufficient capital to fund its activities. As a result of the aforementioned factors and the related uncertainties, there can be no assurance of the Company s future success.

2. Summary of Significant Accounting Policies

Basis of Presentation: The accompanying consolidated financial statements include the accounts of Lexicon and its subsidiaries. Intercompany transactions and balances are eliminated in consolidation.

Use of Estimates: The preparation of financial statements in conformity with U. S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Actual results could differ from those estimates.

Cash, Cash Equivalents and Short-term Investments: Lexicon considers all highly-liquid investments with original maturities of three months or less to be cash equivalents. Short-term investments consist of certificates of deposit, U.S. government agency debt obligations, corporate debt securities and auction rate securities. Short-term investments are classified as available-for-sale securities and are carried at fair value, based on quoted market prices of the securities. The Company views its available-for-sale securities as available for use in current operations regardless of the stated maturity date of the security. Unrealized gains and losses on such securities are reported as a separate component of stockholders equity. Net realized gains and losses, interest and dividends are included in interest income. The cost of securities sold is based on the specific identification method.

Restricted Cash and Investments: Lexicon is required to maintain restricted cash or investments to collateralize standby letters of credit for the lease on its office and laboratory facilities in Hopewell, New Jersey (see Note 9). As of December 31, 2006 and 2005, restricted cash and investments were $0.4 million.

Concentration of Credit Risk: Lexicon s cash equivalents, short-term investments and accounts receivable represent potential concentrations of credit risk. The Company minimizes potential concentrations of risk in cash equivalents and short-term investments by placing investments in high-quality financial instruments. The Company s accounts receivable are unsecured and are concentrated in pharmaceutical and biotechnology companies located in the United States, Europe and Japan. The Company has not experienced any significant credit losses to date. In 2006, customers in the United States, Europe and Japan represented 66%, 21% and 13% of revenue, respectively. In 2005, customers in the United States, Europe and Japan represented 78%, 16% and 6% of revenue, respectively. In 2004, customers in the United States, Japan and Europe represented 93%, 6% and 1% of revenue, respectively. At December 31, 2006, management believes that the Company has no significant concentrations of credit risk.

Segment Information and Significant Customers: Lexicon operates in one business segment, which primarily focuses on the discovery of the functions and pharmaceutical utility of genes and the use of those gene function

discoveries in the discovery and development of pharmaceutical products for the treatment of human disease. Substantially all of the Company s revenues have been derived from drug discovery alliances, target validation collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice, technology licenses, subscriptions to its databases, government grants and contracts and compound library sales. In 2006, Bristol-Myers Squibb Company, N.V. Organon and Takeda represented 35%, 21% and 12% of revenues, respectively. In 2005, Bristol-Myers Squibb, Genentech, Inc. and Organon represented 34%, 30% and 16% of revenues, respectively. In 2004, Bristol-Myers Squibb, Genentech and Incyte Corporation represented 43%, 26% and 8% of revenues, respectively.

Property and Equipment: Property and equipment are carried at cost and depreciated using the straight-line method over the estimated useful life of the assets which ranges from three to 40 years. Maintenance, repairs and minor replacements are charged to expense as incurred. Leasehold improvements are amortized over the shorter of the estimated useful life or the remaining lease term. Significant renewals and betterments are capitalized.

Impairment of Long-Lived Assets: Under Statement of Financial Accounting Standards (SFAS) No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets, long-lived assets and certain identifiable intangible assets to be held and used are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Determination of recoverability is based on an estimate of undiscounted future cash flows resulting from the use of the asset and its eventual disposition. In the event that such cash flows are not expected to be sufficient to recover the carrying amount of the assets, the assets are written down to their estimated fair values.

Goodwill Impairment: Under SFAS No. 142, Goodwill and Other Intangible Assets, goodwill is not amortized, but is tested at least annually for impairment at the reporting unit level. Impairment is the condition that exists when the carrying amount of goodwill exceeds its implied fair value. The first step in the impairment process is to determine the fair value of the reporting unit and then compare it to the carrying value, including goodwill. If the fair value exceeds the carrying value, no further action is required and no impairment loss is recognized. Additional impairment assessments may be performed on an interim basis if the Company encounters events or changes in circumstances that would indicate that, more likely than not, the carrying value of goodwill has been impaired. There was no impairment of goodwill in 2006, 2005 or 2004.

Revenue Recognition: Revenues are recognized under Staff Accounting Bulletin (SAB) No. 104, Revenue Recognition, when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectibility is reasonably assured. Payments received in advance under these arrangements are recorded as deferred revenue until earned. Revenues are earned from drug discovery alliances, target validation collaborations, database subscriptions, technology licenses, and government grants and contracts.

Upfront fees under drug discovery alliances are recognized as revenue on a straight-line basis over the estimated period of service, generally the contractual research term, to the extent they are non-refundable. Research funding under these alliances is recognized as services are performed to the extent they are non-refundable, either on a straight-line basis over the estimated service period, generally the contractual research term; or as contract research costs are incurred. Milestone-based fees are recognized upon completion of specified milestones according to contract terms. Payments received under target validation collaborations and government grants and contracts are recognized as revenue as Lexicon performs its obligations related to such research to the extent such fees are non-refundable. Non-refundable technology license fees are recognized as revenue upon the grant of the license when performance is complete and there is no continuing involvement.

Revenues recognized from multiple element contracts are allocated to each element of the arrangement based on the relative fair values of the elements. The determination of fair value of each element is based on objective evidence. When revenues for an element are specifically tied to a separate earnings process, revenue is recognized when the specific performance obligation associated with the element is completed. When revenues for an element are not specifically tied to a separate earnings process, they are recognized ratably over the term of the agreement.

Research and Development Expenses: Research and development expenses consist of costs incurred for company-sponsored as well as collaborative research and development activities. These costs include direct and

research-related overhead expenses and are expensed as incurred. Patent costs and technology license fees for

Table of Contents

technologies that are utilized in research and development and have no alternative future use are expensed when incurred.

Stock-Based Compensation: On January 1, 2006, Lexicon adopted Statement of Financial Accounting Standards Board No. 123 (Revised), Share-Based Payment, SFAS No. 123(R). This statement requires companies to recognize compensation expense in the statement of operations for share-based payments, including stock options issued to employees, based on their fair values on the date of the grant, with the compensation expense recognized over the period in which an employee is required to provide service in exchange for the stock award. The Company adopted this statement using the modified prospective transition method, which applies the compensation expense recognition provisions to new awards and to any awards modified, repurchased or canceled after the January 1, 2006 adoption date. Additionally, for any unvested awards outstanding at the adoption date, the Company will recognize compensation expense over the remaining vesting period. Stock-based compensation expense is recognized on a straight-line basis. The adoption of SFAS No. 123(R) resulted in stock-based compensation expense of $7.0 million for the year ended December 31, 2006, or $0.11 per share. There is no impact on cash flows from operating activities or financing activities. As of December 31, 2006, stock-based compensation cost for all outstanding unvested options was $11.6 million, which is expected to be recognized over a weighted-average period of 1.2 years.

Prior to the adoption of SFAS No. 123(R), Lexicon s stock-based compensation plans were accounted for under the recognition and measurement provisions of Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees, and Related Interpretations, APB No. 25. Under the intrinsic value method described in APB No. 25, no compensation expense was recorded because the exercise price of the employee stock options equaled the market price of the underlying stock on the date of grant.

Lexicon records expenses for options issued to non-employee consultants at fair value and re-measures the fair value of unvested options at each reporting date. Lexicon reversed stock-based compensation expense of $21,000 during the year ended December 31, 2005 and recognized $0.8 million during 2004, which was primarily related to option grants made prior to Lexicon s April 2000 initial public offering. The following table illustrates the effect on net loss and net loss per share if the fair value recognition provisions of SFAS No. 123, Accounting for Stock Based Compensation, had been applied to all outstanding and unvested awards in each period:

	Year Ended December 31,	
	2005	2004
	(in thousands)	
Net loss, as reported	$ (36,315)	$ (47,172)
Add: Stock-based compensation expense included in reported net loss	(21)	838
Deduct: Total stock-based compensation expense determined under fair value based method for all awards	(11,496)	(16,189)
Pro forma net loss	$ (47,832)	$ (62,523)
Net loss per common share, basic and diluted		
As reported	$ (0.57)	$ (0.74)
Pro forma	$ (0.75)	$ (0.99)

The fair value of stock options is estimated at the date of grant using the Black-Scholes method. The Black-Scholes option-pricing model requires the input of subjective assumptions. 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. For purposes of determining the fair value of stock options granted subsequent to the adoption of SFAS No. 123(R), the Company

segregated its options into two homogeneous groups, based on exercise and post-vesting employment termination behaviors, resulting in a change in the assumptions used for expected option lives and forfeitures. Expected volatility is based on the historical volatility in the Company s stock price. The following weighted-average assumptions were used for options granted in the years ended December 31, 2006, 2005 and 2004, respectively:

Table of Contents

	Expected Volatility	Risk-free Interest Rate	Expected Term	Estimated Forfeitures	Dividend Rate
December 31, 2006:					
Employees	69%	4.6%	7	18%	0%
Officers and non-employee directors	69%	4.7%	9	3%	0%
December 31, 2005:					
Employees, officers and non-employee directors	72%	4.2%	7	3%	0%
December 31, 2004:					
Employees, officers and non-employee directors	92%	3.7%	7	3%	0%

Net Loss per Common Share: Net loss per common share is computed using the weighted average number of shares of common stock outstanding. Shares associated with stock options and warrants are not included because they are antidilutive.

Comprehensive Loss: Comprehensive loss is comprised of net loss and unrealized gains and losses on available-for-sale securities. Comprehensive loss is reflected in the consolidated statements of stockholders equity. There were $36,000 of unrealized gains in the year ended December 31, 2006, $52,000 of unrealized losses in the year ended December 31, 2005, and no unrealized gains or losses in the year ended December 31, 2004.

3. Recent Accounting Pronouncement

In July 2006, the FASB issued FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109 (FIN 48). FIN 48 clarifies the accounting for uncertainty in income taxes recognized in a company s financial statements and prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in an income tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. FIN 48 is effective for the Company as of January 1, 2007. The Company is currently evaluating the effect, if any, of this statement on its financial condition and results of operations.

In September 2006, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 157, Fair Value Measurements (SFAS No. 157). The statement defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. This statement applies under other accounting pronouncements that require or permit fair value measurements, the FASB having previously concluded in those accounting pronouncements that fair value is the relevant measurement attribute. Accordingly, this statement does not require any new fair value measurements. SFAS No. 157 is effective January 1, 2008. The Company is currently evaluating the effect, if any, of this statement on its financial condition and results of operation.

4. Cash and cash equivalents and investments

The fair value of cash and cash equivalents and investments held at December 31, 2006 and 2005 are as follows:

	As of December 31, 2006			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
	(In thousands)			
Cash and cash equivalents	$ 30,239	$	$ (13)	$ 30,226

Securities maturing within one year:

Certificates of deposit	6,193	1	(1)	6,193
Corporate debt securities	5,008		(3)	5,005
Total securities maturing within one year	11,201	1	(4)	11,198
Securities maturing after ten years:				
Auction rate securities	38,575			38,575
Total available-for-sale investments	$ 49,776	$ 1	$ (4)	$ 49,773
Total cash and cash equivalents and investments	$ 80,015	$ 1	$ (17)	$ 79,999

Table of Contents

	As of December 31, 2005			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
		(In thousands)		
Cash and cash equivalents	$ 21,982	$	$ (12)	$ 21,970
Securities maturing within one year:				
Certificates of deposit	574			574
Corporate debt securities	18,941		(45)	18,896
Total securities maturing within one year	19,515		(45)	19,470
Securities maturing after ten years:				
Auction rate securities	58,250	5		58,255
Total available-for-sale investments	$ 77,765	$ 5	$ (45)	$ 77,725
Total cash and cash equivalents and investments	$ 99,747	$ 5	$ (57)	$ 99,695

There were no realized gains or losses for the years ended December 31, 2006, 2005 and 2004.

5. Property and Equipment

Property and equipment at December 31, 2006 and 2005 are as follows:

	Estimated Useful Lives In Years	As of December 31, 2006	2005
		(In thousands)	
Computers and software	3-5	$ 12,259	$ 12,768
Furniture and fixtures	5-7	7,593	7,596
Laboratory equipment	3-7	38,642	36,306
Leasehold improvements	7-10	9,740	9,740
Buildings	15-40	63,299	63,217
Land `		3,564	3,564
Total property and equipment		135,097	133,191
Less: Accumulated depreciation and amortization		(56,905)	(47,926)
Net property and equipment		$ 78,192	$ 85,265

6. Income Taxes

Lexicon recognizes deferred tax liabilities and assets for the expected future tax consequences of events that have been recognized differently in the financial statements and tax returns. Under this method, deferred tax liabilities and assets are determined based on the difference between the financial statement carrying amounts and tax bases of liabilities and assets using enacted tax rates and laws in effect in the years in which the differences are expected to

reverse. Deferred tax assets are evaluated for realization based on a more-likely-than-not criteria in determining if a valuation allowance should be provided.

Table of Contents

The components of Lexicon s deferred tax assets (liabilities) at December 31, 2006 and 2005 are as follows:

	As of December 31,	
	2006	2005
	(In thousands)	
Deferred tax assets:		
Net operating loss carryforwards	$ 93,601	$ 64,645
Research and development tax credits	14,449	12,391
Stock-based compensation	6,880	6,001
Deferred revenue	15,505	28,546
Other	875	724
Total deferred tax assets	131,310	112,307
Deferred tax liabilities:		
Property and equipment	(929)	(1,262)
Other	(380)	(346)
Total deferred tax liabilities	(1,309)	(1,608)
Less: Valuation allowance	(130,001)	(110,699)
Net deferred tax assets	$	$

At December 31, 2006, Lexicon had net operating loss carryforwards of approximately $267.4 million and research and development tax credit carryforwards of approximately $14.4 million available to reduce future income taxes. These carryforwards will begin to expire in 2011. A change in ownership, as defined by federal income tax regulations, could significantly limit the Company s ability to utilize its carryforwards. Based on the federal tax law limits and the Company s cumulative loss position, Lexicon concluded it was appropriate to establish a full valuation allowance for its net deferred tax assets until an appropriate level of profitability is sustained. During 2006, the valuation allowance increased $19.3 million primarily due to the Company s current year net loss. Lexicon recorded a $119,000 income tax provision representing alternative minimum tax payable based on estimated taxable income for the year ended December 31, 2005. This amount was subsequently reversed in 2006.

7. Goodwill and Other Intangible Assets

On July 12, 2001, Lexicon completed the acquisition of Coelacanth Corporation in a merger. Coelacanth, now Lexicon Pharmaceuticals (New Jersey), Inc., forms the core of Lexicon Pharmaceuticals, the division of the Company responsible for small molecule compound discovery. The results of Lexicon Pharmaceuticals (New Jersey), Inc. are included in the Company s results of operations for the period subsequent to the acquisition.

Goodwill associated with the acquisition of $25.8 million, which represents the excess of the $36.0 million purchase price over the fair value of the underlying net identifiable assets, was assigned to the consolidated entity, Lexicon. There was no change in the carrying amount of goodwill for the year ended December 31, 2006. In accordance with SFAS No. 142, the goodwill balance is not subject to amortization, but is tested at least annually for impairment at the reporting unit level, which is the Company s single operating segment. The Company performed an impairment test of goodwill on its annual impairment assessment date. This test did not result in an impairment of goodwill.

Other intangible assets represent Coelacanth s technology platform, which consists of its proprietary ClickChem reactions, novel building blocks and compound sets, automated production systems, high-throughput ADMET (Absorption, Distribution, Metabolism, Excretion and Toxicity) capabilities, and its know-how and trade secrets. The Company amortizes other intangible assets on a straight-line basis over an estimated life of five years.

The amortization expense for the year ended December 31, 2006 was $0.6 million. Other intangible assets are now fully amortized.

8. Debt Obligations

Genentech Loan: On December 31, 2002, Lexicon borrowed $4.0 million under an unsecured note agreement with Genentech, Inc. The proceeds of the loan were to be used to fund research efforts under the alliance agreement with Genentech discussed in Note 13. On November 30, 2005, the note agreement was amended to extend the maturity date of the loan by one year to December 31, 2006. No other terms of the note agreement were changed. The note permitted the Company to repay the note, at any time, at its option, in cash, in shares of common stock valued at the

Table of Contents

then-current market price, or in a combination of cash and shares, subject to certain limitations. The note accrued interest at an annual rate of 8%, compounded quarterly. On December 31, 2006, the Company repaid in full the principal and accrued interest outstanding under the note by issuing to Genentech 1,511,670 shares of common stock.

Mortgage Loan: In October 2000, Lexicon entered into a synthetic lease agreement under which the lessor purchased the Company s existing laboratory and office buildings and animal facility in The Woodlands, Texas and agreed to fund the construction of additional facilities. Including the purchase price for the Company s existing facilities, the synthetic lease, as amended, provided funding of $54.8 million in property and improvements and required that the Company maintain restricted cash or investments to collateralize these borrowings. In April 2004, Lexicon purchased the facilities subject to the synthetic lease, repaying the $54.8 million funded under the synthetic lease with proceeds from a $34.0 million third-party mortgage financing and $20.8 million in cash. The mortgage loan has a ten-year term with a 20-year amortization and bears interest at a fixed rate of 8.23%. As a result of the refinancing, all restrictions on the cash and investments that had secured the obligations under the synthetic lease were eliminated. The buildings and land that serve as collateral for the mortgage loan are included in property and equipment at $63.3 million and $3.6 million, respectively, before accumulated depreciation.

The following table includes the aggregate future principal payments of the Company s long-term debt as of December 31, 2006:

	For the Year Ending December 31 (In thousands)
2007	$ 816
2008	880
2009	963
2010	1,047
2011	1,138
Thereafter	27,344
	32,188
Less current portion	(816)
Total long-term debt	$ 31,372

The fair value of Lexicon s debt financial instruments approximates their carrying value. The fair value of Lexicon s long-term debt is estimated using discounted cash flow analysis, based on the Company s estimated current incremental borrowing rate.

9. Commitments and Contingencies

Operating Lease Obligations: A Lexicon subsidiary leases laboratory and office space in Hopewell, New Jersey under an agreement that expires in June 2013. The lease provides for two five-year renewal options at 95% of the fair market rent and includes escalating lease payments. Rent expense is recognized on a straight-line basis over the original lease term. Lexicon is the guarantor of the obligation of its subsidiary under this lease. The Company is required to maintain restricted investments to collateralize a standby letter of credit for this lease. The Company had $0.4 million in restricted investments as collateral as of December 31, 2006 and 2005. Additionally, Lexicon leases certain equipment under operating leases.

Table of Contents

Rent expense for all operating leases was approximately $2.4 million, $2.4 million and $2.3 million, for the years ended December 31, 2006, 2005 and 2004, respectively. The following table includes non-cancelable, escalating future lease payments for the facility in New Jersey:

	For the Year Ending December 31 (In thousands)
2007	$ 2,355
2008	2,416
2009	2,476
2010	2,476
2011	2,541
Thereafter	3,908
Total	$ 16,172

Employment Agreements: Lexicon has entered into employment agreements with certain of its corporate officers. Under the agreements, each officer receives a base salary, subject to adjustment, with an annual discretionary bonus based upon specific objectives to be determined by the compensation committee. The employment agreements are at-will and contain non-competition agreements. The agreements also provide for a termination clause, which requires either a six or 12-month payment based on the officer s salary, in the event of termination or change in corporate control.

10. Capital Stock

Common Stock: In September 2006, Lexicon issued and sold 1,000,000 shares of its common stock to Azimuth Opportunity Ltd. under its June 2006 equity line agreement with Azimuth at a purchase price of approximately $3.67 per share. After deducting offering expenses, Lexicon received net proceeds from the sale of approximately $3.6 million.

In October 2006, Lexicon completed the registered direct offering and sale of 10,582,011 shares of its common stock to selected institutional investors at a price of $3.78 per share, resulting in net proceeds of $37.5 million, after deducting placement agent fees of $2.4 million and offering expenses of $0.1 million.

11. Stock Options and Warrants

Stock Option Plans

2000 Equity Incentive Plan: In September 1995, Lexicon adopted the 1995 Stock Option Plan, which was subsequently amended and restated in February 2000 as the 2000 Equity Incentive Plan (the Equity Incentive Plan). The Equity Incentive Plan will terminate in 2010 unless the Board of Directors terminates it sooner. The Equity Incentive Plan provides that it will be administered by the Board of Directors, or a committee appointed by the Board of Directors, which determines recipients and types of options to be granted, including number of shares under the option and the exercisability of the shares. The Equity Incentive Plan is presently administered by the Compensation Committee of the Board of Directors.

The Equity Incentive Plan provides for the grant of incentive stock options to employees and nonstatutory stock options to employees, directors and consultants of the Company. The plan also permits the grant of stock bonuses and restricted stock purchase awards. Incentive stock options have an exercise price of 100% or more of the fair market value of our common stock on the date of grant. Nonstatutory stock options may have an exercise price as low as 85% of fair market value on the date of grant. The purchase price of other stock awards may not be less than 85% of fair market value. However, the plan administrator may award bonuses in consideration of past services without a purchase payment. Shares may be subject to a repurchase option in the discretion of the plan administrator.

The Board of Directors initially authorized and reserved an aggregate of 11,250,000 shares of common stock for issuance under the Equity Incentive Plan. On January 1 of each year for ten years, beginning in 2001, the number of shares reserved for issuance under the Equity Incentive Plan automatically will be increased by the greater of:

Table of Contents

5% of Lexicon s outstanding shares on a fully-diluted basis; or

that number of shares that could be issued under awards granted under the Equity Incentive Plan during the prior 12-month period;

provided that the Board of Directors may provide for a lesser increase in the number of shares reserved under the Equity Incentive Plan for any year. The total number of shares reserved in the aggregate may not exceed 30,000,000 shares over the ten-year period.

As of December 31, 2006, an aggregate of 20,500,000 shares of common stock had been reserved for issuance, options to purchase 15,437,347 shares were outstanding, and 3,673,526 shares had been issued upon the exercise of stock options issued under the Equity Incentive Plan.

2000 Non-Employee Directors Stock Option Plan: In February 2000, Lexicon adopted the 2000 Non-Employee Directors Stock Option Plan (the Directors Plan) to provide for the automatic grant of options to purchase shares of common stock to non-employee directors of the Company. Under the Directors Plan, non-employee directors first elected after the closing of the Company s initial public offering receive an initial option to purchase 30,000 shares of common stock. In addition, on the day following each of the Company s annual meetings of stockholders, beginning with the annual meeting in 2001, each non-employee director who has been a director for at least six months was automatically granted an option to purchase 6,000 shares of common stock. Beginning with the annual meeting in 2005, the annual grant was increased to an option to purchase 10,000 shares of common stock. Initial option grants become vested and exercisable over a period of five years and annual option grants become vested over a period of 12 months from the date of grant. Options granted under the Directors Plan have an exercise price equal to the fair market value of the Company s common stock on the date of grant and term of ten years from the date of grant.

The Board of Directors initially authorized and reserved a total of 600,000 shares of its common stock for issuance under the Directors Plan. On the day following each annual meeting of Lexicon s stockholders, for 10 years, starting in 2001, the share reserve will automatically be increased by a number of shares equal to the greater of:

0.3% of the Company s outstanding shares on a fully-diluted basis; or

that number of shares that could be issued under options granted under the Directors Plan during the prior 12-month period;

provided that the Board of Directors may provide for a lesser increase in the number of shares reserved under the Directors Plan for any year.

As of December 31, 2006, an aggregate of 600,000 shares of common stock had been reserved for issuance, options to purchase 304,000 shares were outstanding, and no options had been exercised under the Directors Plan.

Coelacanth Corporation 1999 Stock Option Plan: Lexicon assumed the Coelacanth Corporation 1999 Stock Option Plan (the Coelacanth Plan) and the outstanding stock options under the plan in connection with our July 2001 acquisition of Coelacanth Corporation. The Company will not grant any further options under the plan. As outstanding options under the plan expire or terminate, the number of shares authorized for issuance under the plan will be correspondingly reduced.

The purpose of the plan was to provide an opportunity for employees, directors and consultants of Coelacanth to acquire a proprietary interest, or otherwise increase their proprietary interest, in Coelacanth as an incentive to continue their employment or service. Both incentive and nonstatutory options are outstanding under the plan. Most outstanding options vest over time and expire ten years from the date of grant. The exercise price of options awarded under the plan was determined by the plan administrator at the time of grant. In general, incentive stock options have an exercise price of 100% or more of the fair market value of Coelacanth common stock on the date of grant and nonstatutory stock options have an exercise price as low as 85% of fair market value on the date of grant.

As of December 31, 2006, an aggregate of 122,649 shares of common stock had been reserved for issuance, options to purchase 73,271 shares of common stock were outstanding, options to purchase 22,333 shares of common stock had been canceled, and 27,045 shares of common stock had been issued upon the exercise of stock options issued under the Coelacanth Plan.

Table of Contents

Stock Option Activity: The following is a summary of option activity under Lexicon s stock option plans:

	2006		2005		2004	
(In thousands, except exercise price data)	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price
Outstanding at beginning of year	13,802	$ 6.36	13,299	$ 6.20	12,889	$ 6.12
Granted	2,651	4.07	2,104	5.55	1,935	7.40
Exercised	(156)	2.30	(1,063)	0.56	(664)	2.65
Canceled	(482)	7.14	(538)	10.79	(861)	10.44
Outstanding at end of year	15,815	5.99	13,802	6.36	13,299	6.20
Exercisable at end of year	11,675	$ 6.40	10,312	$ 6.50	9,908	$ 5.96

The weighted average estimated grant date fair value of options granted during the years ended December 31, 2006, 2005 and 2004 were $2.99, $3.93, and $5.95, respectively. The total intrinsic value of options exercised during the years ended December 31, 2006, 2005, and 2004 were $343,000, $4,503,000 and $2,678,000, respectively.

Stock Options Outstanding: The following table summarizes information about stock options outstanding at December 31, 2006:

	Options Outstanding			Options Exercisable	
Range of Exercise Price	Outstanding as of December 31, 2006 (In thousands)	Weighted Average Remaining Contractual Life (In Years)	Weighted Average Exercise Price	Exercisable as of December 31, 2006 (In thousands)	Weighted Average Exercise Price
$ 1.67 2.50	4,645	2.3	$ 2.41	4,645	$ 2.41
3.16 4.72	3,882	8.1	4.00	1,306	3.97
4.76 7.12	2,575	7.7	5.77	1,403	5.80
7.15 10.55	2,907	5.9	8.56	2,515	8.71
10.87 16.00	1,323	4.3	12.64	1,323	12.64
16.63 22.06	356	3.3	19.70	356	19.70
25.25 31.63	28	3.8	26.23	28	26.23
38.00 38.50	99	3.7	38.49	99	38.49
	15,815	5.5	$ 5.99	11,675	$ 6.40

At December 31, 2006, the aggregate intrinsic value of the outstanding options and the exercisable options was $5,567,000.

Warrants

In connection with the acquisition of Coelacanth in July 2001, Lexicon assumed Coelacanth s outstanding warrants to purchase 25,169 shares of common stock. The warrants expire on March 31, 2009. The fair value of the warrants was included in the total purchase price for the acquisition. As of December 31, 2006, warrants to purchase 16,483 shares

of common stock, with an exercise price of $11.93 per share, remained outstanding.

Aggregate Shares Reserved for Issuance

As of December 31, 2006 an aggregate of 15,831,101 shares of common stock were reserved for issuance upon exercise of outstanding stock options and warrants and 1,685,127 additional shares were available for future grants under Lexicon s stock option plans.

12. Benefit Plans

Lexicon has established an Annual Profit Sharing Incentive Plan (the Profit Sharing Plan). The purpose of the Profit Sharing Plan is to provide for the payment of incentive compensation out of the profits of the Company to certain of its employees. Participants in the Profit Sharing Plan are entitled to an annual cash bonus equal to their proportionate share (based on salary) of 15 percent of the Company s annual pretax income, if any.

Table of Contents

Lexicon maintains a defined-contribution savings plan under Section 401(k) of the Internal Revenue Code. The plan covers substantially all full-time employees. Participating employees may defer a portion of their pretax earnings, up to the Internal Revenue Service annual contribution limit. Beginning in 2000, the Company was required to match employee contributions according to a specified formula. The matching contributions totaled $907,000, $821,000, and $776,000 in 2006, 2005 and 2004, respectively. Company contributions are vested based on the employee s years of service, with full vesting after four years of service.

13. Collaboration and License Agreements

Lexicon has derived substantially all of its revenues from drug discovery alliances, target validation collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice, government grants and contracts, technology licenses, subscriptions to its databases and compound library sales.

Drug Discovery Alliances

Lexicon has entered into the following alliances for the discovery and development of therapeutics based on its *in vivo* drug target discovery efforts:

Bristol-Myers Squibb Company: Lexicon established an alliance with Bristol-Myers Squibb in December 2003 to discover, develop and commercialize small molecule drugs in the neuroscience field. Lexicon initiated the alliance with a number of drug discovery programs at various stages of development and is continuing to use its gene knockout technology to identify additional drug targets with promise in the neuroscience field. For those targets that are selected for the alliance, Lexicon and Bristol-Myers Squibb are working together, on an exclusive basis, to identify, characterize and carry out the preclinical development of small molecule drugs, and will share equally both in the costs and in the work attributable to those efforts. As drugs resulting from the collaboration enter clinical trials, Bristol-Myers Squibb will have the first option to assume full responsibility for clinical development and commercialization.

Lexicon received an upfront payment of $36.0 million and research funding of $30.0 million in the initial three years of the agreement. Bristol-Myers Squibb extended the target discovery term of the alliance in May 2006 for an additional two years in exchange for $20.0 million in additional research funding over the two year extension, which commences in January 2007. Lexicon may receive additional cash payments for exceeding specified research productivity levels. Lexicon will also receive clinical and regulatory milestone payments for each drug target for which Bristol-Myers Squibb develops a drug under the alliance. Lexicon will earn royalties on sales of drugs commercialized by Bristol-Myers Squibb. The party with responsibility for the clinical development and commercialization of drugs resulting from the alliance will bear the costs of those efforts. Revenue recognized under this agreement was $21.8 million, $21.8 million and $21.5 million for the years ended December 31, 2006, 2005 and 2004, respectively.

Genentech, Inc. Lexicon established an alliance with Genentech in December 2002 to discover novel therapeutic proteins and antibody targets. Under the original alliance agreement, Lexicon used its target validation technologies to discover the functions of secreted proteins and potential antibody targets identified through Genentech s internal drug discovery research. Lexicon received an upfront payment of $9.0 million and funding under a $4.0 million loan in 2002. The terms of the loan are discussed in Note 8. In addition, Lexicon received $24.0 million in performance payments for its work in the collaboration as it was completed.

In November 2005, Lexicon and Genentech expanded the alliance to include the advanced research, development and commercialization of new biotherapeutic drugs. Lexicon will receive a total of $25.0 million in upfront and milestone payments and research funding for the three-year advanced research portion of the expanded alliance. In the expanded alliance, Lexicon is conducting advanced research on a broad subset of targets validated in the original collaboration using Lexicon s proprietary gene knockout technology.

Lexicon may develop and commercialize drugs for up to six of the targets included in the alliance. Genentech retains an option on the potential development and commercialization of these drugs under a cost and profit sharing arrangement, with Lexicon having certain conditional rights to co-promote drugs on a worldwide basis. Genentech is entitled to receive milestone payments in the event of regulatory approval and royalties on net sales of products commercialized by Lexicon outside of a cost and profit sharing arrangement. Lexicon will receive payments from Genentech upon achievement of milestones related to the development and regulatory approval of certain drugs

Table of Contents

resulting from the alliance that are developed and commercialized by Genentech. Lexicon is also entitled to receive royalties on net sales of these products, provided they are not included in a cost and profit sharing arrangement. Lexicon retains non-exclusive rights for the development and commercialization of small molecule drugs addressing the targets included in the alliance.

Revenue recognized under this agreement was $5.0 million, $22.6 million and $16.0 million for the years ended December 31, 2006, 2005 and 2004, respectively

Incyte Corporation. Lexicon established an alliance with Incyte in June 2001 to discover novel therapeutic proteins using the Company s target validation technologies in the discovery of the functions of secreted proteins from Incyte s LifeSeq® Gold database. Under the alliance agreement, the Company and Incyte each had the right to obtain exclusive commercialization rights, including sublicensing rights, for an equal number of qualifying therapeutic proteins, and will each receive milestone payments and royalties on sales of therapeutic proteins from the alliance that are commercialized by the other party or a third party sublicensee. Lexicon received research funding of $15.0 million under the agreement and recognized revenue of $2.5 million for the year ended December 31, 2004. The collaboration period under the agreement ended in June 2004.

N.V. Organon. Lexicon established an alliance with Organon in May 2005 to jointly discover, develop and commercialize novel biotherapeutic drugs. In the alliance, Lexicon is creating and analyzing knockout mice for up to 300 genes selected by the parties that encode secreted proteins or potential antibody targets, including two of Lexicon s existing drug discovery programs. The parties will jointly select targets for further research and development and will equally share costs and responsibility for research, preclinical and clinical activities. The parties will jointly determine the manner in which alliance products will be commercialized and will equally benefit from product revenue. If fewer than five development candidates are designated under the alliance, Lexicon s share of costs and product revenue will be proportionally reduced. Lexicon will receive a milestone payment for each development candidate in excess of five. Either party may decline to participate in further research or development efforts with respect to an alliance product, in which case such party will receive royalty payments on sales of such alliance product rather than sharing in revenue. Organon will have principal responsibility for manufacturing biotherapeutic products resulting from the alliance for use in clinical trials and for worldwide sales.

Lexicon received an upfront payment of $22.5 million from Organon in exchange for access to Lexicon s drug target discovery capabilities and the exclusive right to co-develop biotherapeutic drugs for the 300 genes selected for the alliance. This upfront payment will be recognized as revenue over the four-year target function discovery portion of the alliance. Organon will also provide Lexicon with annual research funding totaling up to $50.0 million for its 50% share of the alliance s costs during this same period. Revenue recognized under this agreement was $15.5 million and $11.8 million for the years ended December 31, 2006 and 2005, respectively.

Takeda Pharmaceutical Company Limited. Lexicon established an alliance with Takeda in July 2004 to discover new drugs for the treatment of high blood pressure. In the collaboration, Lexicon is using its gene knockout technology to identify drug targets that control blood pressure. Takeda will be responsible for the screening, medicinal chemistry, preclinical and clinical development and commercialization of drugs directed against targets selected for the alliance, and will bear all related costs. Lexicon received an upfront payment of $12.0 million from Takeda for the initial, three-year term of the agreement. This upfront payment will be recognized as revenue over the three-year contractual service period. Takeda has the option to extend the discovery portion of the alliance for an additional two years in exchange for further committed funding. Takeda will make research milestone payments to Lexicon for each target selected for therapeutic development. In addition, Takeda will make clinical development and product launch milestone payments to Lexicon for each product commercialized from the collaboration. Lexicon will also earn royalties on sales of drugs commercialized by Takeda. Revenue recognized under this agreement was $9.0 million, $4.0 million and $3.2 million for the years ended December 31, 2006, 2005 and 2004, respectively.

Other Collaborations and Arrangements

Lexicon has entered into the following other collaborations and arrangements:

Bristol-Myers Squibb Company. Lexicon established a LexVision collaboration with Bristol-Myers Squibb in September 2000, under which Bristol-Myers Squibb was granted non-exclusive access to the Company s LexVision

Table of Contents

database and OmniBank library for the discovery of small molecule drugs. The Company received annual access fees under this agreement, and is entitled to receive milestone payments and royalties on products Bristol-Myers Squibb develops using the Company s technology. The collaboration period under the agreement, as amended, expired in December 2004. Revenue recognized under this agreement was $5.0 million for the year ended December 31, 2004.

Lexicon entered into a drug target validation agreement with Bristol-Myers Squibb in December 2004. Under this agreement, Lexicon developed mice and phenotypic data for certain genes previously requested by Bristol-Myers Squibb under its LexVision agreement, but that Lexicon was not required to deliver thereunder, and certain additional genes requested by Bristol-Myers Squibb. The collaboration term under the agreement expires after the final phenotypic data set has been delivered by Lexicon. The Company received payments totaling $5.0 million under the agreement. Revenue recognized under this agreement was $1.4 million and $3.5 million for the years ended December 31, 2006 and 2005, respectively.

Lexicon also entered into separate drug target validation agreements with Bristol-Myers Squibb in January 2006 and October 2006, under which Lexicon will develop mice and phenotypic data for certain additional genes requested by Bristol-Myers Squibb under those agreements. The collaboration term under each of these agreements will expire after the final phenotypic data set has been delivered by Lexicon under that agreement. The Company received payments totaling $2.5 million under these agreements. Revenue recognized under these agreements was $1.4 million for the year ended December 31, 2006.

Incyte Corporation. Lexicon established a LexVision collaboration with Incyte in June 2001, under which Incyte was granted non-exclusive access to the Company s LexVision database and OmniBank library for the discovery of small molecule drugs. The Company received annual access fees under this agreement, and is entitled to receive milestone payments and royalties on products Incyte develops using the Company s technology. The collaboration period under the agreement terminated in June 2004. Revenue recognized under this agreement was $2.5 million for the year ended December 31, 2004.

Texas Institute for Genomic Medicine. In July 2005, Lexicon was awarded $35.0 million from the Texas Enterprise Fund for the creation of a knockout mouse embryonic stem cell library containing 350,000 cell lines using Lexicon s proprietary gene trapping technology. Lexicon is creating the library for the Texas Institute for Genomic Medicine (TIGM), a newly formed non-profit institute whose founding members are Texas A&M University, the Texas A&M University System Health Science Center and Lexicon. TIGM researchers may also access specific cells from Lexicon s current gene trap library of 270,000 mouse embryonic stem cell lines and will have certain rights to utilize Lexicon s patented gene targeting technologies. In addition, Lexicon will equip TIGM with the bioinformatics software required for the management and analysis of data relating to the library. The Texas Enterprise Fund has also awarded $15.0 million to the Texas A&M University System for the creation of facilities and infrastructure to house the library. Revenue recognized under this agreement was $7.0 million and $3.1 million for the years ended December 31, 2006 and 2005, respectively.

Under the terms of the award, Lexicon is responsible for the creation of a specified number of jobs beginning in 2006, reaching an aggregate of 1,616 new jobs in Texas by December 31, 2015. Lexicon will obtain credits based on funding received by TIGM and certain related parties from sources other than the State of Texas that it may offset against its potential liability for any job creation shortfalls. Lexicon will also obtain credits against future jobs commitment liabilities for any surplus jobs it creates. Subject to these credits, if Lexicon fails to create the specified number of jobs, the state may require Lexicon to repay $2,415 for each job Lexicon falls short. Lexicon s maximum aggregate exposure for such payments, if Lexicon fails to create any new jobs, is approximately $14.4 million, without giving effect to any credits to which Lexicon may be entitled. The Texas A&M University System, together with TIGM, has independent job creation obligations and is obligated for an additional period to maintain an aggregate of 5,000 jobs, inclusive of those Lexicon creates.

Table of Contents

14. Selected Quarterly Financial Data

The table below sets forth certain unaudited statements of operations data, and net income (loss) per common share data, for each quarter of 2006 and 2005.

(In thousands, except per share data)

	Quarter Ended			
	March 31	June 30	September 30	December 31
	(Unaudited)			
2006				
Revenues	$ 20,955	$ 16,164	$ 19,613	$ 16,066
Loss from operations	$(11,020)	$(16,933)	$(12,706)	$(14,572)
Net loss	$(10,831)	$(16,902)	$(12,755)	$(13,823)
Net loss per common share, basic and diluted	$ (0.17)	$ (0.26)	$ (0.20)	$ (0.19)
Shares used in computing net loss per common share	64,566	64,627	64,832	73,405
2005				
Revenues	$ 13,925	$ 13,898	$ 13,963	$ 33,894
Income (loss) from operations	$(13,267)	$(14,519)	$(14,055)	$ 5,722
Net income (loss)	$(13,266)	$(14,842)	$(14,121)	$ 5,914
Net income (loss) per common share, basic and diluted	$ (0.21)	$ (0.23)	$ (0.22)	$ 0.09
Shares used in computing net income (loss) per common share, basic	63,525	63,636	64,134	64,539
Shares used in computing net income (loss) per common share, diluted	63,525	63,636	64,134	67,317

Table of Contents

Exhibit Index

Exhibit No.	Description
3.1	Restated Certificate of Incorporation (filed as Exhibit 3.1 to the Company s Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
3.2	Restated Bylaws (filed as Exhibit 3.2 to the Company s Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
10.1	Restated Employment Agreement with Arthur T. Sands, M.D., Ph.D. (filed as Exhibit 10.1 to the Company s Annual Report on Form 10-K for the period ended December 31, 2005 and incorporated by reference herein).
10.2	Employment Agreement with Jeffrey L. Wade, J.D. (filed as Exhibit 10.3 to the Company s Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
10.3	Employment Agreement with Brian P. Zambrowicz, Ph.D. (filed as Exhibit 10.4 to the Company s Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
10.4	Employment Agreement with Julia P. Gregory (filed as Exhibit 10.5 to the Company s Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
10.5	Employment Agreement with Alan Main, Ph.D. (filed as Exhibit 10.1 to the Company s Quarterly Report on Form 10 Q for the period ended September 30, 2001 and incorporated by reference herein).
10.6	Consulting Agreement with Alan S. Nies, M.D. dated February 19, 2003, as amended (filed as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the period ended March 31, 2004 and incorporated by reference herein).
10.7	Consulting Agreement with Robert J. Lefkowitz, M.D. dated March 31, 2003 (filed as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the period ended March 31, 2003 and incorporated by reference herein).
10.8	Form of Indemnification Agreement with Officers and Directors (filed as Exhibit 10.7 to the Company s Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
10.9	Summary of Non-Employee Director Compensation (filed as Exhibit 10.11 to the Company s Annual Report on Form 10-K for the period ended December 31, 2005 and incorporated by reference herein).
10.10	Summary of 2007 Named Executive Officer Cash Compensation (filed as Exhibit 10.1 to the Company s Current Report on Form 8-K dated February 13, 2007 and incorporated by reference herein).

10.11	2000 Equity Incentive Plan (filed as Exhibit 10.10 to the Company s Annual Report on Form 10-K for the period ended December 31, 2004 and incorporated by reference herein).
10.12	2000 Non-Employee Directors Stock Option Plan (filed as Exhibit 10.14 to the Company s Annual Report on Form 10-K for the period ended December 31, 2005 and incorporated by reference herein).
10.13	Coelacanth Corporation 1999 Stock Option Plan (filed as Exhibit 99.1 to the Company s Registration Statement on Form S-8 (Registration No. 333-66380) and incorporated by reference herein).

Table of Contents

Exhibit No.	Description
10.14	Form of Stock Option Agreement with Officers under the 2000 Equity Incentive Plan (filed as Exhibit 10.2 to the Company s Quarterly Report on Form 10-Q for the period ended September 30, 2004 and incorporated by reference herein).
10.15	Form of Stock Option Agreement with Chairman of Board of Directors under the 2000 Equity Incentive Plan (filed as Exhibit 10.17 to the Company s Annual Report on Form 10-K for the period ended December 31, 2005 and incorporated by reference herein).
10.16	Form of Stock Option Agreement with Directors under the 2000 Non-Employee Directors Stock Option Plan (filed as Exhibit 10.3 to the Company s Quarterly Report on Form 10-Q for the period ended September 30, 2004 and incorporated by reference herein).
10.17	Collaboration and License Agreement, dated December 17, 2003, with Bristol-Myers Squibb Company (filed as Exhibit 10.15 to the amendment to the Company s Annual Report on Form 10-K/A for the period ended December 31, 2003, as filed on July 16, 2004, and incorporated by reference herein).
10.18	First Amendment, dated May 30, 2006, to Collaboration and License Agreement, dated December 17, 2003, with Bristol-Myers Squibb Company (filed as Exhibit 10.2 to the Company s Quarterly Report on Form 10-Q for the period ended June 30, 2006, and incorporated by reference herein).
10.19	Collaboration Agreement, dated July 27, 2004, with Takeda Pharmaceutical Company Limited (filed as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the period ended September 30, 2004 and incorporated by reference herein).
10.20	Collaboration and License Agreement, dated May 16, 2005, with N.V. Organon and (only with respect to Section 9.4 thereof) Intervet Inc. (filed as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the period ended June 30, 2005 and incorporated by reference herein).
10.21	Second Amended and Restated Collaboration and License Agreement, dated November 30, 2005, with Genentech, Inc. (filed as Exhibit 10.22 to the Company s Annual Report on Form 10-K for the period ended December 31, 2005 and incorporated by reference herein).
10.22	Economic Development Agreement dated July 15, 2005, with the State of Texas and the Texas A&M University System (filed as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the period ended September 30, 2005 and incorporated by reference herein).
10.23	Collaboration and License Agreement, dated July 15, 2005, with the Texas A&M University System and the Texas Institute for Genomic Medicine (filed as Exhibit 10.2 to the Company s Quarterly Report on Form 10-Q for the period ended September 30, 2005 and incorporated by reference herein).
10.24	Common Stock Purchase Agreement, dated June 12, 2006, with Azimuth Opportunity Ltd. (filed as Exhibit 10.1 to the Company s Current Report on Form 8-K dated June 12, 2006 and

incorporated by reference herein).

10.25	Loan and Security Agreement, dated April 21, 2004, between Lex-Gen Woodlands, L.P. and iStar Financial Inc. (filed as Exhibit 10.18 to the Company s Annual Report on Form 10-K for the period ended December 31, 2004 and incorporated by reference herein).
10.26	Lease Agreement, dated May 23, 2002, between Lexicon Pharmaceuticals (New Jersey), Inc. and Townsend Property Trust Limited Partnership (filed as Exhibit 10.2 to the Company s Quarterly Report on Form 10-Q for the period ended June 30, 2002 and incorporated by reference herein).

Table of Contents

Exhibit No.	Description
21.1	Subsidiaries (filed as Exhibit 21.1 to the Company s Annual Report on Form 10-K for the year ended December 31, 2004 and incorporated by reference herein).
*23.1	Consent of Independent Registered Public Accounting Firm
*24.1	Power of Attorney (contained in signature page)
*31.1	Certification of CEO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*31.2	Certification of CFO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*32.1	Certification of CEO and CFO Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* Filed herewith.

Confidential treatment has been requested for a portion of this exhibit. The confidential portions of this exhibit have been omitted and filed separately with the Securities and Exchange Commission.