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

FORM 10-K

(MARK ONE)

|X| ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2003

OR

|_| TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE TRANSITION PERIOD FROM _____ TO _____

COMMISSION FILE NUMBER: 000-30111

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: NONE

SECURITIES REGISTERED PURSUANT TO SECTION 12(G) OF THE ACT:
Common Stock, par value $0.001 per share

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 |X| No |_|

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

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes |X| No |_|

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 $198.3 million, based on the closing price of the common stock on the Nasdaq National Market on June 30, 2003 of $6.60 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 8, 2004, 63,312,972 shares of common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Certain sections of the registrant's definitive proxy statement relating to the registrant's 2004 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, 2003, are incorporated by reference into Part III of this annual report on Form 10-K.

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LEXICON GENETICS INCORPORATED

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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," "predict," "should" or "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.

PART I

ITEM 1. BUSINESS

OVERVIEW

Lexicon Genetics is a biopharmaceutical company focused on the discovery of breakthrough treatments for human disease. We are systematically discovering the physiological and behavioral functions of genes to identify those that encode potential targets for therapeutic intervention, or drug targets. We make our discoveries using our proprietary technology to knock out, or disrupt, the function of genes in mice to model the effects on physiology that could be expected from prospective drugs directed against those targets. For targets that we believe have high pharmaceutical value, we engage in programs for the discovery and development of potential small molecule drugs, therapeutic antibodies and therapeutic proteins. We focus our discovery efforts in six therapeutic areas - diabetes and obesity, cardiovascular disease, psychiatric and neurological disorders, cancer, immune system disorders and ophthalmic disease - and we have advanced targets into drug discovery programs in each of these areas with potential for addressing large medical markets.

We make our discoveries using proprietary technology to knock out genes in mice, analyze the resulting effects on physiology and behavior, and identify those genes that exhibit a favorable therapeutic profile in mouse models. Using this information, we select potential targets encoded by the corresponding human genes for our drug discovery programs. . Our physiology-based approach to understanding gene function and our use of mouse models in our drug discovery efforts allow us to make highly-informed decisions throughout the drug discovery and development process, which we believe will increase our likelihood of success in discovering breakthrough therapeutics.

The scope of our gene knockout technology, combined with the size and sophistication of our facilities and our evaluative technologies, provides us with what we believe to be a significant competitive advantage. We are using these technologies in our Genome5000 program to discover the physiological and behavioral functions of 5,000 genes from the human genome that belong to gene families that we consider to be pharmaceutically important. We have completed our analysis of more than 30% of these genes, and we expect to complete the analysis of the remaining genes by the end of 2007. Through February 2004, we have advanced into drug discovery programs more than 40 targets, each of which we have validated in living mammals, or in vivo.

We are working both independently and through strategic collaborations and alliances to commercialize our technology and turn our discoveries into drugs. We have established multiple collaborations with leading pharmaceutical and biotechnology companies, as well as research institutes and academic institutions. We are working with Bristol-Myers Squibb Company to discover and develop novel 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. We are also working with Abgenix, Inc. to discover and develop therapeutic antibodies for drug targets identified in our own research. In addition, we have established collaborations and license agreements with many other leading pharmaceutical and biotechnology companies under which we receive fees and, in many cases, are eligible to receive milestone and royalty payments, in return for granting access to some of our technologies and discoveries for use in such companies' 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 PROCESS

Our drug discovery process begins with our Genome5000 program, in which we are using our gene knockout technology to discover the physiological and behavioral functions of 5,000 human genes through analysis of the corresponding knockout mouse models. 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, such as G-protein coupled, or GPCRs, and other receptors, kinases, ion channels, other key enzymes and secreted proteins. We have already completed our physiology- and behavior-based analysis of more than 30% of these 5,000 genes, and we expect to complete the analysis of the remaining genes by the end of 2007.

We use knockout mice - mice whose DNA has been altered to disrupt, or knock out, the function of the altered gene - to discover the physiological and behavioral effects that result from loss of functioning protein encoded by the disrupted gene. Historically, the study of such loss of function genetic alterations in mice has been a very powerful tool for understanding human genes because of the close similarity of gene function and physiology between mice and humans. With the genomic sequence of both organisms now available, it is noteworthy that approximately 99% of all human genes have a counterpart in the mouse genome. Our patented gene trapping and gene targeting technologies enable us to rapidly generate these knockout mice 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 employ an integrated platform of advanced medical technologies to systematically discover, in vivo, the physiological and behavioral functions and pharmaceutical utility of the genes we have knocked out and the potential drug targets they encode.

We believe that the power of our technology has been described in a large body of scientific literature which was summarized in a retrospective analysis that we performed of the 100 best selling drugs of 2001 and their targets, as modeled by the physiological characteristics of knockout mice. This analysis was published in the January 2003 issue of Nature Reviews Drug Discovery, a peer-reviewed scientific journal. In this analysis we concluded that in most cases there was a direct correlation between the physiological characteristics, or phenotypes, of knockout mice and the therapeutic effect of the 100 best-selling drugs of 2001.

We are working to discover potential small molecule drugs, therapeutic antibodies and therapeutic proteins for those in vivo-validated drug targets that we consider to have high pharmaceutical value. We have established an internal small molecule drug discovery program, 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 our industrialized medicinal chemistry platform to optimize the potency and selectivity of these hits and to identify lead compounds for potential development. Our compound libraries include chemical scaffolds and building blocks that we designed based on analyses of the characteristics of drugs that have proven safe and effective in the past. When we identify a hit, 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.

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 efficacy and safety profiles of drug candidates in mice. We believe that by focusing on the physiological functions and pharmaceutical utility of genes at the outset of the drug discovery process, we will increase our likelihood of success in discovering breakthrough treatments for human disease.

OUR TECHNOLOGY

The scope of our gene knockout and evaluative technologies allows us to create and analyze knockout mice at a rate and on a scale that we believe is unmatched by our competitors. Combined with our state-of-the-art facilities, which are among the largest and most sophisticated of their kind in the world, these technologies provide us with what we believe to be a significant competitive advantage. 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 physiology and our industrialized approach to medicinal chemistry and the generation of high-quality, drug-like compound libraries.

GENE KNOCKOUT TECHNOLOGIES

Gene Targeting. Our gene targeting technology, which is covered by eight issued patents that we have licensed, enables us to generate highly specific alterations in targeted genes. The technology uses a vector to replace 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 therapeutic discovery programs.

Gene Trapping. Our gene trapping technology, which is covered by six 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 stimulates transcription of a non-protein producing portion of the trapped gene, using the cell's own splicing machinery to extract this transcript from the chromosome for automated DNA sequencing. This 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.

PHYSIOLOGICAL ANALYSIS TECHNOLOGIES

We employ an integrated platform of advanced medical examinations to rapidly and systematically discover and catalogue 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. These examinations include many of the most sophisticated diagnostic technologies and tests currently available, many of which might be found in a major medical center. The following are included among the many tests we use::

- CAT-scans;
- magnetic resonance imaging, or MRI;
- complete blood cell analysis, including red and white blood cell counts;
- fluorescently activated cell sorting, or FACS, analysis;
- automated behavior analyses;
- nuclear magnetic resonance, or NMR, analysis; and.
- dual energy X-ray absorptiometry.

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 believe that our medical center approach and the technology platform that makes it possible provide us with substantial advantages over other approaches to discover gene function and identify novel drug targets. In particular, we believe that the comprehensive nature of this approach allows us to uncover functions 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. Such target-related side effects might limit the utility of potential therapeutics directed at the drug target or prove to be unacceptable in light of the potential therapeutic benefit. We believe these advantages will contribute to better target selection and, therefore, to the success of our drug discovery and development efforts.

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 therapeutic candidates in mice. We believe that this

approach will allow us, at an early stage, to identify and optimize therapeutic 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.

PRODUCTION AND ANALYSIS INFRASTRUCTURE

Our facilities, which are among the largest and most sophisticated of their kind in the world, enable us to capitalize on our gene knockout and physiological analysis technologies by generating knockout mice and analyzing the physiological function of genes on an expansive scale. We are able to generate knockout mice for the large number of genes that we believe may be pharmaceutically important and analyze the physiology of each of those knockout mice by utilizing our broad range of medical technologies. Our state-of-the-art animal facilities, occupying a total of approximately 100,000 square feet, are designed to allow us to generate and analyze approximately 1,000 knockout mice per year. 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, or Association for Assessment and Accreditation of Laboratory Animal Care.

Our facilities also 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. As part of our Genome5000 program, we have already examined the physiological functions of more than 1,500 genes and expect to complete our analysis of an aggregate of 5,000 genes by the end of 2007. We are not aware of any study approaching either the magnitude or breadth of our Genome5000 program, and we believe that the investment of significant resources over a period of several years would be required for any competitor to duplicate our gene knockout and physiological analysis capabilities. The scope of our gene knockout technology, combined with the size and sophistication of our facilities and our evaluative technologies, provides us with what we believe to be a significant competitive advantage.

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. We can rapidly reassemble these building blocks to generate optimization libraries when we identify a hit against one of our in vivo-validated targets, enabling us to rapidly optimize those hits and accelerate our medicinal chemistry efforts.

Our medicinal chemistry technology is 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 discovery targets. This provides us with valuable detailed information relevant to the selection of the highest quality compounds for clinical development.

OMNIBANK LIBRARY AND LEXVISION DATABASE

We have capitalized on these core elements of our technology platform by developing our OmniBank library of gene knockout clones and our LexVision database cataloging the functions of certain in vivo-validated drug targets.

OmniBank Library. We have used our gene trapping technology in an automated process to create our OmniBank library of more than 200,000 frozen gene knockout embryonic stem cell clones, each identified by DNA sequence in a relational database. Each OmniBank mouse clone contains a single genetic mutation that can be used to produce knockout models of gene function. 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. We believe our OmniBank library permits us to generate knockout mice at a significantly higher rate than is possible using other methods and, therefore, provides us with a significant strategic advantage in the discovery of in vivo gene function and the identification of novel drug targets.

LexVision Database. Our LexVision database is a comprehensive, relational database of in vivo-validated drug targets that catalogs the physiological functions of genes that we have knocked out using our gene targeting and gene trapping technologies. Our LexVision collaborators obtain non-exclusive access to the LexVision database for the discovery of small molecule drugs. We are committed to include 1,250 in vivo-validated drug targets in our LexVision database over a period of five years. As of December 31, 2003, we had deposited a total of 750 such targets in our LexVision database.

RESEARCH AND DEVELOPMENT EXPENSES

In 2003, 2002 and 2001, respectively, we incurred expenses of $82.2 million, $74.9 million and $53.4 million in company-sponsored research and development activities, including $5.0 million, $5.2 million, and $5.5 million, respectively, of stock-based compensation expense.

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 commercialize our technology and turn our discoveries into drugs. Consistent with this approach, we intend to develop and commercialize certain of our drug discovery 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 discovery programs.

We apply our internal resources to our drug discovery programs in order to commercialize our technology and turn our discoveries into drugs. As we advance targets into our drug discovery programs, we allocate our internal resources in a manner designed to maximize our ability to commercialize opportunities presented by these programs. Our prioritization and allocation of internal resources among these programs are based on our expectations regarding their relative likelihood of success and the relevant medical market, as well as progress realized in our drug discovery efforts for the program. We revise our prioritization and resource allocation among programs as necessary in order to capitalize on new discoveries and opportunities.

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 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.

ALLIANCES, COLLABORATIONS AND LICENSES

DRUG DISCOVERY ALLIANCES

We have entered into the following alliances for the discovery and development of therapeutics based on our in vivo drug target discovery efforts:

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. In the alliance, we are contributing a number of neuroscience drug discovery programs at various stages of development. We will continue 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 will work 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 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 are entitled to receive research funding during the initial three years of the agreement. 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 three years, subject to Bristol-Myers Squibb's option to extend the discovery portion of the alliance for an additional two years in exchange for further research funding payments.

Genentech, Inc. We established a drug discovery alliance with Genentech in December 2002 to discover novel therapeutic proteins and antibody targets. Under the alliance agreement, we are using our target validation technologies to discover the functions of secreted proteins and potential antibody targets identified through Genentech's internal drug discovery research. Genentech will have exclusive rights to the discoveries resulting from the collaboration for the research, development and commercialization of therapeutic proteins and antibodies. We will retain certain other rights to those discoveries, including non-exclusive rights, along with Genentech, for the development and commercialization of small molecule drugs. We received an up-front payment 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. The agreement has an expected collaboration term of three years.

Abgenix, Inc. We established a drug discovery alliance with Abgenix in July 2000 to discover novel therapeutic antibodies using our target validation technologies and Abgenix's technology for generating fully human monoclonal antibodies. We and Abgenix expanded and extended the alliance in January 2002, with the intent of accelerating the selection of in vivo validated antigens for antibody discovery and the development and commercialization of therapeutic antibodies based on those targets. Under the alliance agreement, we and Abgenix will each have the right to obtain exclusive commercialization rights, including sublicensing rights, for an equal number of qualifying therapeutic antibodies, and will each receive milestone payments and royalties on sales of therapeutic antibodies from the alliance that are commercialized by the other party or a third-party sublicensee. Each party bears its own expenses under the alliance. The expanded alliance also provides us with access to Abgenix's XenoMouse(R) technology for use in some of our own drug discovery programs. The collaboration period, as extended, expires in July 2004, subject to the right of the parties to extend the term by mutual agreement for up to three additional one-year periods.

Incyte Corporation. We established a drug discovery alliance with Incyte in June 2001 to discover novel therapeutic proteins using our target validation technologies in the discovery of the functions of secreted proteins identified in Incyte's LifeSeq(R) Gold database. The alliance agreement provides that up to 250 secreted proteins will be jointly selected for functional characterization, and we expect 150 to be selected in the first three years. Under the alliance agreement, we receive research funding from Incyte during the term of the collaboration. In addition, we and Incyte will each have 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. The collaboration period will terminate on June 27, 2004.

LEXVISION COLLABORATIONS

We have entered into the following collaborations for access to our LexVision database of in vivo-validated drug targets:

Bristol-Myers Squibb Company. We established a LexVision collaboration with Bristol Myers Squibb in September 2000, under which Bristol-Myers Squibb has non-exclusive access to our LexVision database and OmniBank library for the discovery of small molecule drugs. We receive annual access fees under this agreement and are entitled to receive milestone payments and royalties on products Bristol-Myers Squibb develops using our technology. The collaboration period extends through December 31, 2005, although either party may terminate the collaboration period on December 31, 2004.

Incyte Corporation. We established a LexVision collaboration with Incyte in June 2001, under which Incyte has non-exclusive access to our LexVision database and OmniBank library for the discovery of small molecule drugs. We receive annual access fees under this agreement, and are entitled to receive milestone payments and royalties on products Incyte develops using our technology. The collaboration period will terminate on June 27, 2004.

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 subscription fees, annual minimum commitments and the potential for royalties on products that our collaborators discover or develop using our technology.

We are generally not pursuing renewals of these agreements as they expire, and are entering into new agreements on a very limited basis.

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 200 agreements under our e-Biology collaboration program with researchers at leading institutions throughout the world.

TECHNOLOGY LICENSES AND COMPOUND SALES

We have granted non-exclusive, internal research-use sublicenses under certain of our gene targeting patent rights to a total of 12 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.

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 and drug targets 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 six issued United States patents that are directed to our gene trapping technology, 31 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 64 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 eight 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 600 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 gene targeting technologies from GenPharm International, Inc. and our Cre/lox technology from DuPont Pharmaceuticals Company. Many of these licenses are nonexclusive, although some are exclusive in specified fields. Most of the licenses, including those 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.

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 for-profit companies such as Human Genome Sciences, Inc., Millennium Pharmaceuticals, Inc. and Exelixis, Inc., among others, many of which have substantially greater financial, scientific and human resources than we do. In addition, the Human Genome Project and 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.

While we are not aware of any other commercial entity that is developing large-scale gene trap mutagenesis in ES cells, we face competition from entities using traditional knockout mouse technology and other technologies. Several companies, including Regeneron Pharmaceuticals, Inc. and DNX (a subsidiary of Xenogen Corporation), and a large number of academic institutions create knockout mice for third parties using these more traditional methods, and a number of companies create knockout mice for use in their own research.

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.

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 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, although 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.

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 March 1, 2004, we employed 637 persons, of whom 136 hold M.D., Ph.D. or D.V.M. degrees and another 86 hold other advanced degrees. We believe that our relationship with our employees is good.

RISK FACTORS

Our business is subject to risks and uncertainties, including those described below:

RISKS RELATED TO OUR BUSINESS

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 $35.2 million for the year ended December 31, 2001, $59.7 million for the year ended December 31, 2002 and $64.2 million for the year ended December 31, 2003. As of December 31, 2003, we had an accumulated deficit of $213.9 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.

We derive substantially all of our revenues from drug discovery alliances, subscriptions to our LexVision database and our OmniBank library and collaborations for the development and, in some cases, analysis of the

physiological effects of genes altered in knockout mice and technology licenses, and will continue to do so for the foreseeable future. Our future revenues from alliances, database subscriptions and collaborations 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 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 pharmaceuticals.

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 fund research and development and to enhance our core technologies. As a result, we expect that our operating expenses will continue to increase significantly in the near term 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.

We will need additional capital in the future and, if it is not available, we will have to curtail or cease operations.

Our future capital requirements will be substantial and will depend on many factors, including:

- our ability to obtain alliance, database subscription, 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 products that we successfully develop and commercially launch; and

- the resources we devote to developing and supporting such products.

Our capital requirements will increase substantially to the extent we advance potential therapeutics into preclinical and 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.

We anticipate that our existing capital resources and the revenues we expect to derive from drug discovery alliances, subscriptions to our databases, collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice and technology licenses will enable us to fund our currently planned operations for at least the next two years. However, we may generate less revenues than we expect, and changes may occur that would consume available capital resources more rapidly than we expect. If our capital resources are insufficient to meet future capital requirements, we will have to raise additional funds to continue the development of our technologies and complete the commercialization of products, if any, resulting from our technologies. 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; if so, we will have to curtail or cease operations.

We are an early-stage company, and we may not successfully develop or commercialize any therapeutics or drug targets 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, nor have we advanced any drug candidates to clinical trials. We do not know that any pharmaceutical products based on our drug target discoveries can be successfully commercialized. In addition, we may experience unforeseen technical complications in the processes we use to generate knockout mice, conduct in vivo analyses, generate compound libraries, develop screening assays for drug targets or conduct screening of compounds against those drug targets. These complications could materially delay or limit the use of those resources, substantially increase the anticipated cost of generating them or prevent us from implementing our processes at appropriate quality and throughput levels. Finally, the information that we learn from knockout mice may prove not to be useful in identifying pharmaceutically-important drug targets or safe and effective therapies.

We face substantial competition in the discovery of the DNA sequences of genes and their functions and in our drug discovery and product development efforts.

We face significant competition in each of the aspects of our business from companies such as Human Genome Sciences, Inc., Millennium Pharmaceuticals, Inc., Exelixis, Inc. and other similar companies that engage in programs for the discovery and development of drugs utilizing a genetics-based approach to target discovery and validation.

There are a finite number of genes in the human genome, and we believe that the majority of such genes have been identified and that virtually all will be identified within the next few years. We face substantial competition in our efforts to discover and patent the sequence and other information derived from such genes from entities using alternative, and in some cases higher volume and larger scale, approaches for the same purpose. These alternative approaches may ultimately prove superior, in some or all respects, to the use of knockout mice.

We also face competition from other companies in our efforts to discover the functions of genes. The Human Genome Project and a large number of universities and other not-for-profit institutions, many of which are funded by the United States and foreign governments, are also conducting research to discover the functions of genes. Competitors could discover and establish patents on genes or gene products that we identify as promising drug targets, which might hinder or prevent our ability to capitalize on such targets.

We face significant competition from other companies, as well as from universities and other not-for-profit institutions, in our drug discovery and product development efforts. 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 rely heavily on our collaborators to develop and commercialize pharmaceutical products based on genes that we identify as promising candidates for development as drug targets and our collaborators' efforts may fail to yield pharmaceutical products on a timely basis, if at all.

It is our strategy to develop drug candidates on our own as well as developing drug candidates in collaboration with third parties, particularly when such collaborations enable us to obtain access to technology and expertise that we do not possess internally or is complementary to our own.

Since we do not currently possess the resources necessary to develop, obtain approvals for or commercialize potential pharmaceutical products based on all of the genes that we identify as promising candidates for development as drug targets, we must enter into collaborative arrangements to develop and commercialize some of these products. We have limited or no control over the resources that any collaborator may devote to this effort. 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.

Some of our existing collaboration agreements contain, and collaborations that we enter into in the future may contain, exclusivity agreements or other limitations on our activities. These agreements may have the effect of limiting our flexibility and may cause us to forego attractive business opportunities.

Cancellations by or conflicts with our collaborators could harm our business.

Our alliance and collaboration agreements may not be renewed and may be terminated in the event either party fails to fulfill its obligations under these agreements. Failures to renew or cancellations by collaborators could mean a significant loss of revenues and could harm our reputation in the business and scientific communities.

In addition, we may pursue opportunities in fields that could conflict with those of our collaborators. 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. These kinds of disagreements could result in costly and time consuming litigation. Conflicts with our collaborators could reduce our ability to obtain future collaboration agreements and could 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.

We may be unsuccessful in developing and commercializing pharmaceutical products on our own.

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. 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 compounds 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 United States Food and Drug Administration, or 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.

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. We currently have no commitments or agreements with respect to any acquisitions. 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 pursue collaborations or develop our own products.

We are highly dependent on Arthur T. Sands, M.D., Ph.D., our president and chief executive officer, as well as other principal members of our management and scientific staff. 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, including Dr. Sands, these employment agreements are 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.

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 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.

Our quarterly operating results have been and likely will continue to fluctuate, and we believe that quarter-to-quarter 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 research collaborations and technology licenses, and the timing of such arrangements;
- the expiration or other termination of database subscriptions and research collaborations with our collaborators, which may not be renewed or replaced;
- the success rate of our discovery efforts leading to opportunities for new research collaborations 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 quarterly 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 quarter-to-quarter comparisons of our operating results are not a good indication of our future performance.

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 biotechnology firms 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 biotechnology patents. The biotechnology 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.

Our patent applications may not result in patent rights and, as a result, the protection afforded to our scientific discoveries may be insufficient.

Our disclosures in our patent applications may not be sufficient to meet the statutory requirements for patentability. Our ability to obtain patent protection based on genes or gene sequences will depend, in part, upon identification of a use for the gene or gene sequences sufficient to meet the statutory requirements that an invention have utility and that a patent application enable one to make and use the invention. While the United States Patent and Trademark Office has issued guidelines for the examination of patent applications claiming gene sequences, their therapeutic uses and novel proteins encoded by such genes, the impact of these guidelines is uncertain and may delay or negatively affect our patent position. Furthermore, biologic data in addition to that obtained by our current technologies may be required for issuance of patents covering any potential human therapeutic products that we may develop. If required, obtaining such biologic data could delay, add substantial costs to, or affect our ability to obtain patent protection for such products. There can be no assurance that the disclosures in our current or future patent applications, including those we may file with our collaborators, will be sufficient to meet these requirements. Even if patents are issued, there may be current or future uncertainty as to the scope of the coverage or protection provided by any such patents.

Some court decisions indicate that disclosure of a partial sequence may not be sufficient to support the patentability of a full-length sequence. These decisions have been confirmed by recent pronouncements of the United States Patent and Trademark Office. We believe that these court decisions and the uncertain position of the United States Patent and Trademark Office present a significant risk that the United States Patent and Trademark Office will not issue patents based on patent disclosures limited to partial gene sequences. In addition, we are uncertain about the scope of the coverage, enforceability and commercial protection provided by any patents issued primarily on the basis of gene sequence information.

If other companies and institutions obtain patents relating to our drug target or product candidate discoveries, we may be unable to obtain patents for our inventions based upon those discoveries and may be blocked from using or developing some of our technologies and products.

Many other entities have filed or may file patent applications on 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 which are identical or similar to some of our filings. Some of these applications attempt to assign biologic function to the genes and proteins based on predictions of function based upon similarity to other genes and proteins or patterns of gene expression. There is the significant possibility that patents claiming the functional uses of such genes and gene products will be issued to our competitors based on such information. 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.

Alternatively, the United States Patent and Trademark Office could decide competing patent claims in an interference proceeding. Any such proceeding would be costly, and we may not prevail. In this event, the prevailing party may require us or our collaborators to stop using a particular technology or pursuing a potential product or may require us to negotiate a license arrangement to do so. We may not be able to obtain a license from the prevailing party on acceptable terms, or at all.

The Human Genome Project, as well as many companies and institutions, have identified genes and deposited partial gene sequences in public databases and are continuing to do so. The entire human genome and the entire mouse genome are now publicly known. These public disclosures might limit the scope of our claims or make unpatentable subsequent patent applications on partial or full-length genes or their uses.

Issued or pending patents may not fully protect our discoveries, and our competitors may be able to commercialize technologies or products similar to those covered by our issued or pending patents.

Pending patent applications do not provide protection against competitors because they are not enforceable until they issue as patents. Issued patents 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.

In addition, others may discover uses for genes, drug targets 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 gene, drug target or therapeutic product, the holder of a patent covering the use of that gene, drug target or therapeutic product could exclude us from selling a product that is based on the same use of that product.

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.

Furthermore, in light of recent United States Supreme Court precedent, our ability to enforce our patents against state agencies, including state sponsored universities and research laboratories, is limited by the Eleventh Amendment to the United States Constitution. In addition, opposition by academicians and the government may hamper our ability to enforce our patents against academic or government research laboratories. Finally, enforcement of our patents may cause our reputation in the academic community to be injured.

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 gene targeting and conditional knockout technologies. We do not own the patents that underlie these licenses. 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.

We may be unable to protect our trade secrets.

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.

Our efforts to discover, evaluate and validate potential targets for drug intervention and our drug discovery programs are subject to evolving data and other risks inherent in the drug discovery process.

We are employing our knockout technology and integrated drug discovery platform to systematically discover, evaluate and validate potential targets for drug intervention and to develop drugs to address those targets. The drug discovery and development process involves significant risks of delay or failure due, in part, to evolving data and the uncertainties involved with the applications of new technologies. As we refine and advance our efforts, it is likely that the resulting data will cause us to change our targets from time to time and, therefore, that the targets that we believe at any time to be promising may prove not to be so. These developments can occur at any stage of the drug discovery and development process.

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, government approval of products based on genes that we identify, or to commercialize such products.

We or our collaborators must obtain approval from the FDA in order to conduct clinical trials and sell our future product candidates in the United States and from foreign regulatory authorities in order to conduct clinical trials and sell our future product candidates in other countries. 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 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.

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.

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 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 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.

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.

ITEM 2. PROPERTIES

We currently lease 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 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 October 2000, we entered into a synthetic lease agreement under which the lessor purchased our existing laboratory and office buildings and animal facility in The Woodlands, Texas and agreed to fund the construction of an additional laboratory and office building and a second animal facility. The synthetic lease agreement was subsequently expanded to include funding for the construction of a central plant facility. Including the purchase price for our existing facilities, the synthetic lease, as amended, provides for funding of up to $55.0 million in property and improvements. The term of the agreement is six years, which includes the construction period and a lease period. Lease payments for the new facilities began upon completion of construction, which occurred at the end of the first quarter of 2002. Lease payments are subject to fluctuation based on LIBOR rates. Based on a year-end LIBOR rate of 1.16%, the total lease payments for our facilities would be approximately $0.8 million per year. At the end of the lease term, the lease may be extended for one-year terms, up to seven additional terms, or we may purchase the properties for a price equal to the $54.8 million funded under the synthetic lease for property and improvements plus the amount of any accrued but unpaid lease payments. If we elect not to renew the lease or purchase the properties, we may arrange for the sale of the properties to a third party or surrender the properties to the lessor. If we elect to arrange for the sale of the properties or surrender the properties to the lessor, we have guaranteed approximately 86% of the total original cost as the residual fair value of the properties.

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

We are not presently a party to any material legal proceedings.

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

No matters were submitted during the fourth quarter of the year ended December 31, 2003.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our common stock has been quoted on The Nasdaq National Market under the symbol "LEXG" since April 7, 2000. Prior to that time, there was no public market for our common stock. The following table sets forth, for the periods indicated, the range of the high and low closing prices per share for our common stock as reported on The Nasdaq National Market.

	HIGH	LOW
2002		
First Quarter	$ 12.04	$ 7.98
Second Quarter	$ 9.00	$ 4.12
Third Quarter	$ 6.18	$ 3.51
Fourth Quarter	$ 5.25	$ 3.35
2003		
First Quarter	$ 5.22	$ 3.16
Second Quarter	$ 6.60	$ 4.05
Third Quarter	$ 7.28	$ 4.50
Fourth Quarter	$ 6.14	$ 5.07

As of March 8, 2004, there were approximately 257 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.

ITEM 6. SELECTED FINANCIAL DATA

The statement of operations data for the years ended December 31, 2003, 2002 and 2001 and the balance sheet data as of December 31, 2003 and 2002 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, 2000 and 1999, and the balance sheet data as of December 31, 2001, 2000 and 1999 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,				
	2003	2002	2001	2000	1999
STATEMENTS OF OPERATIONS DATA:	(IN THOUSANDS, EXCEPT PER SHARE DATA)				
Revenues	$ 42,838	$ 35,200	$ 30,577	$ 14,459	$ 4,738
Operating expenses:					
Research and development, including stock-based compensation of $5,048 in 2003, $5,155 in 2002, $5,539 in 2001 and $10,883 in 2000	82,198	74,859	53,355	31,647	14,646
General and administrative, including stock-based compensation of $5,067 in 2003, $5,113 in 2002, $5,231 in 2001 and $9,958 in 2000	23,233	23,234	20,861	18,289	2,913
Total operating expenses	105,431	98,093	74,216	49,936	17,559
Loss from operations	(62,593)	(62,893)	(43,639)	(35,477)	(12,821)
Interest and other income, net	1,471	3,223	8,467	9,483	346
Net loss before cumulative effect of a change in accounting principle	(61,122)	(59,670)	(35,172)	(25,994)	(12,475)
Cumulative effect of a change in accounting principle	(3,076)	-	-	-	-
Net loss	(64,198)	(59,670)	(35,172)	(25,994)	(12,475)
Accretion on redeemable convertible preferred stock	-	-	-	(134)	(536)
Net loss attributable to common stockholders	$ (64,198)	$ (59,670)	$ (35,172)	$ (26,128)	$ (13,011)
Net loss per common share basic and diluted:					
Net loss before cumulative effect of a change in accounting principle	$ (1.08)	$ (1.14)	$ (0.70)	$ (0.63)	$ (0.53)
Cumulative effect of a change in accounting principle	(0.05)	-	-	-	-
Net loss per common share, basic and diluted	$ (1.13)	$ (1.14)	$ (0.70	$ (0.63)	$ (0.53)
Shares used in computing net loss per common share, basic and diluted	56,820	52,263	50,213	41,618	24,530

	AS OF DECEMBER 31,				
	2003	2002	2001	2000	1999
BALANCE SHEET DATA:	(IN THOUSANDS)				
Cash, cash equivalents and investments, including restricted cash and investments of $57,514 in 2003, $57,710 in 2002, $43,338 in 2001 and $13,879 in 2000	$ 161,001	$ 123,096	$ 166,840	$ 202,680	$ 9,156
Working capital	139,739	111,833	147,663	194,801	2,021
Total assets	284,199	201,772	239,990	220,693	22,295
Long-term debt, net of current portion	56,344	4,000	--	1,834	3,577
Redeemable convertible preferred stock	--	--	--	--	30,050
Accumulated deficit	(213,943)	(149,745)	(90,075)	(54,903)	(28,909)
Stockholders' equity (deficit)	166,216	169,902	218,372	207,628	(21,937)

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 of breakthrough treatments for human disease. We are using gene knockout technology to systematically discover the physiological functions of genes in living mammals, or in vivo. We generate our gene function discoveries using knockout mice - mice whose DNA has been altered to disrupt, or "knock out," the function of the altered gene. Our patented gene trapping and gene targeting technologies enable us to rapidly generate these knockout mice 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 employ an integrated platform of advanced medical technologies to systematically discover and validate which genes, when knocked out, result in a favorable medical profile with pharmaceutical utility. We then pursue those genes and the proteins they encode as potential targets for therapeutic intervention in our drug discovery programs.

We employ internal resources and drug discovery alliances to discover potential small molecule drugs, therapeutic antibodies and therapeutic proteins for in vivo-validated drug targets that we consider to have high pharmaceutical value. We use our own sophisticated libraries of drug-like chemical compounds and an industrialized medicinal chemistry platform to identify small molecule drug candidates for our in vivo-validated drug targets. We have established alliances with Bristol-Myers Squibb Company to discover and develop novel small molecule drugs in the neuroscience field; Genentech, Inc. for the discovery of therapeutic proteins and antibody targets; with Abgenix, Inc. for the discovery and development of therapeutic antibodies based on our drug target discoveries; and with Incyte Corporation for the discovery and development of therapeutic proteins. In addition, we have established collaborations and license agreements with many other leading pharmaceutical and biotechnology companies under which we receive fees and, in many cases, are eligible to receive milestone and royalty payments, for access to some of our technologies and discoveries for use in their own drug discovery efforts.

We derive substantially all of our revenues from drug discovery alliances, subscriptions to our databases, target validation collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice, technology licenses and compound library sales. 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 research collaborations and technology licenses, expirations of our research collaborations and database subscriptions, the success rate of our discovery efforts leading to opportunities for new research collaborations 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 database subscriptions 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. Subject to limited exceptions, we do not intend to offer subscriptions to our databases or continue to make our compound libraries available for purchase in the future. Our ability to secure future revenue-generating agreements will depend upon our ability to address the needs of our potential future collaborators 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 quarterly operating results have fluctuated in the past and are likely to do so in the future, and we do not believe that quarter-to-quarter 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, 2003, we had an accumulated deficit of $213.9 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 prior to our April 2000 initial public offering. 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 expenses related to our drug discovery and LexVision 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, finance and other administrative personnel, professional fees and other corporate expenses including business development and general legal activities, as well as expenses related to our patent infringement litigation against Deltagen, Inc., which was settled in September 2001. In connection with the expansion of our drug discovery programs and our target validation research efforts, 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, 2003 we had net operating loss carryforwards of approximately $131.8 million. We also had research and development tax credit carryforwards of approximately $8.1 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.

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 and determinable, and collectibility is reasonably assured. Payments received in advance under these arrangements are recorded as deferred revenue until earned.

Fees for access to our databases and other target validation resources are recognized ratably over the subscription or access period. Payments received under target validation collaborations are recognized as revenue as we perform our obligations related to such research to the extent such fees are non-refundable. Non-refundable upfront fees and annual research funding 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. Milestone-based fees are recognized upon completion of specified milestones according to contract terms. 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.

Prior to preclinical development work, we are unable to segregate the costs related to research performed on drug candidates because the drug candidate is often not specifically identified until the later stages of our research. When we begin the formal preclinical process in preparation for filing an IND, we intend to account on a program by program basis for the costs related to the development of the identified candidate. To date, we have not advanced any drug products into formal preclinical development.

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 2003.

RECENT ACCOUNTING PRONOUNCEMENTS

In November 2002, the Emerging Issues Task Force, or EITF, reached a consensus on EITF Issue No. 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables." This consensus requires that revenue arrangements with multiple deliverables be divided into separate units of accounting if the delivered items have value to the customer on a standalone basis, there is objective and reliable evidence of fair value of the undelivered items and, if the arrangement includes a general right of return, performance of the undelivered item is considered probable and substantially in our control. The final consensus is applicable to agreements entered into in fiscal periods beginning after June 15, 2003. The adoption of EITF 00-21 did not have a material impact on our financial statements.

In December 2002, the FASB issued Statement of Financial Accounting Standards, or SFAS, No. 148, "Accounting for Stock-Based Compensation - Transition and Disclosure." This statement amends SFAS No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, this statement amends the disclosure requirements of SFAS No. 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based accounting for employee compensation and the effect of the method used on reported results. We have elected to continue to follow the intrinsic value method of accounting as prescribed by Accounting Principles Board Opinion No. 25 (or APB 25), "Accounting for Stock Issued to Employees," to account for employee stock options.

In January 2003, the FASB issued Interpretation No. 46, or FIN 46, "Consolidation of Variable Interest Entities - an Interpretation of ARB No. 51." FIN 46 was revised in December 2003. It requires that unconsolidated variable interest entities be consolidated by their primary beneficiaries. A primary beneficiary is the party that absorbs a majority of the entity's expected losses or residual benefits. FIN 46 applied immediately to variable interest entities created after January 31, 2003, but was effective for the period ending December 31, 2003 for variable interest entities created before February 1, 2003. We adopted FIN 46 on December 31, 2003 and determined that the lessor under the synthetic lease is a variable interest entity as defined by FIN 46, and that we absorb a majority of the variable interest entity's expected losses. Accordingly, we consolidated the assets of the variable interest entity, which were comprised of property and improvements funded under the synthetic lease. These assets had a carrying value of $54.8 million, net of accumulated depreciation of $3.1 million on December 31, 2003. We also consolidated the variable interest entity's debt of $52.3 million and non-controlling interests of $2.5 million. Additionally, we 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. These improvements will be depreciated over their useful lives. Due to our residual value guarantee on the property, the non-recourse feature of the underlying debt, and certain other provisions of the lease arrangement, we do not allocate any of the variable interest entity's depreciation or interest expenses to the non-controlling interest. As permitted by applicable accounting standards, we had previously accounted for our involvement with the variable interest entity as an operating lease.

RESULTS OF OPERATIONS

YEARS ENDED DECEMBER 31, 2003 AND 2002

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,	
	2003	2002
Total revenues	$ 42.8	$ 35.2
Dollar increase	$ 7.6	
Percentage increase	22%	

- Subscription and license fees - Revenue from subscriptions and license fees increased 21% to $21.6 million due to additional technology licenses granted to pharmaceutical and biotechnology companies in 2003.

- Collaborative research - Revenue from collaborative research increased 24% to $21.2 million primarily due to increased revenue under our drug discovery alliances with Genentech and Bristol-Myers Squibb, offset in part by a decrease in revenues from target validation collaborations due to the scheduled conclusion of many of these arrangements.

- Compound libraries and other - Revenue from compound library sales and other decreased 81% to $46,000 due to the fact that we are not making our compound libraries available for purchase, subject to limited exceptions. We may, however, provide additional quantities of selected compounds or optimization services under existing compound sales agreements.

In 2003, Incyte Corporation, Amgen, Inc., Bristol-Myers Squibb Company and Genentech, Inc. represented 23%, 15%, 14% and 14% of revenues, respectively. In 2002, Incyte, Bristol-Myers Squibb Company and Millennium Pharmaceuticals, Inc. represented 28%, 14% and 11% 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,	
	2003	2002
Total research and development expense	$ 82.2	$ 74.9
Dollar increase	$ 7.3	
Percentage increase	10%	

Research and development expenses consist primarily of salaries and other personnel-related expenses, stock-based compensation expenses, laboratory supplies, facility and equipment costs, consulting and other services. The change in 2003 as compared to 2002 resulted primarily from the following costs:

- Personnel - Personnel costs increased 14% to $35.0 million primarily due to increased personnel to support the expansion of our drug discovery programs, merit pay increases for employees and increasing employee benefit costs. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.

- Stock-based compensation - Stock based compensation expense, primarily relating to option grants made prior to our April 2000 initial public offering, decreased 2% to $5.0 million.

- Laboratory supplies - Laboratory supplies expense increased 5% to $11.1 million due primarily to an increase in drug discovery activities such as high throughput screening.

- Facilities and equipment - Facility and equipment costs increased 13% to $19.8 million primarily due to increased rent resulting from the May 2002 lease of our facility in Hopewell, New Jersey and increased property taxes on our facilities in The Woodlands, Texas. Additionally, depreciation expense increased as a result of purchases of capital equipment and leasehold improvements.

- Consulting and other services - Consulting and other services decreased by 1% to $7.7 million. Consulting and other services include subscriptions to third-party databases, technology licenses and legal and patent fees.

- Other - Other costs increased by 17% to $3.6 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,	
	2003	2002
Total general and administrative expense...	$ 23.2	$ 23.2
Dollar increase.....	$ --	
Percentage increase.....	--	

General and administrative expenses consist primarily of personnel costs to support our research activities, stock-based compensation expense, facility and equipment costs and professional fees, such as legal fees. The change in 2003 as compared to 2002 resulted primarily from the following costs:

- Personnel - Personnel costs decreased 4% to $10.6 million primarily due to decreased staffing in overhead departments. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.

- Stock-based compensation - Stock based compensation expense, primarily relating to option grants made prior to our April 2000 initial public offering, decreased 1% to $5.1 million.

- Facilities and equipment - Facility and equipment costs increased 12% to $3.6 million primarily due to increased rent resulting from the May 2002 lease of our facility in Hopewell, New Jersey and increased property taxes on our facilities in The Woodlands, Texas.

- Professional fees - Professional fees increased 43% to $1.6 million primarily due to increased legal fees.

- Other - Other costs increased 13% to $2.3 million.

Interest and Other Income. Interest and other income decreased 44% to $1.8 million in 2003 from $3.2 million in 2002. This decrease resulted primarily from lower average cash and investment balances and lower average interest rates on our investments.

Net Loss and Net Loss Per Common Share Before Cumulative Effect of a Change in Accounting Principle. Net loss before a change in accounting principle increased to $61.1 million in 2003 from $59.7 million in 2002. Net loss per common share before a change in accounting principle decreased to $1.08 in 2003 from $1.14 in 2002. Net loss before a change in accounting principle includes stock-based compensation expense of $10.1 million and $10.3 million in 2003 and 2002, respectively.

Change In Accounting Principle. As discussed in "Recent Accounting Pronouncements" above, we adopted FIN 46 on December 31, 2003 and determined that the lessor under the synthetic lease is a variable interest entity as defined by FIN 46, and that we absorb a majority of the variable interest entity's expected losses. Accordingly, we 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.

Net Loss and Net Loss Per Common Share. Net loss increased to $64.2 million in 2003 from $59.7 million in 2002. Net loss per common share decreased to $1.13 in 2003 from $1.14 in 2002.

YEARS ENDED DECEMBER 31, 2002 AND 2001

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,	
	2002	2001
Total revenues	$ 35.2	$ 30.6
Dollar increase	$ 4.6	
Percentage increase	15%	

- Subscription and license fees - Revenue from subscriptions and license fees increased 21% to $17.9 million due to subscriptions to our LexVision database.

- Collaborative research - Revenue from collaborative research increased 52% to $17.1 million primarily due to increased revenue from target validation collaborations and our drug discovery alliance with Incyte.

- Compound libraries and other - Revenue from compound library sales and other decreased 95% to $0.2 million due to the fact that we did not make our compound libraries available for purchase in 2002 and, subject to limited exceptions, do not intend to make our compound libraries available for purchase in the future. We may, however, provide additional quantities of selected compounds or optimization services under existing compound sales agreements.

In 2002, Incyte, Bristol-Myers Squibb and Millennium Pharmaceuticals represented 28%, 14% and 11% of revenues, respectively. In 2001, Incyte, Bristol-Myers Squibb and Merck & Co., Inc. represented 16%, 13% and 12% 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,	
	2002	2001
Total research and development expense	$ 74.9	$ 53.4
Dollar increase	$ 21.5	
Percentage increase	40%	

Research and development expenses consist primarily of salaries and other personnel-related expenses, stock-based compensation expenses, laboratory supplies, facility and equipment costs, consulting and other services. The change in 2002 as compared to 2001 resulted primarily from the following costs:

- Personnel - Personnel costs increased 35% to $30.8 million primarily due to increased personnel to support the expansion of our drug discovery programs, a full year of medicinal chemistry operations and merit pay increases for employees. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.

- Stock-based compensation - Stock based compensation expense, primarily relating to option grants made prior to our April 2000 initial public offering, decreased 7% to $5.2 million.

- Laboratory supplies - Laboratory supplies expense increased 28% to $10.6 million due primarily to an increase in drug discovery activities and a full year of medicinal chemistry operations.

- Facilities and equipment - Facility and equipment costs increased 98% to $17.5 million due to increased rent, maintenance costs and property taxes resulting from our expansion in 2002 into additional facilities in The Woodlands, Texas and a full year of medicinal chemistry operations. Additionally, depreciation expense increased as a result of purchases of capital equipment and leasehold improvements.

- Consulting and other services - Consulting and other services increased by 83% to $7.7 million, primarily due to increased fees related to third party database subscriptions. Consulting and other services include subscriptions to third-party databases, technology licenses and legal and patent fees.

- Other - Other costs decreased 17% to $3.1 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,	
	2002	2001
Total general and administrative expense...	$ 23.2	$ 20.9
Dollar increase.....	$ 2.3	
Percentage increase.....	11%	

General and administrative expenses consist primarily of personnel costs to support our research activities, stock-based compensation expense, facility and equipment costs and professional fees, such as legal fees. The change in 2002 as compared to 2001 resulted primarily from the following costs:

- Personnel - Personnel costs increased 59% to $11.1 million primarily due to increased personnel to support our research activities and merit pay increases for employees. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.

- Stock-based compensation - Stock based compensation expense, primarily relating to option grants made prior to our April 2000 initial public offering, decreased 2% to $5.1 million

- Facilities and equipment - Facility and equipment costs increased 81% to $3.2 million primarily due to increased rent and property taxes resulting from the expansion in 2002 into additional facilities in The Woodlands, Texas.

- Professional fees - Professional fees decreased 73% to $1.1 million primarily due to a reduction in legal costs as a result of the September 2001 settlement of our patent infringement litigation against Deltagen, Inc.

- Other - Other costs increased 1% to $2.7 million.

Interest and Other Income. Interest and other income decreased 63% to $3.2 million in 2002 from $8.8 million in 2001. This decrease resulted from lower cash and investment balances and lower average interest rates during 2002.

Net Loss and Net Loss Per Common Share. Net loss increased to $59.7 million in 2002 from $35.2 million in 2001. Net loss per common share increased to $1.14 in 2002 from $0.70 in 2001. Net loss includes stock-based compensation expense of $10.3 million and $10.8 million in 2002 and 2001, respectively.

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 database subscription, collaboration and license agreements, equipment financing arrangements and leasing arrangements. From our inception through December 31, 2003, we had received net proceeds of $293.1 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 and $50.1 million from our July 2003 common stock offering. In addition, from our inception through December 31, 2003, we received $172.2 million in cash payments from database subscription and technology license fees, drug discovery alliances, target validation collaborations, sales of compound libraries and reagents and government grants, of which $131.3 million had been recognized as revenues through December 31, 2003.

As of December 31, 2003, we had $161.0 million in cash, cash equivalents and short-term investments (including $57.5 million of restricted cash and investments), as compared to $123.1 million (including $57.7 million of restricted cash and investments) as of December 31, 2002. We used cash of $7.7 million in operations in 2003. This consisted primarily of the net loss for the year of $64.2 million offset by non-cash charges of $10.1 million related to stock-based compensation expense, $10.2 million related to depreciation expense, $3.1 million related to the cumulative effect of a change in accounting principle and $1.2 million related to amortization of intangible assets other than goodwill; a $29.0 million increase in deferred revenue; and changes in other operating assets and liabilities of $2.8 million. Financing activities provided cash of $50.4 million, consisting primarily of the $50.1 million in net proceeds from our July 2003 common stock offering.

In October 2000, we entered into a synthetic lease agreement under which the lessor purchased our existing laboratory and office buildings and animal facility in The Woodlands, Texas and agreed to fund the construction of an additional laboratory and office building and a second animal facility. The synthetic lease agreement was subsequently expanded to include funding for the construction of a central plant facility for the distribution of utilities and related services among our facilities. Including the purchase price for our existing facilities, the synthetic lease, as amended, provided for funding of up to $55.0 million in property and improvements. The term of the agreement is six years, which includes the construction period and a lease period. Lease payments for the new facilities began upon completion of construction, which occurred at the end of the first quarter of 2002. Lease payments are subject to fluctuation based on LIBOR rates. Based on a year-end LIBOR rate of 1.16%, our total lease payments would be approximately $0.8 million per year. At the end of the lease term, the lease may be extended for one-year terms, up to seven additional terms, or we may purchase the properties for a price equal to the $54.8 million funded under the synthetic lease for property and improvements plus the amount of any accrued but unpaid lease payments. If we elect not to renew the lease or purchase the properties, we may arrange for the sale of the properties to a third party or surrender the properties to the lessor. If we elect to arrange for the sale of the properties or surrender the properties to the lessor, we have guaranteed approximately 86% of the total original cost as the residual fair value of the properties. We are required to maintain restricted cash or investments to collateralize borrowings made under the synthetic lease agreement. In addition, we have agreed to maintain cash and investments of at least $12.0 million in excess of our restricted cash and investments. If our cash and investments fall below that level, we may be required to seek a waiver of that agreement or to purchase the properties or arrange for their sale to a third party. Because our cost to purchase the properties would not materially exceed the $54.8 million funded under the synthetic lease for property and improvements and would likely be less than the amount of restricted cash and investments we are required to maintain under the synthetic lease, we believe that any requirement that we do so would not have a material adverse effect on our financial condition. As of December 31, 2003 and 2002, we maintained restricted cash and investments of $57.0 million and $57.2 million, respectively, to collateralize funding for property and improvements under the synthetic lease of $54.8 million and $55.0 million.

We are considering replacing our synthetic lease agreement covering all of our facilities in The Woodlands, Texas, and we are currently engaged in discussions to do so. We expect that any such new arrangement would require us to maintain substantially lower amounts of restricted cash and investments while increasing our lease payments with respect to these facilities, as compared to our synthetic lease agreement.

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.

In December 2002, we borrowed $4.0 million under a note agreement with Genentech. The proceeds of the loan are to be used to fund research efforts under our alliance with Genentech for the discovery of therapeutic proteins and antibody targets. The note matures on or before December 31, 2005, but we may prepay it at any time. We may repay the note, 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. The note accrues interest at an annual rate of 8%, compounded quarterly.

Including the lease and debt obligations described above, we had incurred the following contractual obligations as of December 31, 2003:

	PAYMENTS DUE BY PERIOD (IN MILLIONS)				
CONTRACTUAL OBLIGATIONS	TOTAL	LESS THAN 1 YEAR	1-3 YEARS	3-5 YEARS	MORE THAN 5 YEARS
Long-term debt	$ 56.3	$ --	$ 56.3	$ --	$ --
Other long-term liabilities	2.5	--	2.5	--	--
Interest payment obligations	2.6	0.8	1.8	--	--
Operating leases	22.0	2.2	4.4	4.6	10.8
Obligations under purchase orders	1.9	1.9	--	--	--
Total	$ 85.3	$ 4.9	$ 65.0	$ 4.6	$ 10.8

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 revenues we expect to derive from subscriptions to our databases, target validation collaborations, technology licenses and drug discovery alliances will be sufficient to fund our operations at least through the next two years. 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, restructure or replace our synthetic lease to reduce the required amount of restricted cash and investments, 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. 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, 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 are exposed to interest rate risk because our synthetic lease payments fluctuate based upon LIBOR rates. A hypothetical 1% increase in LIBOR rates would result in $0.5 million of additional interest expense under the lease.

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.

On March 26, 2002, the Board of Directors and its audit committee dismissed Arthur Andersen LLP as our independent public accountants and engaged Ernst & Young LLP to serve as our independent auditors for the fiscal year ending December 31, 2002, subject to stockholder ratification.

Arthur Andersen's report on our consolidated financial statements for the fiscal year ended December 31, 2001 did not contain an adverse opinion or disclaimer of opinion, nor was it qualified or modified as to uncertainty, audit scope or accounting principles.

During the fiscal year ended December 31, 2001 and through the date of the Board of Directors' decision, there were no disagreements with Arthur Andersen on any matter of accounting principle or practice, financial statement disclosure, or auditing scope or procedure which, if not resolved to Arthur Andersen's satisfaction, would have caused them to make reference to the subject matter in connection with their report on our consolidated financial statements for such year; and there were no reportable events as defined in Item 304(a)(1)(v) of Regulation S-K.

During the fiscal year ended December 31, 2001 and through the date of the Board of Directors' decision, we did not consult Ernst & Young LLP with respect to the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on our consolidated financial statements, or any other matters or reportable events as set forth in Items 304(a)(2)(i) and (ii) of Regulation S-K.

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 conducted within 90 days prior to the date hereof.

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.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information required by this Item as to our directors and executive officers is hereby incorporated by reference from the information appearing under the captions "Election of Directors," "Executive Officers" and "Code of Ethics" 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, 2003.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item as to our management is hereby incorporated by reference from the information appearing under the captions "Executive Compensation" and "Election of Director - 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, 2003. Notwithstanding the foregoing, in accordance with the instructions to Item 402 of Regulation S-K, the information contained in our proxy statement under the sub-heading "Report of the Compensation Committee of the Board of Directors" and "Performance Graph" 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 as to the ownership by management and others of our securities is hereby incorporated by reference from 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, 2003.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by this Item as to certain business relationships and transactions with our management and other related parties is hereby incorporated by reference to such information appearing under the captions "Certain Transactions" and "Compensation Committee Interlocks and Insider Participation" 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, 2003.

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 "Compensation 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, 2003.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

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

1. Consolidated Financial Statements

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.

2. 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	--	Employment Agreement with Arthur T. Sands, M.D., Ph.D. (filed as Exhibit 10.1 to the Company's Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
10.2	--	Employment Agreement with James R. Piggott, Ph.D. (filed as Exhibit 10.2 to the Company's Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
10.3	--	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).
10.4	--	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).
10.5	--	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).
10.6	--	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).
10.7	--	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).
10.8	--	2000 Equity Incentive Plan (filed as Exhibit 10.8 to the Company's Registration

Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).

10.9 -- 2000 Non-Employee Directors' Stock Option Plan (filed as Exhibit 10.9 to the Company's Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).

10.10 -- 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).

+10.11 -- LexVision Database and Collaboration Agreement, dated September 26, 2000, with Bristol-Myers Squibb Company (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K dated September 26, 2000 and incorporated by reference herein).

+10.12 -- LexVision Database and Collaboration Agreement, dated June 27, 2001, with Incyte Genomics, Inc. (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2001 and incorporated by reference herein).

+10.13 -- Therapeutic Protein Alliance Agreement, dated June 27, 2001, with Incyte Genomics, Inc. (filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2001 and incorporated by reference herein).

*+10.14 -- Amended and Restated Collaboration and License Agreement, dated November 19, 2003, with Genentech, Inc.

*+10.15 -- Collaboration and License Agreement, dated December 17, 2003, with Bristol-Myers Squibb Company

10.16 -- Synthetic Lease Financing Facility with First Security Bank, National Association, the Lenders and Holders named therein, and Bank of America, N.A. (filed as Exhibit 10.12 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000 and incorporated by reference herein).

10.17 -- Lease Agreement, dated October 21, 1998, between Coelacanth Chemical Corporation and ARE-279 Princeton Road, LLC. (filed as Exhibit 10.18 to the Company's Annual Report on Form 10-K for the year ended December 31, 2001 and incorporated by reference herein).

10.18 -- 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, 2001 and incorporated by reference herein).

*23.1 -- Consent of Ernst & Young LLP

*23.2 -- Information regarding consent of Arthur Andersen LLP

*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

99.1 -- Letter to the Securities and Exchange Commission regarding Audit Assurances (filed as Exhibit 99.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2001 and incorporated by reference herein).

EXHIBIT NO.	DESCRIPTION

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* 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.

(b) Reports on Form 8-K:

On October 30, 2003, we filed a Current Report on Form 8-K dated October 30, 2003 relating to our issuance of a press release reporting our financial results for the quarter ended September 30, 2003, which press release included our consolidated balance sheet data and consolidated statements of operations data for the period.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities 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, 2004 By: /s/ ARTHUR T. SANDS

Arthur T. Sands, M.D., Ph.D.
President and Chief Executive Officer

Date: March 12, 2004 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, 2004
/S/ JULIA P. GREGORY Julia P. Gregory	Executive Vice President, Corporate Development and Chief Financial Officer (Principal Financial and Accounting Officer)	March 12, 2004
/S/ C. THOMAS CASKEY C. Thomas Caskey, M.D.	Chairman of the Board of Directors	March 12, 2004
/S/ SAM L. BARKER Sam L. Barker, Ph.D.	Director	March 12, 2004
/S/ PATRICIA M. CLOHERTY Patricia M. Cloherty	Director	March 12, 2004
/S/ ROBERT J. LEFKOWITZ Robert J. Lefkowitz, M.D.	Director	March 12, 2004
/S/ ALAN S. NIES Alan S. Nies. M.D.	Director	March 12, 2004

REPORT OF INDEPENDENT AUDITORS

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

We have audited the accompanying consolidated balance sheets of Lexicon Genetics Incorporated and subsidiary (the Company) as of December 31, 2003 and 2002, and the related consolidated statements of operations, stockholders' equity and cash flows for the years then ended. 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. The financial statements of the Company for the year ended December 31, 2001 was audited by other auditors who have ceased operations and whose report dated February 22, 2002 expressed an unqualified opinion on those statements before the reclassification adjustment described in Note 4.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Lexicon Genetics Incorporated as of December 31, 2003 and 2002, and the consolidated results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States.

As discussed in Note 3 to the consolidated financial statements, during 2003 the Company adopted relevant portions of Financial Accounting Standards Board Interpretation No. 46, "Consolidation of Variable Interest Entities - An Interpretation of ARB No. 51."

As discussed above, the financial statements of the Company for the year ended December 31, 2001 were audited by other auditors who have ceased operations. As described in Note 4, these financial statements have been revised. We audited the reclassification adjustment described in Note 4 that was applied to revise the 2001 financial statements. In our opinion, such reclassification adjustment is appropriate and has been properly applied. However, we were not engaged to audit, review or apply any procedures to the 2001 financial statements of the Company other than with respect to such reclassification adjustment and, accordingly, we do not express an opinion or any other form of assurance on the 2001 financial statements taken as a whole.

/s/ ERNST & YOUNG LLP

Houston, Texas
February 12, 2004

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

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

We have audited the accompanying consolidated balance sheets of Lexicon Genetics Incorporated (a Delaware corporation) and subsidiary as of December 31, 2001 and 2000, and the related consolidated statements of operations, stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 2001. These financial statements are the responsibility of Lexicon Genetics Incorporated's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Lexicon Genetics Incorporated and subsidiary as of December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States.

ARTHUR ANDERSEN LLP

Houston, Texas
February 22, 2002

THIS IS A COPY OF THE REPORT ISSUED BY ARTHUR ANDERSEN LLP, LEXICON'S FORMER INDEPENDENT PUBLIC ACCOUNTANTS, IN CONNECTION WITH THE COMPANY'S ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2001. THIS REPORT HAS NOT BEEN REISSUED BY ARTHUR ANDERSEN LLP IN CONNECTION WITH LEXICON'S ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2003. SEE EXHIBIT 23.2 FOR FURTHER INFORMATION.

LEXICON GENETICS INCORPORATED

CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS, EXCEPT PAR VALUE)

	AS OF DECEMBER 31,	
	2003	2002
ASSETS		
Current assets:		
Cash and cash equivalents	$ 81,915	$ 39,362
Restricted cash	56,963	29,487
Short-term investments, including restricted investments of $551 and $28,223, respectively	22,123	54,247
Accounts receivable, net of allowances of $109 for 2003 and 2002	6,571	5,143
Prepaid expenses and other current assets	3,933	4,893
Total current assets	171,505	133,132
Property and equipment, net of accumulated depreciation of $31,941 and $19,768, respectively	83,676	37,362
Goodwill	25,798	25,798
Intangible assets, net of amortization of $2,960 and $1,760, respectively	3,040	4,240
Other assets	180	1,240
Total assets	$ 284,199	$ 201,772
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 5,884	$ 4,378
Accrued liabilities	4,757	4,161
Current portion of deferred revenue	21,125	12,760
Total current liabilities	31,766	21,299
Deferred revenue, net of current portion	26,567	5,887
Long-term debt	56,344	4,000
Other long-term liabilities	3,306	684
Total liabilities	117,983	31,870
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; 62,827 and 52,367 shares issued and outstanding, respectively	63	52
Additional paid-in capital	380,995	330,701
Deferred stock compensation	(899)	(11,106)
Accumulated deficit	(213,943)	(149,745)
Total stockholders' equity	166,216	169,902
Total liabilities and stockholders' equity	$ 284,199	$ 201,772

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

LEXICON GENETICS INCORPORATED

CONSOLIDATED STATEMENTS OF OPERATIONS
(IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

	YEAR ENDED DECEMBER 31,		
	2003	2002	2001
Revenues:			
Subscription and license fees	$ 21,550	$ 17,871	$ 14,744
Collaborative research	21,242	17,088	11,220
Compound libraries and other	46	241	4,613
Total revenues	42,838	35,200	30,577
Operating expenses:			
Research and development, including stock-based compensation of $5,048, $5,155, and $5,539, respectively	82,198	74,859	53,355
General and administrative, including stock-based compensation of $5,067, $5,113, and $5,231, respectively	23,233	23,234	20,861
Total operating expenses	105,431	98,093	74,216
Loss from operations	(62,593)	(62,893)	(43,639)
Interest and other income	1,796	3,230	8,781
Interest expense	(325)	(7)	(314)
Net loss before cumulative effect of a change in accounting principle	(61,122)	(59,670)	(35,172)
Cumulative effect of a change in accounting principle	(3,076)	--	--
Net loss	$ (64,198)	$ (59,670)	$ (35,172)
Net loss per common share basic and diluted:			
Net loss before cumulative effect of a change in accounting principle	$ (1.08)	$ (1.14)	$ (0.70)
Cumulative effect of a change in accounting principle	(0.05)	--	--
Net loss per common share, basic and diluted	$ (1.13)	$ (1.14)	$ (0.70)
Shares used in computing net loss per common share, basic and diluted	56,820	52,263	50,213

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

LEXICON GENETICS INCORPORATED

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(IN THOUSANDS)

COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	DEFERRED STOCK COMPENSATION	ACCUMULATED COMPREHENSIVE LOSS	OTHER	TOTAL STOCKHOLDERS' EQUITY
SHARES	PAR VALUE					
Balance at December 31, 2000	48,272	$48	$296,120	$(33,637)	$ (54,903)	$ --	$ 207,628
Deferred stock compensation, net of reversals	--	--	(958)	958	--	--	--
Deferred stock compensation of options assumed in acquisition	--	--	--	(351)	--	--	(351)
Amortization of deferred stock compensation	--	--	--	10,770	--	--	10,770
Common stock issued in connection with acquisition	2,919	3	35,213	--	--	--	35,216
Exercise of common stock options	419	1	717	--	--	--	718
Exercise of common stock warrants	412	--	--	--	--	--	--
Net loss	--	--	--	--	(35,172)	--	(35,172)
Unrealized loss on long-term investments	--	--	--	--	--	(437)	(437)
Comprehensive loss	--	--	--	--	--	--	(35,609)
Balance at December 31, 2001	52,022	52	331,092	(22,260)	(90,075)	(437)	218,372
Deferred stock compensation, net of reversals	--	--	(985)	985	--	--	--
Issuance of restricted stock	18	--	99	(99)	--	--	--
Amortization of deferred stock compensation	--	--	--	10,268	--	--	10,268
Cancellation of equity securities in connection with acquisition	(7)	--	(79)	--	--	--	(79)
Exercise of common stock options	330	--	574	--	--	--	574
Exercise of common stock warrants	4	--	--	--	--	--	--
Net loss	--	--	--	--	(59,670)	--	(59,670)
Reversal of unrealized loss on sale of long-term investments	--	--	--	--	--	437	437
Comprehensive loss	--	--	--	--	--	--	(59,233)
Balance at December 31, 2002	52,367	52	330,701	(11,106)	(149,745)	--	169,902
Deferred stock compensation, net of reversals	--	--	(92)	92	--	--	--
Amortization of deferred stock compensation	--	--	--	10,115	--	--	10,115
Public offering of common stock, net of offering costs	10,240	10	50,147	--	--	--	50,157
Exercise of common stock options	102	1	239	--	--	--	240
Exercise of common stock warrants	118	--	--	--	--	--	--
Net and comprehensive loss	--	--	--	--	--	--	--

- -- -- (64,198) -- (64,198) ----
-- --- -------- -------- --------
--- ----- --------- Balance at
December 31, 2003..... 62,827
$63 $380,995 $ (899) $ (213,943)
$ -- $ 166,216 ====== ===
======== ======== ===========
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The accompanying notes are an integral part of these consolidated financial statements.

LEXICON GENETICS INCORPORATED

CONSOLIDATED STATEMENTS OF CASH FLOWS
(IN THOUSANDS)

	YEAR ENDED DECEMBER 31,		
	2003	2002	2001
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$ (64,198)	$ (59,670)	$ (35,172)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	10,215	9,111	5,220
Amortization of intangible assets, other than goodwill	1,200	1,200	560
Amortization of deferred stock compensation	10,115	10,268	10,770
Loss on sale of long-term investments	--	197	--
Gain on disposal of property and equipment	(18)	--	--
Cumulative effect of a change in accounting principle	3,076	--	--
Changes in operating assets and liabilities:			
Increase in accounts receivable	(1,428)	(599)	(1,409)
(Increase) decrease in prepaid expenses and other current assets	960	484	(2,531)
(Increase) decrease in other assets	1,060	3,965	(4,919)
Increase in accounts payable and other liabilities	2,257	700	1,089
Increase in deferred revenue	29,045	5,552	8,402
Net cash used in operating activities	(7,716)	(28,792)	(17,990)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of property and equipment	(4,824)	(19,766)	(13,471)
Proceeds from disposal of property and equipment	48	--	--
(Increase) decrease in restricted cash	(27,476)	(22,794)	7,186
Purchase of short-term investments	(33,313)	(91,962)	(355,869)
Maturities of short-term investments	65,437	171,109	387,345
Purchase of long-term investments	--	--	(10,835)
Sale of long-term investments	--	10,638	--
Payment of transaction costs, net of cash acquired	--	--	(752)
Net cash provided by (used in) investing activities	(128)	47,225	13,604
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from issuance of common stock	50,397	574	718
Proceeds from debt borrowings	--	4,000	--
Repayment of debt borrowings	--	--	(3,909)
Net cash provided by (used in) financing activities	50,397	4,574	(3,191)
Net increase (decrease) in cash and cash equivalents	42,553	23,007	(7,577)
Cash and cash equivalents at beginning of year	39,362	16,355	23,932
Cash and cash equivalents at end of year	$ 81,915	$ 39,362	$ 16,355
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid for interest	$ 4	$ 7	$ 330
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES:			
Unrealized (loss) and reversal of unrealized loss on long-term investments	$ --	$ 437	$ (437)
Issuance (cancellation) of equity securities in connection with acquisition	$ --	$ (79)	$ 35,216
Deferred stock compensation, net of reversals	$ 92	$ 886	$ 958
Retirement of property and equipment	$ 1,148	$ 90	$ 181
Property and equipment recorded in connection with consolidation of variable interest entity	$ 54,811	$ --	$ --
Long-term debt recorded in connection with consolidation of variable interest entity	$ (52,344)	$ --	$ --
Other long-term liabilities recorded in connection with consolidation of variable interest entity	$ (2,467)	$ --	$ --

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

LEXICON GENETICS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2003

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, contract and milestone payments received under database subscription and collaboration agreements, technology licenses, equipment financing arrangements and leasing arrangements. The Company's future success is dependent upon many factors, including, but not limited to, its ability to discover promising candidates for drug target or therapeutic protein development using its gene knockout technology, establish additional research contracts and agreements for access to its technology, achieve milestones under such contracts and 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 subsidiary. Intercompany transactions and balances are eliminated in consolidation.

Use of Estimates: The preparation of financial statements in conformity with accounting principles generally accepted in the United States 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 or auction-based interest rate reset dates of three months or less to be cash equivalents. Management determines the appropriate classification of its cash equivalents and short-term investments at the time of purchase. Short-term investments consist of U.S. government agency debt obligations, investment grade commercial paper, corporate debt securities and certificates of deposit that have maturities of three to twelve months from the date of purchase. Short-term investments are classified as held-to-maturity securities in the accompanying financial statements. Held-to-maturity securities are carried at amortized cost.

Restricted Cash and Investments: Lexicon is required to maintain restricted cash or investments to collateralize borrowings made under the synthetic lease agreement under which it leases its office and laboratory facilities in The Woodlands, Texas (see Note 9) as well as to collateralize standby letters of credit for the leases on its office and laboratory facilities in East Windsor and Hopewell, New Jersey (see Note 10). As of December 31, 2003 and 2002, the Company maintained restricted cash and investments of $57.5 million and $57.7 million, respectively, under these agreements.

Concentration of Credit Risk: Lexicon's cash equivalents, short-term investments and trade receivables 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 and Europe. The Company has not experienced any significant credit losses to date and, at December 31, 2003, 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 subscriptions to its databases, 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 and compound library sales. In 2003, Incyte Corporation, Amgen Inc., Bristol-Myers Squibb Company and Genentech, Inc. represented 23%, 15%, 14% and 14% of revenues, respectively. In 2002, Incyte, Bristol-Myers Squibb and Millennium Pharmaceuticals, Inc. represented 28%, 14% and 11% of revenues, respectively. In 2001, Incyte, Bristol-Myers Squibb and Merck & Co., Inc. represented 16%, 13% and 12% 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. 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 2003.

Revenue Recognition: Revenues are recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed and determinable and collectibility is reasonably assured. Payments received in advance under these arrangements are recorded as deferred revenue until earned. Revenues are earned from database subscriptions, 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 and compound library sales.

Fees for access to databases and other target validation resources are recognized ratably over the subscription or access period. Payments received under target validation collaborations are recognized as revenue as Lexicon performs its obligations related to such research to the extent such fees are non-refundable. Non-refundable upfront fees and annual research funding 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. Milestone-based fees are recognized upon completion of specified milestones according to contract terms. 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. Compound library sales are recognized as revenue upon shipment.

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. In accordance with Staff Accounting Bulletin (SAB) No. 104, "Revenue Recognition," 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 technologies that are utilized in research and development and have no alternative future use are expensed when incurred.

Stock-Based Compensation: As further discussed in Note 12, Lexicon has three stock-based compensation plans, which are accounted for under the recognition and measurement provisions of Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees, and Related Interpretations." Under the intrinsic value

method described in APB Opinion No. 25, no compensation expense is recognized if the exercise price of the employee stock option equals the market price of the underlying stock on the date of grant. Lexicon recognized $10.1 million, $10.3 million and $10.8 million of stock-based compensation during 2003, 2002 and 2001, respectively, 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,		
	2003	2002	2001
	(IN THOUSANDS)		
Net loss, as reported	$ (64,198)	$ (59,670)	$ (35,172)
Add: Stock-based employee compensation expense included in reported net loss	10,115	10,268	10,770
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards	(26,344)	(25,913)	(20,616)
Pro forma net loss	$ (80,427)	$ (75,315)	$ (45,018)
Net loss per common share, basic and diluted			
As reported	$ (1.13)	$ (1.14)	$ (0.70)
Pro forma	$ (1.42)	$ (1.44)	$ (0.90)

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 long-term investments, which are considered available-for-sale securities. Comprehensive loss is reflected in the consolidated statements of stockholders' equity. During 2002, Lexicon sold its available-for-sale security for $10.6 million, resulting in a realized loss of $197,000 reflected in its net loss for the year. As a result, there is no accumulated other comprehensive loss as of December 31, 2003 or 2002.

3. RECENT ACCOUNTING PRONOUNCEMENTS

In November 2002, the Emerging Issues Task Force, or EITF, reached a consensus on EITF Issue No. 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables." This consensus requires that revenue arrangements with multiple deliverables be divided into separate units of accounting if the delivered items have value to the customer on a standalone basis, there is objective and reliable evidence of fair value of the undelivered items and, if the arrangement includes a general right of return, performance of the undelivered item is considered probable and substantially in our control. The final consensus is applicable to agreements entered into in fiscal periods beginning after June 15, 2003. The adoption of EITF 00-21 did not have a material impact on the Company's financial statements.

In December 2002, the Financial Accounting Standards Board (FASB) issued SFAS No. 148, "Accounting for Stock-Based Compensation - Transition and Disclosure." This statement amends SFAS No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, this statement amends the disclosure requirements of SFAS No. 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. The Company has elected to continue to follow the intrinsic value method of accounting as prescribed by APB Opinion No. 25, "Accounting for Stock Issued to Employees," to account for employee stock options. The additional disclosures required under SFAS No. 148 are effective for fiscal years ending after December 15, 2002, and have been provided in Note 2.

In January 2003, the FASB issued Interpretation No. 46, or FIN 46, "Consolidation of Variable Interest Entities - An Interpretation of ARB No. 51." FIN 46 was revised in December 2003. It requires that unconsolidated variable interest entities be consolidated by their primary beneficiaries. A primary beneficiary is the party that absorbs a majority of the entity's expected losses or residual benefits. FIN 46 applied immediately to variable interest entities created after January 31, 2003, but was effective for the period ending December 31, 2003 for variable interest

entities created before February 1, 2003. The Company adopted FIN 46 on December 31, 2003 and determined that the lessor under the synthetic lease, as discussed in Note 9, is a variable interest entity as defined by FIN 46, and that the Company absorbs a majority of the variable interest entity's expected losses. Accordingly, the Company consolidated the assets of the variable interest entity, which were comprised of property and improvements funded under the synthetic lease. These assets had a carrying value of $54.8 million, net of accumulated depreciation of $3.1 million on December 31, 2003. Such amounts are included in property and equipment in the accompanying consolidated balance sheet as of 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, in the accompanying consolidated balance sheet as of December 31, 2003. 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. These improvements will be depreciated over their useful lives. Due to the Company's residual value guarantee on the property, the non-recourse feature of the underlying debt, and certain other provisions of the lease arrangement, the Company did not allocate any of the variable interest entity's depreciation or interest expenses to the non-controlling interest. The Company had previously accounted for its involvement with the variable interest entity as an operating lease.

4. RECLASSIFICATION

In the accompanying statement of cash flows for the year ended December 31, 2001, Lexicon has reclassified the amount of restricted cash from cash and cash equivalents into a separate line item.

5. INVESTMENTS

Investments at December 31, 2003 and 2002 were as follows:

	AS OF DECEMBER 31, 2003			
	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	ESTIMATED FAIR VALUE
	(IN THOUSANDS)			
Held-to-maturity:				
Certificates of deposit	$ 561	$ --	$ --	$ 561
U.S. government agencies	3,500	2	--	3,502
Corporate debt securities	16,572	--	(13)	16,559
Commercial paper	1,490	--	(2)	1,488
Total held-to-maturity investments	$ 22,123	$ 2	$ (15)	$ 22,110

	AS OF DECEMBER 31, 2002			
	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	ESTIMATED FAIR VALUE
	(IN THOUSANDS)			
Held-to-maturity:				
Certificates of deposit	$ 6,091	$ --	$ --	$ 6,091
U.S. government agencies	7,036	5	--	7,041
Corporate debt securities	13,719	8	(3)	13,724
Commercial paper	26,127	--	--	26,127
Other debt securities	1,274	7	--	1,281
Total held-to-maturity investments	$ 54,247	$ 20	$ (3)	$ 54,264

6. PROPERTY AND EQUIPMENT

Property and equipment at December 31, 2003 and 2002 are as follows:

	ESTIMATED USEFUL LIVES IN YEARS	AS OF DECEMBER 31, 2003	AS OF DECEMBER 31, 2002
		(IN THOUSANDS)	
Computers and software	3-5	$ 11,519	$ 10,996
Furniture and fixtures	5-7	7,676	8,595
Laboratory equipment	3-7	29,847	27,282
Leasehold improvements	3-10	11,765	10,257
Buildings	15-40	51,246	--
Land	--	3,564	--
Total property and equipment		115,617	57,130
Less: Accumulated depreciation		(31,941)	(19,768)
Net property and equipment		$ 83,676	$ 37,362

7. 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.

The components of Lexicon's deferred tax assets (liabilities) at December 31, 2003 and 2002 are as follows:

	AS OF DECEMBER 31, 2003	AS OF DECEMBER 31, 2002
	(IN THOUSANDS)	
Deferred tax assets:		
Net operating loss carryforwards	$ 46,130	$ 39,887
Research and development tax credits	8,105	7,113
Stock-based compensation	7,468	5,828
Deferred revenue	16,685	4,686
Other	1,628	1,230
Total deferred tax assets	80,016	58,744
Deferred tax liabilities:		
Property and equipment	(1,643)	(990)
Other	(59)	(138)
Total deferred tax liabilities	(1,702)	(1,128)
Less: Valuation allowance	(78,314)	(57,616)
Net deferred tax assets	$ --	$ --

At December 31, 2003, Lexicon had net operating loss carryforwards of approximately $131.8 million and research and development tax credit carryforwards of approximately $8.1 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 2003, the valuation allowance increased $20.7 million primarily due to the Company's current year net loss, and the current year research tax credits.

8. 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, 2003. 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(TM) 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 expects to amortize the value assigned to other intangible assets on a straight-line basis over an estimated life of five years.

The amortization expense for the year ended December 31, 2003 was $1.2 million. The estimated amortization expense for the next five years is as follows:

	FOR THE YEAR ENDING DECEMBER 31 (IN THOUSANDS)
2004.....	$ 1,200
2005.....	1,200
2006.....	640
2007.....	--
2008.....	--

9. DEBT OBLIGATIONS

Genentech Loan: On December 31, 2002, Lexicon borrowed $4.0 million under a note agreement with Genentech, Inc. The proceeds of the loan are to be used to fund research efforts under the alliance agreement with Genentech discussed in Note 14. The note matures on December 31, 2005, but the Company may prepay it at any time. The Company may repay the note, at its option, in cash, in shares of common stock valued at the then-current market price, or in a combination of cash and shares, subject to certain limitations. The note accrues interest at an annual rate of 8%, compounded quarterly. The note is subordinated in right of payment to borrowings made under Lexicon's synthetic lease, which is discussed below.

Synthetic Lease Obligation: 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 an additional laboratory and office building and a second animal facility. The synthetic lease agreement was subsequently expanded to include funding for the construction of a central plant facility. Including the purchase price for the Company's existing facilities, the synthetic lease, as amended, provides for funding of up to $55.0 million in property and improvements. The term of the agreement is six years, which includes the construction period and a lease period. Lease payments for the new facilities began upon completion of construction, which occurred at the end of the first quarter of 2002. Lease payments are subject to fluctuation based on LIBOR rates. Based on a year-end LIBOR rate of 1.16%, the Company's total lease payments would be approximately $0.8 million per year. At the end of the lease term, the lease may be extended for one-year terms, up to seven additional terms, or the Company may purchase the properties for a price equal to the $54.8 million funded under the synthetic lease for property and improvements plus the amount of any accrued but unpaid lease payments. If the Company elects not to renew the lease or purchase the properties, it may arrange for the sale of the properties to a third party or surrender the properties to the lessor. If the Company elects to arrange for the sale of the properties or surrender the properties to the lessor, it has guaranteed approximately 86% of the total original cost as the residual fair value of the properties. The Company is required to maintain restricted cash or investments to collateralize borrowings made under the synthetic lease agreement. In addition, Lexicon has agreed to maintain cash and investments of at least $12.0 million in excess of the Company's restricted cash and investments. If the Company's cash and investments fall below that level, the Company may be required to seek a waiver of that agreement or to purchase the properties or arrange for their sale to a third party. Because the Company's cost to purchase the properties would not materially exceed the $54.8 million funded under the synthetic

lease for property and improvements and would likely be less than the amount of restricted cash and investments it is required to maintain under the synthetic lease, the Company believes that any requirement that it do so would not have a material adverse effect on its financial condition. As of December 31, 2003 and 2002, the Company maintained restricted cash and investments of $57.0 million and $57.2 million, respectively, to collateralize funding for property and improvements under the synthetic lease of $54.8 million and $55.0 million. Lexicon consolidated the lessor under its synthetic lease upon adoption of FIN 46. See Note 3, "Recent Accounting Pronouncements," for information on the financial statement impact.

10. COMMITMENTS AND CONTINGENCIES

Operating Lease Obligation: Lexicon's subsidiary leases laboratory and office space in East Windsor and Hopewell, New Jersey under agreements which expire in January 2004 and June 2013, respectively. Lexicon is the guarantor of the obligations of its subsidiary under the Hopewell lease. The Company is required to maintain restricted investments to collateralize the East Windsor and Hopewell leases. As of December 31, 2003 and 2002, the Company had $0.5 million in restricted investments to collateralize standby letters of credit for these leases. Additionally, Lexicon leases certain equipment under operating leases.

Rent expense for all operating leases was approximately $3.7 million, $2.8 million, and $0.9 million for the years ended December 31, 2003, 2002 and 2001, respectively. These amounts included rent expense related to the synthetic lease. Lexicon consolidated the lessor under its synthetic lease upon adoption of FIN 46 on December 31, 2003. Future payments under the synthetic lease agreement will be included in interest expense rather than rent expense. The table below includes non-cancelable future lease payments for the facilities in New Jersey:

	FOR THE YEAR ENDING DECEMBER 31
	(IN THOUSANDS)
2004	$ 2,196
2005	2,191
2006	2,248
2007	2,248
2008	2,309
Thereafter	10,921
Total	$ 22,113

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.

11. CAPITAL STOCK

Common Stock: In July 2003, Lexicon completed the public offering and sale of 10.0 million shares of its common stock at a price of $5.25 per share. In August 2003, the underwriters partially exercised their over-allotment option, purchasing an additional 240,000 shares. The total net proceeds from the offering was $50.1 million, after deducting underwriting discounts of $3.2 million and offering expenses of $0.4 million.

12. STOCK OPTIONS AND WARRANTS

Stock Options

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:

- 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 60,000,000 shares over the ten-year period.

As of December 31, 2003, an aggregate of 15,000,000 shares of common stock had been reserved for issuance, options to purchase 12,669,159 shares were outstanding and 1,795,078 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 is automatically granted an option to purchase 6,000 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, 2003, an aggregate of 600,000 shares of common stock had been reserved for issuance, options to purchase 131,000 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, 2003, an aggregate of 122,649 shares of common stock had been reserved for issuance, options to purchase 89,012 shares of common stock were outstanding, options to purchase 10,689 shares of common stock had been cancelled and 22,948 shares of common stock had been issued upon the exercise of stock options issued under the Coelacanth Plan.

Stock-Based Compensation: SFAS No. 123, "Accounting for Stock-Based Compensation," allows companies to adopt one of two methods for accounting for stock options. Lexicon has elected the method that requires disclosure only of stock-based compensation. Because of this election, the Company is required to account for its employee stock-based compensation plans under APB Opinion No. 25 and its related interpretations. Accordingly, deferred compensation is recorded for stock-based compensation grants based on the excess of the estimated fair value of the common stock on the measurement date over the exercise price. The deferred compensation is amortized over the vesting period of each unit of stock-based compensation grant, generally four years. If the exercise price of the stock-based compensation grants is equal to the estimated fair value of the Company's stock on the date of grant, no compensation expense is recorded.

During the year ended December 31, 2000, Lexicon recorded $54.1 million in aggregate deferred compensation relating to options issued to employees and non-employee directors prior to our initial public offering. During the years ended December 31, 2003, 2002 and 2001, the Company recognized $10.1 million, $10.3 million and $10.7 million, respectively, in compensation expense relating to these options. Additionally, during the years ended December 31, 2003 and 2002, the Company reversed approximately $79,000 and $612,000, respectively, of deferred compensation and additional paid-in capital for unamortized deferred compensation related to the forfeiture of nonvested options by terminated employees. Total amortization expense was revised to the extent amortization had previously been recorded for nonvested options.

The pro forma information regarding net loss required by SFAS No. 123 has been included in Note 2. The information has been determined as if Lexicon had accounted for its employee stock options under the fair-value method as defined by SFAS No. 123. For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the vesting period of the options using the straight-line method. The fair value of these options was estimated at the date of grant using the Black-Scholes method and the following weighted-average assumptions for 2003, 2002 and 2001:

- volatility factors of 92%, 100% and 109%, respectively;
- risk-free interest rates of 3.40%, 4.64%, and 5.03%, respectively;
- expected option lives of seven years;
- three percent expected turnover; and
- no dividends.

Lexicon records the fair value of options issued to non-employee consultants, including Scientific Advisory Panel members, at the fair value of the options issued. The fair values of the issuances were estimated using the Black-Scholes pricing model with the assumptions noted in the preceding paragraph. Any expense is recognized over the service period or at the date of issuance if the options are fully vested and no performance obligation exists. The Company reversed expense of $6,000 for the year ended December 31, 2003 for the decline in fair value of options issued to non-employee consultants and recognized expense of $79,000 and $109,000 in the years ended December 31, 2002 and 2001, respectively.

If vesting continues in accordance with the outstanding individual stock options, Lexicon expects to record amortization expense for deferred stock compensation of $0.9 million in 2004.

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

	OPTIONS OUTSTANDING	WEIGHTED AVERAGE EXERCISE PRICE
	(IN THOUSANDS)	
Balance at December 31, 2000	8,253	$ 4.33
Granted	2,493	11.31
Exercised	(419)	1.71
Canceled	(224)	9.17
Balance at December 31, 2001	10,103	6.04
Granted	2,200	8.68
Exercised	(330)	1.74
Canceled	(601)	9.70
Balance at December 31, 2002	11,372	6.47
Granted	1,897	4.24
Exercised	(102)	2.34
Canceled	(278)	8.92
Balance at December 31, 2003	12,889	6.12
Exercisable at December 31, 2003	9,345	$ 5.73

The weighted average fair values of options granted during the years ended December 31, 2003, 2002 and 2001 were $3.52, $7.32 and $10.31, respectively. As of December 31, 2003, 1,004,763 shares of common stock were available for grant under Lexicon's stock option plans.

Stock Options Outstanding: The following table summarizes information about stock options outstanding at December 31, 2003:

OPTIONS OUTSTANDING				OPTIONS EXERCISABLE	
RANGE OF EXERCISE PRICE	OUTSTANDING AS OF DECEMBER 31, 2003	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE (IN YEARS)	WEIGHTED AVERAGE EXERCISE PRICE	EXERCISABLE AS OF DECEMBER 31, 2003	WEIGHTED AVERAGE EXERCISE PRICE
	(IN THOUSANDS)			(IN THOUSANDS)	
$0.0003 - $0.22	886	1.9	$ 0.05	886	$ 0.05
1.67 - 2.50	5,509	5.3	2.41	5,419	2.41
3.16 - 4.70	1,534	9.1	3.92	44	4.18
4.76 - 7.00	633	9.1	5.62	145	5.75
7.20 - 10.55	1,994	8.0	9.34	1,035	9.33
10.87 - 16.00	1,715	7.3	12.60	1,268	12.55
16.63 - 22.06	401	6.3	19.51	362	19.51
25.25 - 31.63	35	6.8	27.00	28	27.12
38.00 - 38.50	182	6.7	38.49	158	38.49
	12,889		$ 6.12	9,345	$ 5.73

Warrants

On May 7, 1998, Lexicon issued to the placement agent for the Series A Preferred Stock private placement a warrant to purchase 605,001 shares of common stock at an exercise price of $2.50 per share. The warrant provided that the exercise price could be paid in cash or by way of a "cashless" exercise based upon the difference between fair market value and exercise price. The value of the warrant, along with the offering costs associated with the private placement, were accreted back to the Series A Preferred Stock through the conversion date of the Series A Preferred Stock. This warrant was exercised in 2001 by way of a cashless exercise, resulting in the issuance of a total of 412,648 shares of common stock.

In July 1998, Lexicon issued a warrant to purchase 249,999 shares of common stock at an exercise price of $2.50 per share, in connection with the grant to the Company of an option to lease additional real property. Amortization of the remaining balance of $155,000 on the lease option was expensed in 2000 upon the Company's completion of a synthetic lease agreement under which the lessor purchased the optioned real property under an arrangement providing for its lease to the Company (see Note 9). The warrant was exercised in 2003 by way of a cashless exercise, resulting in the issuance of a total of 117,784 shares of common stock.

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, 2003, 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, 2003 an aggregate of 12,905,654 shares of common stock were reserved for issuance upon exercise of outstanding stock options and warrants and 1,004,763 additional shares were available for future grants under Lexicon's stock option plans.

13. 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.

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 approximately $637,000, $645,000, and $332,000 in 2003, 2002 and 2001, respectively. Company contributions are vested based on the employee's years of service, with full vesting after four years of service.

14. COLLABORATION AND LICENSE AGREEMENTS

Lexicon derives 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, 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:

Abgenix, Inc. Lexicon established a drug discovery alliance with Abgenix in July 2000 to discover novel therapeutic antibodies using the Company's target validation technologies and Abgenix's technology for generating fully human monoclonal antibodies. Lexicon and Abgenix expanded and extended the alliance in January 2002, with the intent of accelerating the selection of in vivo-validated antigens for antibody discovery and the development and commercialization of therapeutic antibodies based on those targets. Under the alliance agreement, the Company and Abgenix will each have the right to obtain exclusive commercialization rights, including sublicensing rights, for an equal number of qualifying therapeutic antibodies, and will each receive milestone payments and royalties on sales of therapeutic antibodies from the alliance that are commercialized by the other party or a third party sublicensee. Each party will bear its own expenses under the alliance. The expanded alliance also provides us with access to Abgenix's XenoMouse(R) technology for use in some of our own drug discovery programs. The agreement, as extended, has a term of four years ending July 2004, subject to the right of the parties to extend the term for up to three additional one-year periods.

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 is contributing a number of drug discovery programs at various stages of development. Lexicon will continue 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 will work 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 is entitled to receive research funding of $30.0 million in the initial three years of the agreement. Bristol-Myers Squibb has the option to extend the discovery portion of the alliance for an additional two years in exchange for further committed research funding

of up to $50.0 million. 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 $0.8 million for the year ended December 31, 2003.

Genentech, Inc. Lexicon established a drug discovery alliance with Genentech in December 2002 to discover novel therapeutic proteins and antibody targets. Under the alliance agreement, Lexicon will use its target validation technologies to discover the functions of secreted proteins and potential antibody targets identified through Genentech's internal drug discovery research. Genentech will have exclusive rights in the discoveries resulting from the collaboration for the research, development and commercialization of therapeutic proteins and antibodies. Lexicon will retain certain other rights in those discoveries, including rights for the development of small molecule drugs. 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 9. In addition, Lexicon can receive up to $24.0 million in performance payments for its work in the collaboration as it is completed, of which $3.0 million has been received as of December 31, 2003. Total revenue recognized under this agreement was $6.0 million and $0.1 million for the years ended December 31, 2003 and 2002, respectively. Lexicon will also receive milestone payments and royalties on sales of therapeutic proteins and antibodies for which Genentech obtains exclusive rights. The agreement has an expected collaboration term of three years.

Incyte Corporation. Lexicon established a drug discovery 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(R) Gold database. Lexicon receives research funding under the agreement, $15.0 million of which has been received as of December 31, 2003. Revenue recognized under this agreement was $5.0 million, $5.0 million and $2.5 million for the years ended December 31, 2003, 2002 and 2001, respectively. Under the alliance agreement, the Company and Incyte will each have 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. The agreement will terminate in June 2004.

Revenues from drug discovery alliances are included in collaborative research revenue in the accompanying consolidated statements of operations.

LexVision Collaborations

Lexicon has entered into the following collaborations for access to the Company's LexVision database of in vivo-validated drug targets:

Bristol-Myers Squibb Company. Lexicon established a LexVision collaboration with Bristol-Myers Squibb in September 2000, under which Bristol-Myers Squibb has non-exclusive access to the Company's LexVision database and OmniBank library for the discovery of small molecule drugs. The Company receives 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. Revenue recognized under this agreement was $5.0 million, $5.0 million and $4.0 million for the years ended December 31, 2003, 2002 and 2001, respectively. The agreement, as amended, has a term of five years, although either party may terminate the agreement after four years.

Incyte Corporation. Lexicon established a LexVision collaboration with Incyte in June 2001, under which Incyte has non-exclusive access to the Company's LexVision database and OmniBank library for the discovery of small molecule drugs. The Company receives annual access fees under this agreement, and is entitled to receive milestone payments and royalties on products Incyte develops using the Company's technology. Revenue recognized under this agreement was $5.0 million, $5.0 million and $2.5 million for the years ended December 31, 2003, 2002 and 2001, respectively. The agreement will terminate in June 2004.

15. SELECTED QUARTERLY FINANCIAL DATA

The table below sets forth certain unaudited statements of operations data, and net loss per common share data, for each quarter of 2003 and 2002.

(IN THOUSANDS, EXCEPT PER SHARE DATA)

	QUARTER ENDED			
	MARCH 31	JUNE 30	SEPTEMBER 30	DECEMBER 31
	(UNAUDITED)			
2003				
Revenues	$ 8,106	$ 8,921	$ 12,111	$ 13,700
Loss from operations	$ (17,532)	$ (17,852)	$ (14,868)	$ (12,341)
Net loss before cumulative effect of a change in accounting principle	$ (17,145)	$ (17,619)	$ (14,558)	$ (11,800)
Cumulative effect of a change in accounting principle	--	--	--	(3,076)
Net loss	$ (17,145)	$ (17,619)	$ (14,558)	$ (14,876)
Net loss per common share before cumulative effect of a change in accounting principle	$ (0.33)	$ (0.34)	$ (0.24)	$ (0.19)
Cumulative effect of a change in accounting principle	--	--	--	(0.05)
Net loss per common share, basic and diluted	$ (0.33)	$ (0.34)	$ (0.24)	$ (0.24)
Shares used in computing net loss per common share	$ 52,371	$ 52,496	$ 59,475	$ 62,794
2002				
Revenues	$ 7,656	$ 9,411	$ 8,013	$ 10,120
Loss from operations	$ (15,177)	$ (15,640)	$ (17,491)	$ (14,585)
Net loss	$ (14,059)	$ (14,940)	$ (16,809)	$ (13,862)
Net loss per common share, basic and diluted	$ (0.27)	$ (0.29)	$ (0.32)	$ (0.26)
Shares used in computing net loss per common share	52,126	52,250	52,314	52,357

EXHIBIT NO.		DESCRIPTION
*+10.14	--	Amended and Restated Collaboration and License Agreement, dated November 19, 2003, with Genentech, Inc.
*+10.15	--	Collaboration and License Agreement, dated December 17, 2003, with Bristol-Myers Squibb Company
*23.1	--	Consent of Ernst & Young LLP
*23.2	--	Information regarding consent of Arthur Andersen LLP
*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

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* 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.

Confidential materials omitted and filed separately with the Securities and Exchange Commission. Asterisks denote omissions.

AMENDED AND RESTATED

COLLABORATION AND LICENSE AGREEMENT

This Amended and Restated Collaboration and License Agreement (the "Agreement") is executed as of the 19 day of November, 2003 and made effective as of the 17 day of December, 2002 (the "Effective Date") between Genentech, Inc., a Delaware corporation having its principal place of business at 1 DNA Way, South San Francisco, California 94080 ("Genentech"), and Lexicon Genetics Incorporated, a Delaware corporation having its principal place of business at 8800 Technology Forest Place, The Woodlands, TX 77381-1160 ("Lexicon"). The Agreement amends and restates that certain Collaboration and License Agreement between Genentech and Lexicon dated as of December 17, 2002 (the "Original Agreement"). Throughout the Agreement, Genentech and Lexicon are sometimes referred to individually as a "Party" and collectively as "Parties."

RECITALS

WHEREAS, Genentech is in the business of using human genetic information to discover, develop, manufacture and market pharmaceutical products; and

WHEREAS, Lexicon possesses certain knowledge and experience in the design, generation, and phenotypic analysis of Knock-Out Mice and ES Cell Lines; and

WHEREAS, Genentech desires, on the terms and conditions contained herein, for Lexicon to generate Knock-Out Mice and ES Cell Lines for Genentech based on human gene sequences provided by Genentech and then to analyze such Knock-Out Mice and ES Cell Lines, and Lexicon desires, on the terms and conditions, and for the consideration, contained herein, to undertake such activities; and

NOW THEREFORE, in consideration of the foregoing premises and the mutual covenants contained in this Agreement, the Parties agree as follows:

ARTICLE 1

DEFINITIONS

Terms defined in this Article 1 and parenthetically elsewhere, including in the introductory paragraph and recitals, will have the same meaning throughout this Agreement, unless otherwise specified. Defined terms are capitalized and may be used in the singular or plural.

1.1 "ACADEMIC COLLABORATOR" means a principal investigator, employed at a university or other not-for-profit academic research institution that has entered into a material transfer agreement with Genentech pursuant to Section 5.10, who is performing collaborative research with Genentech involving use of a Knock-Out Mouse or Progeny.

1.2 "ACTUAL KNOWLEDGE" of a Party means [**].

1.3 "AFFILIATE" of a Party means any person or corporation, joint venture, or other business entity which directly (or indirectly through one or more intermediaries) controls, is controlled by, or is under common control with such Party, as the case may be. For purposes of this definition only, the terms "controls," "controlled," and "control" mean the direct or indirect ability or power to direct or cause the direction of the management and policies of an entity or otherwise direct the affairs of such entity, whether through ownership of equity, voting securities, or beneficial interest, by contract, or otherwise. Notwithstanding the foregoing, F. Hoffmann-La Roche Ltd and its affiliates shall not be considered Affiliates of Genentech for purposes of this Agreement.

1.4 "APPLICABLE LAWS" means all applicable statutes, ordinances, regulations, rules, or orders of any kind whatsoever of any government authority or court of competent jurisdiction.

1.5 "BLA" means a Biologics License Application filed with the FDA in the United States or a corresponding application filed with a governmental authority in any other country, together with all additions, deletions and supplements thereto.

1.6 "CALENDAR QUARTER" means a period of three (3) consecutive calendar months ending on either March 31, June 30, September 30, or December 31.

1.7 "CALENDAR YEAR" means the respective period of a year commencing on January 1 and ending on December 31.

1.8 "COMMERCIALLY REASONABLE EFFORTS" or "commercially reasonable efforts" means [**]. With regard to the creation and generation of Knock-Out Mice for a Project, such efforts shall be deemed to have been exhausted if Lexicon has [**].

1.9 "CONFIDENTIAL INFORMATION" means Lexicon Confidential Information, Project Confidential Information and/or Genentech Confidential Information, as applicable.

1.10 "CONTRACT SERVICE PROVIDER" means [**].

1.11 "DERIVATIVE PROTEIN" means [**].

1.12 "DOLLARS" means United States dollars.

1.13 "EFFECTIVE DATE" has the meaning set forth in the introductory paragraph of the Agreement.

1.14 "ES CELL LINE" means the embryonic stem cell line used to produce a line of Knock-Out Mice containing within their genome the corresponding mutated gene. [**]

1.15 "FDA" means the U.S. Food and Drug Administration or corresponding governmental authority in another country.

1.16 "FIELD" means any human or animal healthcare applications including, without limitation, the diagnosis, prevention and treatment of diseases or conditions.

1.17 "FIRST PASS PHENOTYPIC ANALYSIS" means the tests, observations, and analyses listed on Exhibit A that Lexicon will use Commercially Reasonable Efforts to perform, under Section 3.3, on the Knock-Out Mice of each Project.

1.18 "FORCE MAJEURE" means acts of God, strikes, civil disturbances, earthquakes, fires, floods, explosions, riots, war, rebellion, sabotage, acts or failure to act of governmental authority, or any other cause beyond the reasonable control and without negligence of the defaulting Party, provided that the Party claiming force majeure has exerted all reasonable efforts to promptly remedy such force majeure.

1.19 "GAAP" shall mean United States generally accepted accounting principles, consistently applied.

1.20 "GENENTECH CONFIDENTIAL INFORMATION" means all proprietary discoveries, trade secrets, inventions (whether or not patentable), data, materials and information disclosed or provided by, or on behalf of, Genentech to Lexicon or its designees in connection with this Agreement (including, but not limited to, Genentech Gene Patents and Know-How) other than Project Confidential Information, whether provided prior to, or after, the Effective Date and whether provided orally, electronically, visually, or in writing, except such discoveries, trade secrets, inventions, data, materials or information that Lexicon can demonstrate, through its contemporaneous written records:

(i) was known to Lexicon or to the public prior to Genentech's disclosure hereunder;

(ii) became known to the public, after Genentech's disclosure hereunder, other than through an unauthorized act of Lexicon or of any person to whom Lexicon disclosed such information;

(iii) was subsequently disclosed to Lexicon by a person having lawful possession of, and a legal right to disclose without any restrictions, such information; or

(iv) was developed by Lexicon without use, and independent, of Genentech Confidential Information.

1.21 "GENENTECH GENE PATENTS AND KNOW HOW" means (i) all Patents which are owned, controlled or licensed by Genentech as of the Effective Date or which are created

or acquired by Genentech during the course of this Agreement and which claim a Project Gene, polypeptides encoded by such genes and/or antibodies directed toward such polypeptides and/or methods of treatment employing such genes, polypeptides and/or antibodies (also referred to herein as a "Genentech Gene Patent") and (ii) all Know-How which is owned, controlled or licensed by Genentech as of the Effective Date or which is created or acquired by Genentech during the course of this Agreement which relates to any of the Project Genes (also referred to herein as "Genentech Gene Know-How"); provided that Genentech Gene Patents and Know-How shall not include Project Patents and Know-How. [**]

1.22 "GROSS SALES" means, with respect to a Licensed Product, the gross amount invoiced by Genentech, its Affiliates and Product Licensees, as applicable, for sales of such Licensed Product to Third Persons.

1.23 "IND" means an Investigational New Drug Application filed with the FDA in the United States, or a corresponding application filed with a regulatory agency in any other country, together with all additions, deletions, and supplements thereto.

1.24 "KNOCK-OUT MOUSE" means a mouse made by Lexicon pursuant to this Agreement in which Lexicon has interrupted, disrupted, or deleted a specific gene or portion thereof, homologous to a Project Gene, to inactivate the function of such gene in such mouse.

1.25 "KNOW-HOW" means all proprietary information, trade secrets, techniques and data (including Confidential Information) of a Party that are owned, controlled or licensed by such a Party as of the Effective Date or thereafter during the term of this Agreement, including but not limited to, discoveries, formulae, materials, practices, methods, knowledge, processes, experience, test data (including pharmacological, toxicological and clinical information and test data), analytical and quality control data, marketing, pricing, distribution, cost and sales data or descriptions. Know-How may be made prior to the Effective Date or after the Effective Date whether or not during the course of, in furtherance of, and as a direct result of the activities of one or more Parties hereunder. Know-How may be made by employees of Lexicon, solely or jointly with a Third Person, by employees of Genentech, solely or jointly with a Third Person, or jointly by employees of Lexicon and Genentech, alone or together with a Third Person. Know-How does not include Patents.

1.26 "LEXICON CONFIDENTIAL INFORMATION" means all proprietary discoveries, trade secrets, inventions (whether or not patentable), data, materials, and information disclosed or provided by, or on behalf of, Lexicon to Genentech or its designees in connection with this Agreement (including, but not limited to, Lexicon Knock-Out Technology), other than Project Confidential Information, whether provided prior to, or after, the Effective Date and whether provided orally, electronically, visually, or in writing, except such discoveries, trade secrets, inventions, materials, data, or information that Genentech can demonstrate, through its contemporaneous written records:

(i) was known to Genentech or to the public prior to Lexicon's disclosure hereunder;

(ii) became known to the public, after Lexicon's disclosure hereunder, other than through an unauthorized act of Genentech or of any person to whom Genentech disclosed such information;

(iii) was subsequently disclosed to Genentech by a person having lawful possession of, and a legal right to disclose without any restrictions, such information; or

(iv) was developed by Genentech without use, and independent, of Lexicon Confidential Information.

1.27 "LEXICON KNOCK-OUT TECHNOLOGY" means all Patents and Know How which are (i) owned, controlled or licensed by Lexicon as of the Effective Date or created or acquired by Lexicon during the course of this Agreement and (ii) related to a process or method used in the creation or generation of Knock-Out or transgenic mice, including the process for creating Knock-Out Mice [**]. "Lexicon Knock-out Technology" shall also include (A) the Know-How consisting of the Knock-Out Mice [**]; the Know-How consisting of ES Cell Lines; and the Know-How consisting of biological materials (such as nucleic acid sequences, RNA, DNA, organisms, proteins, polypeptides, plasmids and vectors) used for the creation of such Knock-Out Mice [**], but not the Know-How related to the biological materials and/or sequence information provided by Genentech to Lexicon or known to Genentech (as evidenced by written records) prior to the Effective Date; and (B) Patents claiming such Know How. [**]

1.28 "LEXICON PRE-EXISTING PATENTS AND KNOW-HOW" means all Patents ("Lexicon Pre-Existing Patents") and Know-How ("Lexicon Pre-Existing Know-How") which are (i) owned, controlled or licensed by Lexicon as of the Effective Date, or involve a Project Gene for which Lexicon [**] and (ii) related to a Pre-Existing Project, a Project Gene, a Protein Candidate or a Licensed Product, provided in each case that Lexicon Pre-Existing Patents and Know-How shall not include (a) Lexicon Knock-Out Technology, (b) Genentech Gene Patents and Know How, (c) Project Patents and Know How, (d) Restricted Rights Project Patents and Know-How, (e) general Patents that cover inventions that could be used for products other than products under which Genentech has a license pursuant to Article 5, including, without limitation, Patents covering manufacturing or process inventions, or (f) that portion of any such Patent or Know-How which is beyond the scope of the work performed by Lexicon for Projects other than Pre-Existing Projects.

1.29 "LICENSED PRODUCT" means a pharmaceutical preparation other than a Small Molecule Drug that is ready for administration to the ultimate consumer and that (i) contains as the active pharmaceutical ingredient a Protein Candidate or (ii) that directly modulates a Protein Candidate, or the gene that encodes a Protein Candidate.

1.30 "NDA" means a New Drug Application filed with the FDA in the United States, or a corresponding application filed with a regulatory agency in any other country, together with all additions, deletions, and supplements thereto.

1.31 "NET SALES" means, with respect to a Licensed Product, Gross Sales of such Licensed Product less Sales Returns and Allowances for such Licensed Product.

1.32 "NOTE AGREEMENT" shall have the meaning set forth in Section 7.14.

1.33 [**]

1.34 [**]

1.35 "PATENT" means:

(i) a U.S. and corresponding foreign patent application (including provisional application, division, refiling, continuation, continuation-in-part, reissue and re-examination thereof); and

(ii) any patent (including without limitation, any substitution, extension, reissue, renewal, re-examination, patent of addition, supplementary protection certificate and inventors' certificate) that has issued or may issue in the future from any patent application described in Subsection (i).

1.36 "PHASE III CLINICAL TRIAL" means, as to a specific Licensed Product, a controlled and lawful study in humans of the efficacy and safety of such Licensed Product, which is prospectively designed to demonstrate statistically whether such Licensed Product is effective and safe for use in a particular indication in a manner sufficient to file a BLA or NDA to obtain regulatory approval to market and sell that Licensed Product in the United States or another country for the indication being investigated by the study, as further defined in Federal Regulation 21 C.F.R. 312.21.

1.37 "PIPELINE PROJECT" means a Project involving a Project Gene for which Lexicon [**].

1.38 "PRE-EXISTING PROJECT" means a Pipeline Project involving a Project Gene for which Lexicon [**].

1.39 "PRODUCT LICENSEE" means any Third Person which enters into an agreement with Genentech or its Affiliates involving the grant to such Third Person of a license to sell a Licensed Product.

1.40 "PROGENY" means mice, including successive generations thereof, that are produced or developed by Genentech, its Affiliates or Academic Collaborators by breeding a Knock-Out Mouse with any other mouse (including, without limitation, any other Knock-Out Mouse).

1.41 "PROJECT" has the meaning set forth in Section 3.1(e).

1.42 "PROJECT CONFIDENTIAL INFORMATION" means all discoveries, trade secrets, inventions (whether or not patentable), data, materials, and information created by either Party, or created jointly by both Parties, in connection with this Agreement (including, but not limited to, Project Patents and Project Know How) and that are created during the course of performing the activities contemplated by this Agreement, and whether provided orally, electronically, visually or in writing, except such discoveries, trade secrets, inventions, materials, data, or information that a Party can demonstrate, through its contemporaneous written records:

(i) was known to such Party or to the public prior to its creation hereunder;

(ii) became known to the public, after its creation hereunder, other than through an unauthorized act of such Party or of any person to whom such Party disclosed such information;

(iii) was subsequently disclosed to such Party by a person having lawful possession of, and a legal right to disclose without any restrictions, such information; or

(iv) was developed by such Party without use, and independent, of the Project Confidential Information.

1.43 "PROJECT GENE" has the meaning set forth in Section 3.1(e); provided that a Rejected Proposed Gene shall not be a Project Gene.

1.44 "PROJECT MATERIALS" means, with respect to a Project, [**].

1.45 "PROJECT PATENTS AND KNOW-HOW" means all Patents (also referred to herein as "Project Patents") and Know How (also referred to herein as "Project Know How") (i) created or acquired by either Party during the course of and in connection with this Agreement and (ii) which are based upon data and other information reviewed by the Steering Committee related to a Project Gene or Protein Candidate; provided in each case that Project Patents and Know How shall not include (A) Lexicon Knock-Out Technology, (B) Genentech Gene Patents and Know-How, (C) Lexicon Pre-Existing Patents and Know-How, (D) Restricted Rights Project Patents and Know-How, (E) general Patents that cover inventions that could be used for products other than a Licensed Product, including, without limitation, Patents covering manufacturing or process inventions, or (F) any Patent or Know-How arising from work performed not in relation to this Agreement. [**].

1.46 "PROPOSED GENE" means a human gene sequence proposed by Genentech under Section 3.1(a), (i) that Genentech believes is the full-length gene sequence for a Protein and (ii) for which a patent application owned or controlled by Genentech has been filed

claiming such full-length human gene sequence and the Protein believed to be produced by such gene.

1.47 "PROTEIN" means [**].

1.48 "PROTEIN CANDIDATE" has the meaning set forth in Section 3.5, and shall include Derivative Proteins.

1.49 "REGULATORY APPROVAL" means any and all approvals (including pricing and reimbursement approvals), licenses, registrations or authorizations of any kind of the FDA (or foreign equivalent) necessary for the marketing and sale of a Licensed Product in any country or other regulatory jurisdiction. "Regulatory Approval" shall include, without limitation, approval granted with respect to any BLA, NDA or other foreign equivalent.

1.50 "REJECTED PROJECT GENE" means a Project Gene whose Protein is not designated as a Protein Candidate under Section 3.5(c).

1.51 "REJECTED PROPOSED GENE" means a Proposed Gene (i) that is rejected under Section 3.1(b), (c) or (d), (ii) that is removed from the collaboration under Section 3.1(f), (iii) that is deemed a Rejected Gene pursuant to Section 3.2(a), (iv) for which the Steering Committee does not vote, under Section 3.2(b), to proceed or (v) that is designated a Rejected Proposed Gene under Section 3.3(a).

1.52 "RESTRICTED RIGHTS PROJECT" means a Project involving a Project Gene [**].

1.53 "RESTRICTED RIGHTS PROJECT PATENTS AND KNOW-HOW" means all Patents (also referred to herein as "Restricted Rights Project Patents") and Know How (also referred to herein as "Restricted Rights Project Know How") which are (i) owned, controlled or licensed by Lexicon as of the Effective Date or created or acquired by Lexicon during the course of and in connection with this Agreement and (ii) which are based upon data and other information reviewed by the Steering Committee related to a Project Gene or Protein Candidate in connection with a Restricted Rights Project; provided in each case that Restricted Rights Project Patents and Know How shall not include (A) Lexicon Knock-Out Technology, (B) Genentech Gene Patents and Know-How, (C) general Patents that cover inventions that could be used for products other than a Licensed Product, including, without limitation, Patents covering manufacturing or process inventions, or (D) any Patent claims or Know-How arising from work performed not in relation to this Agreement.

1.54 "SALES RETURNS AND ALLOWANCES" means, with respect to a Licensed Product, the sum of (a) and (b), where: (a) is a provision, [**] for sales of such Licensed Product under GAAP as provided hereinabove for (i) cash and quantity discounts or rebates on such Licensed Product (other than price discounts granted at the time of invoicing and which are included in the determination of Gross Sales), (ii) credits or allowances given

or made for rejection or return of previously sold Licensed Product or for retroactive price reductions (including Medicare and similar types of rebates and chargebacks), (iii) sales taxes, duties or other governmental charges levied on or measured by the billing amount for such Licensed Product, as adjusted for rebates and refunds, (iv) charges for freight and insurance directly related to the distribution of such Licensed Product, to the extent included in the invoice to the customer, and (v) credits for allowances given or made for wastage replacement, indigent patient and any other sales programs agreed to by the Parties for such Licensed Product; and (b) is a periodic adjustment of the provision determined in (a) to reflect amounts actually incurred by Genentech, its Affiliates and Product Licensees, as applicable, for items (i), (ii), (iii), (iv) and (v) in clause (a).

1.55 "SMALL MOLECULE DRUG" means any pharmaceutical compound for the treatment of any human or animal disease or condition, the active ingredient of which is a synthetically prepared, or a naturally derived chemical compound [**]; provided, however, that "Small Molecule Drug" specifically excludes any compound which consists of or incorporates as an active ingredient a Protein, a Derivative Protein, a nucleic acid oligomer, or an antibody or any fragment thereof.

1.56 "STEERING COMMITTEE" means the committee established and described in Article 2.

1.57 "THIRD PERSON" means any person or entity other than Lexicon, Genentech or any Affiliate of Lexicon or Genentech.

ARTICLE 2

GOVERNANCE OF RESEARCH

2.1 CREATION OF A STEERING COMMITTEE. Within [**] of the Effective Date, the Parties shall establish a Steering Committee to oversee the Parties' activities under Article 3 of this Agreement. The Steering Committee shall be comprised of [**], but each Party may change its Steering Committee members at any time by giving prior written notice to the other Party.

2.2 STEERING COMMITTEE RESPONSIBILITIES. The Steering Committee shall have the following responsibilities, as well as any additional responsibilities expressly set forth in this Agreement:

(i) receiving and reviewing reports and data received from a Party from time to time as set forth herein, including without limitation the submission of Proposed Genes, data related to the murine homology of Proposed Genes, results of the First Pass Phenotypic Analysis and [**];

(ii) receiving notices from the Parties as set forth herein, including without limitation notices of delays or stalled research pursuant to Section 3.3(a);

(iii) the designation of Project Genes and Protein Candidates under Sections 3.1 and 3.5, respectively;

(iv) coordinating the activities of the Parties hereunder;

(v) developing and implementing a publicity strategy and policy for the review and approval of press releases and publications in accordance with Section 9.4;

(vi) settling disputes or disagreements that arise between the parties as set forth in Article 13; and

(vii) performing such other functions as appropriate to further the purposes of this Agreement, as determined by the Parties.

2.3 STEERING COMMITTEE DECISIONS. All Steering Committee decisions will be made by [**] of all the Steering Committee's members, except as expressly stated otherwise in this Agreement. Each Steering Committee member will have one vote, and a Steering Committee member need not be present in order to vote; the Steering Committee member(s) of a Party that are present for, or participating in, a decision shall have the authority to vote on behalf of the Steering Committee member(s) of such Party who are not present for, or participating in, such decision.

2.4 STEERING COMMITTEE MEETINGS. Within [**] after the Effective Date, the Steering Committee will hold an in-person organizational meeting to establish the Committee's operating procedures. After such initial meeting, the Steering Committee will meet at such other times as are unanimously agreed to by the Steering Committee members, but no less than once each Calendar Quarter. Such meetings may be in-person, via videoconference, or via teleconference, provided that at least one meeting per Calendar Year shall be held in person. The location of in-person Steering Committee meetings will alternate between South San Francisco, California and The Woodlands, Texas. Each Party will bear the expense of its respective Committee members' participation in Steering Committee meetings. Minutes will be kept of all Steering Committee meetings. Responsibility for keeping minutes will alternate between the Parties, beginning with Genentech. Meeting minutes will be sent to each member of the Steering Committee for review as soon as practicable after a meeting.

2.5 DISSOLUTION OF THE STEERING COMMITTEE. Upon the expiration of [**] after all of the activities of Lexicon that have been approved by the Steering Committee have been completed, the Steering Committee will have no further responsibilities or authority under this Agreement and will be considered dissolved by the Parties.

ARTICLE 3

KNOCK-OUT MICE PROJECTS

3.1 GENENTECH SUBMISSION OF PROPOSED GENES.

(a) Initial Submission of Proposed Genes. Genentech, within [**], will provide the Steering Committee with a written list of [**] Proposed Genes, together with the date of Genentech's initial Patent filing with regard to each such Proposed Gene.

(b) Delivery of Notice by Lexicon. Within [**] of the delivery by Genentech of the list of Proposed Genes (or, with respect to replacement Proposed Genes proposed by Genentech under Section 3.1(b), (c) or (f) or Section 3.2(a), within [**] of the delivery by Genentech of notice to the Steering Committee of such replacement), Lexicon will notify the Steering Committee in writing as to whether or not: (i) to Lexicon's Actual Knowledge, Lexicon's conducting the activities contemplated by this Agreement with regard to such Proposed Gene would infringe patents or other intellectual property rights under which Lexicon is not licensed through this Agreement or otherwise; or (ii) [**]. If so, Lexicon shall additionally notify Genentech which Proposed Gene(s) are the subject of such patents or intellectual property rights [**].

(c) Rejection of Proposed Genes by Lexicon; Proposal of Replacement Proposed Genes by Genentech. Lexicon shall not be obligated to develop, produce or deliver a Knock-Out Mouse related to a Proposed Gene where Lexicon reasonably believes, with the advice of its counsel and the Steering Committee, that such action would infringe the intellectual property rights of a Third Person. Such Proposed Gene shall become a Rejected Proposed Gene and the Steering Committee shall adopt an acceptable solution including, but not limited to, the identification by Genentech of an alternative Proposed Gene. Lexicon shall further have the sole right, but not the obligation, to reject any Proposed Gene for which Lexicon reasonably believes, with the advice of its counsel and the Steering Committee, that Genentech was not the first to file a patent application, but only in cases where the Steering Committee reasonably believes [**], by notice to the Steering Committee within the period specified in Section 3.1(b), in which case Lexicon shall have the right to designate such Proposed Gene as a Rejected Proposed Gene. In such event, Genentech shall have the sole right, but not the obligation, to propose another Proposed Gene in the place of such Rejected Proposed Gene for the Steering Committee's review and approval, by notice to the Steering Committee within [**] of Lexicon's notice.

(d) Removal of Proposed Genes by Genentech. Within [**] of Genentech's receipt of Lexicon's notice under Section 3.1(b), Genentech shall inform Lexicon which, if any, of the Proposed Genes referenced in Lexicon's notice (and not automatically deemed a Rejected Proposed Gene under Section 3.1(b)) Genentech elects to remove from the collaboration and, thereafter, all such removed Proposed Genes shall constitute Rejected Proposed Genes. Genentech shall have no right to propose a replacement

Proposed Gene for any Proposed Gene that it elects to remove from the collaboration under this Section 3.1(d).

(e) Designation of Project Genes. Following Genentech's notice pursuant to Section 3.1(d), the remaining Proposed Genes shall constitute "Project Genes" (and the work performed hereunder with regard to such Project Gene shall be deemed a corresponding "Project"), and be deemed to be submitted to the collaboration for Lexicon to begin determining, as fully described in Section 3.2(a), the murine gene that is homologous to each such Project Gene. Except as set forth in this Section 3.1, Lexicon, acting through the Steering Committee or otherwise, shall not have the ability to prevent the submission of a Project Gene to the collaboration for Lexicon to conduct its activities under Section 3.2(a) regarding such Project Gene. [**] following each designation of Proposed Genes as Project Genes hereunder, Lexicon shall provide Genentech with a list of the Projects, if any, that are Pipeline Projects and/or Pre-Existing Projects, and the stage of each such Pipeline Project or Pre-Existing Project, as the case may be.

(f) Removal and Replacement of Project Genes by Genentech. At any time prior to [**], Genentech shall have the sole right, but not the obligation, to remove such Project Gene and/or propose another Proposed Gene for the Steering Committee's review and approval, by delivering notice thereof to the Steering Committee; provided, however, that Genentech shall not be permitted to remove more than [**] Project Genes pursuant to this Section 3.1(f); and provided, further, that Genentech shall reimburse Lexicon for all reasonable costs and expenses, including allocable overhead, incurred by Lexicon under this Agreement prior to the date of Genentech's notice under this subsection 3.1(f) in respect of the Project Gene being removed (for purposes of which, "allocable overhead" shall mean [**]. Any such removed Project Gene shall be considered a Rejected Proposed Gene for purposes of this Agreement.

3.2 LEXICON IDENTIFICATION OF HOMOLOGOUS MURINE GENE; STEERING COMMITTEE REVIEW AND APPROVAL OF PROJECTS.

(a) Lexicon Efforts to Determine Homologous Murine Gene. For each Project Gene submitted to the collaboration under Section 3.1(e), Lexicon will use Commercially Reasonable Efforts to identify the homologous murine gene as soon as practicable, and in any event within [**], after such Project Gene was submitted to it, and will provide Genentech with [**] reports regarding its efforts. To identify the homologous murine gene, Lexicon will use its standard resources and, if applicable, [**]. Upon identifying what it believes to be the homologous murine gene(s) for a Project Gene, Lexicon will provide the Steering Committee with written evidence of such gene's (or, if applicable, genes') homology. If Lexicon is unable to identify a homologous murine gene for a Project Gene, Lexicon will report all of the results related to such Project Gene obtained during the course of its search to the Steering Committee as well, and such Project Gene shall thereafter be deemed a Rejected Proposed Gene under this Agreement. Genentech shall have the sole right, but not the obligation, to propose another Proposed Gene in the place of such Rejected Proposed Gene for the Steering

Committee's review and approval, by notice to the Steering Committee within [**] of Lexicon's report of its failure to identify a homologous murine gene.

(b) Steering Committee Review and Approval of Projects. The Steering Committee will review the information provided by Lexicon under Sections 3.2(a) with respect to a Project Gene and will confirm that Lexicon has identified the homologous murine gene, and therefore to proceed with such Project Gene under Section 3.3 hereof. If the Steering Committee determines that Lexicon has not identified a homologous murine gene for a Project Gene, such Project Gene shall thereafter be deemed a Rejected Proposed Gene under this Agreement.

(c) Project Development Plan. Concurrently with its delivery of the information contemplated by Section 3.2(a), Lexicon will provide the Steering Committee (i) for Pipeline Projects, information (as set forth in Exhibit A) [**], and (ii) for Projects other than Pipeline Projects, [**].

3.3 LEXICON'S CREATION AND TESTING OF KNOCK-OUT MICE AND ES CELL LINES.

(a) Activities Performed by Lexicon. Once the Steering Committee approves proceeding with a Project Gene under Section 3.2(b), Lexicon, in accordance with the recommendation from Genentech as to desired priority, will, at Lexicon's sole expense, use Commercially Reasonable Efforts to perform the following activities on such Project: (i) create and generate, [**] Knock-Out Mice using the Project Gene's homologous murine gene; (ii) conduct a First Pass Phenotypic Analysis of such Knock-Out Mice; and (iii) [**]. Lexicon agrees to use Commercially Reasonable Efforts to perform and complete such activities on a Project within [**] after the approval of a Project Gene by the Steering Committee under Section 3.2(b). If a Project is delayed or stalled due to technological or scientific difficulties, Lexicon will so notify Genentech and the Steering Committee. The Parties will consult with each other to determine whether such difficulties can be resolved or remedied. The Steering Committee shall decide, based on input from Lexicon, whether such Project's problems can be remedied within the scope of commercially reasonable efforts for such Project or whether to terminate such Project and designate such Project Gene a Rejected Proposed Gene. Genentech shall have the right to terminate this Agreement under certain circumstances, as set forth in Section 10.2.

(b) Reports; Consultation and Site Visits. Within [**] after the end of [**], Lexicon will provide each Steering Committee member with a written report describing the status of its work on each Project, and, [**], Lexicon will provide a Genentech Steering Committee member with the same [**] report generated for Lexicon's internal purposes. Upon reasonable advance written notice from the Steering Committee or Genentech, Lexicon will make persons working on its behalf on a Project available during normal business hours for a reasonable number of consultations with the Steering Committee or Genentech regarding such Project. Such consultations will either be in-person at such person's place of employment or via videoconference or teleconference. Upon reasonable notice, Genentech representatives may visit during normal business

hours the facilities where Lexicon is performing services on Projects. All Genentech representatives will be advised of, and be bound by, Genentech's confidentiality obligations in Article 9 and will follow such security and facility access procedures as are reasonably designated by Lexicon. Lexicon may require that at all times the Genentech representatives be accompanied by a Lexicon representative.

3.4 SAFEGUARDS TO PROTECT CONFIDENTIALITY OF PROJECTS.

(a) Lexicon hereby agrees that each person working on a Project on its behalf (whether as an employee, subcontractor, or otherwise) has or will, prior to commencing work on a Project, have executed an instrument:

(i) assigning to Lexicon all of his, her, or its rights, title, and interest in inventions or intellectual property arising during the course, and as a result, of his, her, or its association with Lexicon; and

(ii) agreeing to abide by confidentiality and non-use restrictions regarding Confidential Information and the existence and terms of this Agreement no less stringent than Lexicon's confidentiality and non-use obligations under Article 9.

Lexicon also agrees to maintain appropriate security measures no less stringent than measures that are customary in the industry.

(b) Genentech hereby agrees that each person working on a Project on its behalf (whether as an employee, subcontractor, or otherwise) has or will, prior to commencing work on a Project, have executed an instrument:

(i) assigning to Genentech all of his, her, or its rights, title, and interest in inventions or intellectual property arising during the course, and as a result, of his, her, or its association with Genentech; and

(ii) agreeing to abide by confidentiality and non-use restrictions regarding Confidential Information and the existence and terms of this Agreement no less stringent than Genentech's confidentiality and non-use obligations under Article 9.

Genentech also agrees to maintain appropriate security measures no less stringent than measures that are customary in the industry.

3.5 REVIEW OF FIRST PASS PHENOTYPIC ANALYSIS; DESIGNATION OF PROTEIN CANDIDATES.

(a) Review of First Pass Phenotypic Analysis. Once Lexicon completes the First Pass Phenotypic Analysis on each of the Project Genes, it will submit to Genentech, through the Steering Committee, the data from such Projects. After reviewing this information from a Project, the Steering Committee will determine by [**], within [**]

following the submission of the First Pass Phenotypic Analysis on such Project, whether Lexicon has [**] for such Project Gene.

(b) Designation of Protein Candidates. The Protein produced by each such Project Gene for which the Steering Committee [**] votes that Lexicon has [**] shall be designated as a "Protein Candidate." In the event that the Steering Committee designates [**] Proteins produced by Project Genes as Protein Candidates, then Lexicon shall have the right to designate an additional number of Proteins produced by Project Genes as Protein Candidates, so that there are a total of [**]; provided that Lexicon shall make such designations no later than [**] following the submission to the Steering Committee of the last First Pass Phenotypic Analysis to be submitted under this Agreement. Genentech shall have the rights and obligations set forth in Article 4 and 6 with regard to such Protein Candidates.

(c) Rejected Project Genes. Any Project Gene the Protein product of which has not been designated as a Protein Candidate pursuant to subsection (b) above, shall be deemed a Rejected Project Gene for purposes of this Agreement. Genentech shall have the rights and obligations set forth in Articles 5 and 6 with regard to such Rejected Project Genes.

3.6 [**]

ARTICLE 4

LICENSED PRODUCTS

4.1 GENENTECH'S EXCLUSIVE RIGHT TO DEVELOP AND COMMERCIALIZE LICENSED PRODUCTS. Genentech shall have the sole right and responsibility for, and control over, developing and commercializing Licensed Products; provided, however, that with regard to Restricted Rights Projects, nothing in this Section will be deemed to grant Genentech rights beyond the scope of the licenses granted to Genentech (or limit the rights of Lexicon, its collaborators or licensees) with regard to such Restricted Rights Project.

4.2 TRANSFER TO GENENTECH OF LEXICON PRE-EXISTING KNOW-HOW AND PROJECT KNOW-HOW RELATED TO PROTEIN Candidates. Within [**] after designation of a Protein Candidate pursuant to Section 3.5, Lexicon will provide Genentech, to the extent not previously provided, with a copy of all Lexicon Pre-Existing Know-How, Project Know-How and Restricted Rights Know-How related to such Protein Candidate in Lexicon's possession or control.

4.3 GENENTECH RESPONSIBLE FOR DEVELOPMENT COSTS. Genentech shall bear all costs and expenses associated with, and shall have sole control over, developing and commercializing Licensed Products.

4.4 PRODUCT LICENSEES. Genentech agrees to notify Lexicon promptly of any (sub)license that it enters into with a Product Licensee, and Genentech further covenants that any such (sub)licence shall contain terms and conditions consistent with Genentech's obligations under this Agreement.

ARTICLE 5

GRANT OF LICENSE RIGHTS

5.1 EXCLUSIVE LICENSE UNDER LEXICON PRE-EXISTING PATENTS AND KNOW-HOW AND RESTRICTED RIGHTS PROJECT PATENTS AND KNOW-HOW FOR THE RESEARCH, DEVELOPMENT AND COMMERCIALIZATION OF LICENSED PRODUCTS. Subject to the terms of this Agreement, Lexicon hereby grants to Genentech (i) an exclusive (even as to Lexicon), world-wide right and license under the Lexicon Pre-Existing Patents and Know-How and (ii), to the extent specified in the Parties' designation(s) of Restricted Rights Project(s), an exclusive (even as to Lexicon) or non-exclusive, world-wide right and license under the Restricted Rights Project Patents and Know-How, in each case to research, develop, make (or have made), use, sell, offer for sale, and import Licensed Products in the Field. Such license includes the right to grant sublicenses of all or part of such rights without Lexicon's consent; provided that the grant of any such sublicense shall be consistent with the terms and conditions of this Agreement and that no such sublicense to a Product Licensee shall relieve Genentech of primary responsibility for all payments and royalties due to Lexicon under Article 7 with respect to Licensed Product(s) licensed to such Product Licensee.

5.2 LICENSE UNDER LEXICON PRE-EXISTING PATENTS AND KNOW-HOW AND RESTRICTED RIGHTS PROJECT PATENTS AND KNOW-HOW FOR THE RESEARCH, DEVELOPMENT AND COMMERCIALIZATION OF PRODUCTS OTHER THAN LICENSED PRODUCTS IN THE FIELD. Subject to the terms of this Agreement, Lexicon hereby grants to Genentech a royalty-free, worldwide right and license under the Lexicon Pre-Existing Patents and Know-How and, to the extent specified in the Parties' designation(s) of Restricted Rights Project(s), the Restricted Rights Project Patents and Know-How to research, develop, make (or have made), use, offer for sale, sell, and import products (including, but not limited to Small Molecule Drugs) other than Licensed Products for use in the Field. Such right and license (i) shall be exclusive (even as to Lexicon) under the Lexicon Pre-Existing Patents and Know-How with respect to products in the Field other than Small Molecule Drugs, (ii) shall be exclusive (even as to Lexicon) or non-exclusive under the Restricted Rights Project Patents and Know-How, to the extent specified in the Parties' designation(s) of Restricted Rights Project(s), with respect to products in the Field other than Small Molecule Drugs and (iii) shall be non-exclusive with regard to Small Molecule Drugs. Lexicon hereby grants Genentech the right to grant sublicenses under the right and license granted by Lexicon pursuant to this Section 5.2, on a Project Gene-by-Project Gene basis; provided, however, that with respect to a Small Molecule Drug related to a Project Gene, without the prior written consent of Lexicon, no such sublicense under the Lexicon Pre-Existing Patents or Know-How or Restricted Rights Project Patents or

Know-How may be granted to any Third Person in the absence of (x) a corresponding license or sublicense of right to a given Small Molecule Drug that directly modulates the Protein produced by such Project Gene or Derivative Protein thereof and discovered, researched and under bona fide commercial development (at least through the stage of the demonstration of preclinical efficacy in animal studies) by Genentech and (y) the license or sublicense of Patent rights pertaining thereto owned by, licensed to or controlled by Genentech.

5.3 LICENSE UNDER PROJECT PATENTS AND KNOW-HOW FOR THE RESEARCH, DEVELOPMENT AND COMMERCIALIZATION OF SMALL MOLECULE DRUGS IN THE FIELD. Subject to the terms of this Agreement, Genentech hereby grants to Lexicon a royalty-free, non-exclusive, worldwide right and license under the Project Patents and Know-How to research, develop, make (or have made), use, offer for sale, sell, and import Small Molecule Drugs for use in the Field. Such right and license shall be exclusive; provided that Genentech retains rights under the Genentech Project Patents and Know How (i) to research, develop, make (or have made), use, offer for sale, sell, and import Small Molecule Drugs for use in the Field and (ii) to grant licenses to Third Persons under the Genentech Project Patents and Know How to research, develop, make (or have made), use, offer for sale, sell, and import Small Molecule Drugs for use in the Field in connection with (A) a corresponding license or sublicense of right to a given Small Molecule Drug that directly modulates the Protein produced by a Project Gene or Derivative Protein thereof and discovered, researched and under bona fide commercial development (at least through the stage of the demonstration of preclinical efficacy in animal studies) by Genentech and (B) the license or sublicense of Patent rights pertaining thereto owned by, licensed to or controlled by Genentech. Genentech hereby grants Lexicon the right to grant sublicenses under the right and license granted by Genentech pursuant to this Section 5.3, subject to the restrictions, if any, on Project Materials set forth in Section 5.5.

5.4 NON-EXCLUSIVE RESEARCH LICENSE GRANT UNDER LEXICON KNOCK-OUT TECHNOLOGY TO KNOCK-OUT MICE AND PROGENY. Subject to the terms of this Agreement and the restrictions, if any, on Project Materials set forth in Section 5.5, Lexicon hereby grants to Genentech a worldwide, non-exclusive right and license under the Lexicon Knock-Out Technology to use, breed, cross-breed and have bred and cross-bred Knock-Out Mice and Progeny, at the internal research facilities of Genentech and its Academic Collaborators or Contract Service Providers, for research directed toward the discovery, identification, selection, characterization, development or commercialization of products for use in the Field. Except as provided in Section 5.10, Genentech agrees to use Knock-Out Mice and Progeny solely for its own internal research purposes in accordance with the terms and conditions of this Agreement, and not to use any Knock-Out Mice or Progeny for any purposes for any Third Person, or to transfer, license the use of or make available to any Third Person any Knock-Out Mice or Progeny.

5.5 [**]

5.6 [**]

5.7 RESERVATION OF RIGHTS. Notwithstanding the non-exclusive rights and licenses granted to Genentech under Sections 5.2 and 5.4, but subject to the exclusive rights and licenses granted to Genentech under Sections 5.1 and 5.2 [**]:

(a) Lexicon reserves the right under the Lexicon Knock-Out Technology to make and use, and to permit others to use, (i) Project Materials and (ii) other transgenic and Knock-Out Mice (including, without limitation, transgenic and Knock-Out Mice with a mutation in the same gene as a Knock-Out Mouse or Overexpression Mouse) and phenotypic data with respect thereto, including the right to grant licenses with respect to any applicable intellectual property rights for such purpose.

(b) Lexicon reserves the right under the Lexicon Pre-Existing Patents and Know-How and Restricted Rights Project Patents and Know-How (i) to discover, research, develop, make, have made, import, use, have used, offer for sale, sell and have sold Small Molecule Drugs and (ii) to grant licenses to Third Persons to discover, research, develop, make, have made, import, use, have used, offer for sale, sell and have sold Small Molecule Drugs.

5.8 LIMITED LICENSE TO GENENTECH GENE KNOW-HOW. For each Project Gene, Genentech hereby grants Lexicon a non-exclusive, royalty-free license under the Genentech Gene Patents and Know-How related to such Project Gene solely for Lexicon to perform the following activities under this Agreement:

(i) identify, under Section 3.2(a), the homologous murine gene;

(ii) create, under Section 3.3, Knock-Out Mice with such homologous murine gene;

(iii) test, under Section 3.3 and, if applicable, Section 3.6, such Knock-Out Mice;

(iv) conduct a First Pass Phenotypic Analysis on such Project Gene under Section 3.3(a); and

(v) [**]

Lexicon has no right to sublicense under this license grant, which shall be considered personal to Lexicon. Such license will terminate with regard to a Project Gene upon the earliest to occur of such Project Gene becoming a Rejected Proposed Gene, a Rejected Project Gene, a Protein Candidate, or the completion of Lexicon's activities under this article 5.8.

5.9 NO GRANT OF OTHER TECHNOLOGY OR PATENT RIGHTS. Except as otherwise expressly provided in this Agreement, under no circumstances shall a party hereto, as a

result of this Agreement, obtain any ownership interest in or other right to any technology, know-how, patents, patent applications, gene or genomic sequence data or information, products, or biological materials of the other party, including items owned, controlled or developed by, or licensed to, the other party, or transferred by the other party to said party, at any time pursuant to this Agreement.

5.10 TRANSFERS TO ACADEMIC COLLABORATOR OR CONTRACT SERVICE PROVIDERS. Genentech shall have the right to transfer a Knock-Out Mouse or Progeny made pursuant to this Agreement to an Academic Collaborator or Contract Service Providers, provided that such Academic Collaborator or Contract Service Providers shall have entered into a material transfer agreement with Genentech containing terms relating to the transfer of such material that expressly (i) prohibit the use of such Knock-Out Mice or Progeny thereof for any purpose other than such Academic Collaborator's collaborative research with, or Contract Service Provider's service for, Genentech in the Field and (ii) prohibit the transfer of such Knock-Out Mice thereof by such Academic Collaborator or Contract Service Provider to any Third Party. Within [**] of entering into any such material transfer agreement, Genentech shall provide Lexicon with a copy thereof.

5.11 LICENSE TO LEXICON ISOGENIC TECHNOLOGY. On the Effective Date, Lexicon and Genentech shall enter into the Sublicense Agreement attached hereto as Exhibit B.

ARTICLE 6

REQUEST FOR AND DELIVERY OF KNOCK-OUT MICE

6.1 REQUESTS FOR PROJECT MATERIALS BY GENENTECH. During the period of [**] following the submission to the Steering Committee of the data from the First Pass Phenotypic Analysis for a Project Gene in accordance with Section 3.5(a), Genentech shall have the option, subject to the terms and conditions of this Agreement, to have Lexicon deliver to Genentech [**] the Knock-Out Mice for such Project Gene, by delivering written notice of such request to Lexicon. During the period beginning on the date of the submission to the Steering Committee of the data from the First Pass Phenotypic Analysis for a Project Gene in accordance with Section 3.5(a) and ending on [**], Genentech shall have the option, subject to the terms and conditions of this Agreement, to have Lexicon deliver to Genentech Project Materials and Project Know-How (to the extent not already provided), including without limitation [**], for such Project Gene. Genentech may also have, during such period, [**]. Lexicon shall have no further obligation to deliver Project Materials to Genentech following such period; provided that, following such period, Genentech may [**].

6.2 MAINTENANCE OF BACK-UP COLONIES. For a period of at least [**] after the delivery of a particular Knock-Out Mouse requested by Genentech under Section 6.1, Lexicon shall retain a small back-up colony of [**] such Knock-Out Mice [**], for the purpose of replacing mice shipped to Genentech under this Article 6 which die or are otherwise unable to breed during or within [**] after shipment to Genentech hereunder.

Thereafter, until the expiration of six (6) months following the submission to the Steering Committee of the data from the last First Pass Phenotypic Analysis to be submitted under this Agreement, Lexicon shall [**], if requested by Genentech. In the event Genentech requests that Lexicon maintain any such colony for a period of more than [**], Genentech shall pay Lexicon a storage and maintenance charge of [**] for such requested line of Knock-Out Mice for each [**] that Lexicon maintains such colony at Genentech's request.

6.3 DELIVERY TERMS AND CONDITIONS. Lexicon shall be responsible for making shipping arrangements for all Knock-Out Mice to be shipped to Genentech from Lexicon; provided that Genentech shall be responsible for (i) paying all shipment and delivery charges in connection therewith and (ii) obtaining, if desired, and paying for any insurance for Knock-Out Mice shipped to Genentech from Lexicon. Genentech shall also be responsible for complying with all customs, regulations, veterinary handling procedures and protocols, and obtaining any and all permits, forms or permissions that may be required for Genentech to accept shipment of Knock-Out Mice from Lexicon. Lexicon shall ship to Genentech [**] Knock-Out Mice, [**], promptly following its receipt of written notice that Genentech is prepared to accept shipment. Risk of loss with respect to any Knock-Out Mice to be transferred under this Section 6.3 shall pass to Genentech upon delivery thereof to the shipping company designated as specified herein. If Genentech fails to complete the necessary arrangements to accept shipment and provide such notice within [**] after delivery of its request for such Knock-Out Mice pursuant to Section 6.1, Genentech shall pay Lexicon a storage and maintenance charge of [**] for such requested line of Knock-Out Mice for each week thereafter until Lexicon receives such notice.

ARTICLE 7

PAYMENTS

7.1 UP-FRONT FEE. As partial consideration for the work to be performed by Lexicon under this Agreement, Genentech shall pay Lexicon a fee of [**], which fee shall be payable within ten (10) days of the Effective Date.

7.2 PERFORMANCE PAYMENTS. Within [**] (of achieving each of the research milestones listed below, Genentech shall pay to Lexicon the following amounts:

[**]

7.3 OPTION FEE. In the event Genentech exercises its option under [**] with respect to a [**], Genentech shall pay Lexicon [**] concurrently with its delivery of its notice exercising such option.

7.4 [**] FUNDING. To the extent the Steering Committee elects to have Lexicon produce [**], Genentech shall pay Lexicon funding of [**] for each additional [**], which funding shall be payable within [**] of such election.

7.5 FEE FOR [**] KNOCK-OUT MICE. In the event Genentech requests, more than [**] following the submission to the Steering Committee of the data from the First Pass Phenotypic Analysis for a Project Gene in accordance with Section 3.5(a), that Lexicon [**], Genentech shall pay Lexicon a fee of [**] concurrently with its delivery of such request.

7.6 FEE FOR DELIVERY OF MATERIALS [**]. In the event Genentech requests, after the later of (i) the date of submission to the Steering Committee of the data from the last First Pass Phenotypic Analysis to be submitted under this Agreement and (ii) [**] following the date of submission to the Steering Committee of the data from the First Pass Phenotypic Analysis for a Project Gene, that [**], Genentech shall pay Lexicon a fee of [**] within [**] of Lexicon's notice that [**].

7.7 MILESTONE PAYMENTS. With respect to the first Licensed Product relating to a specified Protein Candidate to achieve the following development milestones listed below, within [**] of achieving each such development milestones, Genentech shall pay Lexicon the following amounts:

[**]

For purposes of clarification, with respect to each Project Gene whose Protein is designated as a Protein Candidate, Genentech shall only be required to pay Lexicon for each of the above development milestones once upon the first occurrence of the respective event. All milestone payments hereunder are to be made by wire transfer of immediately available funds. Such milestone payments are non-refundable and non-creditable against any other payments hereunder. Genentech shall give Lexicon written notice of the achievement of any milestone event no later than [**] after such achievement.

7.8 ROYALTIES ON LICENSED PRODUCTS. As consideration for its exclusive rights with respect to Licensed Products and the other rights provided and activities performed by Lexicon hereunder, Genentech agrees to pay Lexicon a royalty of [**] of Net Sales of each Licensed Product by Genentech, its Affiliates and Product Licensees, on a country-by-country basis, during the period commencing with the first sale for use or consumption by the general public of a Product in a country after Regulatory Approval in such country and ending on the date that is [**] from the date of such first commercial sale of such Licensed Product in such country; provided that, in the event the worldwide Net Sales of such Licensed Product for which a royalty is payable to Lexicon hereunder exceeds [**] in any Calendar Year, Genentech shall pay Lexicon a royalty of [**] on that portion of such Net Sales of such Licensed Product that exceeds [**] in such Calendar Year. The royalty payable hereunder shall be payable only once with respect to the same unit of Licensed Product.

7.9 PAYMENT OF ROYALTY; REPORTING; EXCHANGE RATES. Within [**] after the end of each [**], Genentech will pay (and/or cause its Affiliates and/or Product Licensees to pay) the royalty owed under this Agreement, if any, on applicable Net Sales invoiced during such just-ended [**]. Such payment will be accompanied by the report showing: (i) the Gross Sales and Net Sales of Products sold during the reporting period and the calculation of Net Sales from such Gross Sales; (ii) the royalties payable in Dollars which shall have accrued hereunder in respect of such Net Sales; (iii) withholding taxes, if any, required by law to be deducted in respect of such royalties; (iv) the dates of the first commercial sales of Licensed Products in any country during the reporting period, if applicable; and (v) the exchange rates used in determining the amount of Dollars payable hereunder. Royalties payable on sales in countries other than the United States shall be calculated in accordance with the standard exchange rate conversion practices used by Genentech, its Affiliates or the Product Licensee, as applicable, for financial accounting purposes. If no royalty or payment is due for any royalty period hereunder, Genentech shall so report. Genentech shall keep, and shall require its Affiliates and Product Licensees to keep (all in accordance with GAAP), complete and accurate records in sufficient detail to properly reflect all gross sales and Net Sales and to enable the royalties payable hereunder to be determined.

7.10 U.S. CURRENCY; WIRE TRANSFERS. All payments, including any interest pursuant to Section 7.12, payable by Genentech, its Affiliates and Product Licensees to Lexicon under this Agreement will be paid in Dollars and will be made by wire transfer, in immediately available funds, to an account designated in writing by Lexicon.

7.11 TAXES. Any and all taxes levied on any payments from Genentech to Lexicon under this Agreement will be the liability of, and paid by, Lexicon. However, if Applicable Laws require the withholding of such taxes, Genentech will deduct such taxes from its payment to Lexicon and remit such withheld amount to the proper tax authority. Genentech will provide proof of payment to Lexicon within [**] of such payment. This Agreement shall not be considered a partnership for tax reporting purposes.

7.12 INTEREST ON OVERDUE PAYMENTS. In the event a royalty or other payment under this Agreement is not made within [**] of when due, such outstanding payment will accrue interest (from the date such payment is due through and including the date upon which full payment is made) at the annual rate equal to the [**]. Payment of accrued interest will accompany payment of the outstanding payment.

7.13 ROYALTY RECORDS; AUDIT RIGHTS. Genentech will keep, and maintain for a period of [**] following the end of a Calendar Year, accurate records in sufficient detail to enable royalties under this Agreement for such Calendar Year to be determined. Lexicon has the right, upon prior written notice to Genentech, not more than [**], through an independent certified public accountant selected by Lexicon and acceptable to Genentech (which acceptance shall not be unreasonably refused) to have access during normal business hours to those records of Genentech as may be reasonably necessary to verify the accuracy of the royalty reports furnished by Genentech under this Agreement for the previous Calendar Year. Prior to implementing an audit, Lexicon agrees to submit an

audit plan, including audit scope, to Genentech for Genentech's approval (which shall not be unreasonably withheld). Lexicon's independent certified public accountant will keep confidential all information obtained during such audit and will report to Lexicon only the amount of Genentech's Gross Sales and Net Sales made during, and royalties due for, the Calendar Year in question. Genentech shall have the right, at its own expense, to have its own independent certified public accountant review and confirm the results of the audit performed by Lexicon's accountants. In the event that the Parties' accountants do not agree as to the results of the audit, the Parties agree that such accountants shall attempt in good faith to resolve any discrepancies between their results according to GAAP and the terms of this Agreement.

Lexicon is solely responsible for all the expenses of an audit, unless the independent certified public accountant's report correctly shows any underpayment of royalties by Genentech exceeding [**] of the total royalties it owed for the Calendar Year then being reviewed. If the independent certified public accountant's report correctly shows that Genentech underpaid its royalties by more than [**], Genentech is responsible for the reasonable expenses incurred by Lexicon for the independent certified public accountant's services.

If the independent certified public accountant's report correctly shows any underpayment of royalties by Genentech, Genentech shall remit to Lexicon within [**] after the Genentech receipt of such report:

(i) the amount of such royalty underpayment;

(ii) interest on the amount being paid in (i), which interest shall be calculated pursuant to Section 7.12; and

(iii) if such royalty underpayment exceeds [**] of Genentech's total royalties owed for the Calendar Year then being reviewed, the reasonable expenses incurred by Lexicon for the independent certified public accountant's services.

If the independent certified public accountant's report correctly shows any overpayment of royalties by Genentech, such overpayment shall be fully creditable against future royalties payable by Genentech in subsequent royalty periods.

The calculation of royalties payable with respect to a Calendar Year will be binding and conclusive on the Parties upon the expiration of [**] following the end of such Calendar Year, unless (i) an audit of such Calendar Year, initiated before the expiration of such [**], is on-going or (ii) Lexicon has, in good faith and through written notice to Genentech, disputed such calculation before the expiration of such [**] or, if applicable, within [**] after receipt of the audit report.

7.14 CONVERTIBLE NOTE. Simultaneously with the execution and delivery of this Agreement, the parties hereto shall enter into a Note Agreement (the "Note Agreement"),

dated as of the date hereof, substantially in the form attached as Exhibit C hereto. Under the Note Agreement, Genentech shall loan Lexicon Four Million Dollars (U.S.$4,000,000), on or before December 31, 2002, pursuant to the terms and conditions set forth in such Note Agreement.

ARTICLE 8

INTELLECTUAL PROPERTY RESPONSIBILITIES

8.1 OWNERSHIP.

(a) Lexicon shall own all Lexicon Knock-Out Technology, Lexicon Pre-Existing Patents and Know-How and Restricted Rights Project Patents and Know-How. Genentech shall own all Genentech Gene Patents and Know-How and Project Patents and Know-How.

(b) Lexicon shall assign all right, title and interest in inventions encompassed within Project Patents and Know-How to Genentech by taking, and causing its employees and agents to take, all necessary actions and executing, and causing its employees and agents to execute, all necessary documents to assign such rights, title and interest to Genentech. Moreover, Lexicon covenants and agrees to cooperate, and cause its employees and agents to cooperate, with Genentech to enable Genentech to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and foreign countries. Such cooperation shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by Genentech (a) for perfecting the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting applications for reissuance of any of said patents; (d) for interference or other priority proceedings involving said invention; and (e) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by Lexicon, its employees and agents in providing such cooperation shall be paid for by Genentech.

8.2 PATENT PROSECUTION OF LEXICON KNOCK-OUT TECHNOLOGY, LEXICON PRE-EXISTING PATENTS AND RESTRICTED RIGHTS PROJECT PATENTS.

(a) Patentable Inventions. Lexicon shall be responsible, at its sole discretion and expense, for filing, prosecuting, and maintaining Lexicon Knock-Out Technology, Lexicon Pre-Existing Patents and Restricted Rights Project Patents; provided that Genentech shall be responsible, at its sole discretion, for filing, prosecuting, and maintaining Lexicon Pre-Existing Patents and Restricted Rights Project Patents (to the

extent exclusively licensed to Genentech) claiming Protein Candidates and uses thereof following their designation as Protein Candidates.

(b) Review and Comment. Lexicon shall provide Genentech with a copy of any patent application (including any provisional applications) within Lexicon Knock-Out Technology specifically related to a Protein Candidate prior to filing in any jurisdiction, for review and comment by Genentech. Lexicon shall reasonably consider comments and suggestions provided in a timely manner by Genentech. Genentech shall maintain any such applications in confidence.

(c) Notice of Decision. If Lexicon decides not to file an application within Lexicon Knock-Out Technology specifically related to a Protein Candidate in any country, it shall give Genentech prompt notice to this effect. After such notice, Genentech may file, prosecute (including any interference), and maintain, at its own expense, such application in such country, and Lexicon shall execute such documents and perform such acts as may be reasonably necessary for Genentech to continue such filing, prosecution, or maintenance.

(d) Prosecution and Maintenance. Lexicon agrees to use reasonable diligence to prosecute and maintain the Lexicon Knock-Out Technology specifically related to a Protein Candidate it filed and to prosecute any interference proceedings with respect thereto, unless it provides Genentech notice under Subsection (c) or (e). Upon Genentech's request, Lexicon shall provide Genentech with (i) a copy of communications with any patent office with respect to any Lexicon Knock-Out Technology specifically related to a Protein Candidate and (ii) the opportunity to review and comment on any or all such communications. Genentech shall provide its comments on any such communication within [**] after receipt of such communication, and should no comments be received by Lexicon on or before the [**], then it shall be deemed that Genentech has no comment to make on such communication. Lexicon shall reasonably consider comments and suggestions provided in a timely manner by Genentech. Genentech shall maintain any such communications in confidence. All such communications provided to Genentech pursuant to this Section shall be sent to a person to be designated by Genentech by written notice to Lexicon.

(e) Cessation of Prosecution or Maintenance. Lexicon shall give prior written notice to Genentech of any decision by Lexicon to cease the prosecution (including any interference) and maintenance of Lexicon Knock-Out Technology specifically related to a Protein Candidate and, in such case, Genentech shall have the right at its sole discretion and expense to continue such prosecution (including any interference) or maintenance. If Genentech continues such prosecution or maintenance, Lexicon shall execute such documents and perform such acts as may be reasonably necessary for Genentech to continue such prosecution or maintenance.

8.3 PATENT PROSECUTION OF GENENTECH GENE PATENTS, PROJECT PATENTS AND LEXICON PRE-EXISTING PATENTS AND RESTRICTED RIGHTS PROJECT PATENTS CLAIMING PROTEIN CANDIDATES.

(a) Patentable Inventions. Genentech shall be responsible, at its sole discretion and expense, for filing, prosecuting, and maintaining Genentech Gene Patents, Project Patents and, following designation of a Protein Candidate, any Lexicon Pre-Existing Patents and Restricted Rights Project Patents (to the extent exclusively licensed to Genentech) related to such Protein Candidate.

(b) Review and Comment. Genentech shall provide Lexicon with a copy of any patent application (including any provisional applications) within (i) Project Patents and (ii) Lexicon Pre-Existing Patents or Restricted Rights Project Patents relating to Protein Candidates prior to filing in any jurisdiction for review and comment by Lexicon. Genentech shall reasonably consider comments and suggestions provided in a timely manner by Lexicon. Lexicon shall maintain any such applications in confidence.

(c) Notice of Decision. If Genentech decides not to file an application within (i) Project Patents related to a specific Project or (ii) Lexicon Pre-Existing Patents or Restricted Rights Project Patents related to a Protein Candidate in any country, it shall give Lexicon prompt notice to this effect. After such notice, Lexicon may file, prosecute (including any interference), and maintain, at its own expense, such application in such country, and Genentech shall execute such documents and perform such acts as may be reasonably necessary for Lexicon to continue such filing, prosecution, or maintenance.

(d) Prosecution and Maintenance. Genentech agrees to use reasonable diligence to prosecute and maintain (i) Project Patents and (ii) Lexicon Pre-Existing Patents and Restricted Rights Project Patents related to Protein Candidates it filed and to prosecute any interference proceedings with respect thereto, unless it provides Lexicon notice under Subsection (c) or (e). Upon Lexicon's request, Genentech shall provide Lexicon with (i) a copy of communications with any patent office with respect to any (A) Project Patents and (B) Lexicon Pre-Existing Patents and Restricted Rights Project Patents related to Protein Candidates and (ii) the opportunity to review and comment on any or all such communications. Lexicon shall provide its comments on any such communication within [**] after receipt of such communication, and should no comments be received by Genentech on or before the [**], then it shall be deemed that Lexicon has no comment to make on such communication. Genentech shall reasonably consider comments and suggestions provided in a timely manner by Lexicon. Lexicon shall maintain any such communications in confidence. All such communications provided to Lexicon pursuant to this Section shall be sent to a person to be designated by Lexicon by written notice to Genentech.

(e) Cessation of Prosecution or Maintenance. Genentech shall give prior written notice to Lexicon of any decision by Genentech to cease the prosecution (including any interference) and maintenance of (i) Project Patents related to a specific Project or (ii) Lexicon Pre-Existing Patents or Restricted Rights Project Patents related to a Protein Candidate and, in such case, Lexicon shall have the right at its sole discretion and expense to continue such prosecution (including any interference) or maintenance. If Lexicon continues such prosecution or maintenance, Genentech shall execute

such documents and perform such acts as may be reasonably necessary for Lexicon to continue such prosecution or maintenance.

8.4 INFRINGEMENT AND MISAPPROPRIATION.

(a) Notice. Each Party shall promptly notify the other Party in writing of any alleged infringement or misappropriation, of which it becomes aware, by any person of any intellectual property licensed or sublicensed to a Party under this Agreement.

(b) Infringement of Lexicon Knock-Out Technology, Project Patents and Lexicon Pre-Existing Patents involving Small Molecule Drugs, and Restricted Rights Project Patents. Lexicon shall have the sole right, but not the obligation, to take appropriate steps to remove the infringement or alleged infringement of (i) Lexicon Knock-Out Technology, (ii) Project Patents and Lexicon Pre-Existing Patents involving infringement or alleged infringement of a Small Molecule Drug, and (iii) Restricted Rights Project Patents (except to the extent exclusively licensed to Genentech), including, without limitation, by initiation, prosecution and control, at its own expense, of any suit, proceeding or other legal action by counsel of its own choice. Any damages or other monetary awards recovered by Lexicon shall be owned by Lexicon.

(c) Notwithstanding the above, if the infringement or alleged infringement relates to Lexicon Knock-Out Technology specifically related to a Protein Candidate or to Project Patents and Lexicon Pre-Existing Patents involving infringement or alleged infringement of a Small Molecule Drug, Lexicon shall have the first right, but not the obligation, to take appropriate steps to remove the infringement or alleged infringement, including, without limitation, by initiation, prosecution and control, at its own expense, of any suit, proceeding or other legal action by counsel of its own choice, provided that Lexicon keeps Genentech reasonably informed of the progress of such suit, proceeding or legal action and provides Genentech with copies of any substantive documents related to such suit, proceeding or legal action and reasonable notice thereof. Lexicon shall notify Genentech of its decision to exercise its right to enforce Lexicon Knock-Out Technology specifically related to a Protein Candidate or to Project Patents and Lexicon Pre-Existing Patents involving infringement or alleged infringement of a Small Molecule Drug not later than [**] following its discovery or notice of alleged infringement of Lexicon Knock-Out Technology specifically related to a Protein Candidate or to Project Patents and Lexicon Pre-Existing Patents involving infringement or alleged infringement of a Small Molecule Drug. Genentech shall have the right, at its own expense, to be represented in any such action by counsel of its own choice. If Lexicon decides not to institute an infringement suit, proceeding or other legal action that Genentech feels is reasonably required to protect such Lexicon Knock-Out Technology specifically related to a Protein Candidate or to Project Patents and Lexicon Pre-Existing Patents involving infringement or alleged infringement of a Small Molecule Drug, Genentech shall have the right, at its sole discretion, to institute such suit, proceeding or other legal action and Lexicon shall have the right to be represented in such suit, proceeding or legal action, at its own expense, by counsel of its own choice. For this purpose, the Party not bringing

the suit shall execute such legal papers necessary for such suit as may be reasonably requested by the Party bringing suit.

In the case of infringement or alleged infringement of a Project Patent, Genentech in its sole discretion, may elect to assign such a Project Patent to Lexicon so that Lexicon may maintain such suit, proceding or legal action in its own name. In such event, the licenses to Genentech under such a Project Patent shall remain unaffected.

If Lexicon brings an action under this Subsection, any damages or other monetary awards recovered by Lexicon shall be applied proportionately first to defray the unreimbursed costs and expenses (including actual and reasonable attorneys' fees) incurred by the Parties in the action. If any balance remains, such balance shall be the property of Lexicon. If Lexicon fails to bring an action under this Subsection, but Genentech brings an action, any damages or other monetary awards recovered by Genentech shall be applied first to defray the costs and expenses (including actual and reasonable attorneys' fees) incurred in the action by the Parties. The balance that remains shall be the property of Genentech

(d) Infringement of Genentech Gene Patents and Know-How, Project Patents and Know-How, and Lexicon Pre-Existing Patents and Know-How and Restricted Rights Project Patents related to Protein Candidates. Genentech shall have the sole right, but not the obligation, to take appropriate steps to remove the infringement or alleged infringement of (i) Genentech Gene Patents and Know-How, and (ii) (A) Project Patents and Know-How and (B) Lexicon Pre-Existing Patents and Know-How (except to the extent such infringement or alleged infringement relates to the development of Small Molecule Drugs, which shall be controlled by subsection (c) above) and Restricted Rights Project Patents and Know-How (to the extent exclusively licensed to Genentech) related to Protein Candidates, including, without limitation, by initiation, prosecution and control, at its own expense, of any suit, proceeding or other legal action by counsel of its own choice. Any damages or other monetary awards recovered by Genentech shall be owned by Genentech.

(e) If Genentech brings action under Subsection (d) above with respect to (i) Project Patents and Know-How or (ii) Lexicon Pre-Existing Patents and Know-How or Restricted Rights Project Patents and Know-How (to the extent exclusively licensed to Genentech) related to Protein Candidates, any damages or other monetary awards recovered by Genentech shall be applied proportionately first to defray the unreimbursed costs and expenses (including actual and reasonable attorneys' fees) incurred by the Parties in the action. If any balance remains, Lexicon shall retain as its own property an amount of compensatory damages equal to the royalty that Lexicon would otherwise be entitled to under this Agreement if such remaining balance was treated as Genentech Net Sales. If any balance remains after Lexicon's retained amount, such balance shall be the property of Genentech.

8.5 NOTICE OF INFRINGEMENT BY A PARTY. If the making, using, importing, offer for sale, or selling a Licensed Product results in a claim against a Party of patent

infringement by any Third Person, the Party first having notice of that claim shall promptly notify the other Party in writing. The notice shall set forth the facts of the claim in reasonable detail.

If any notice of infringement is received by, or a suit is initiated against, either Party with respect to any Licensed Product, the Parties shall consult in good faith regarding the best response.

Notwithstanding the foregoing, if the claim involves an allegation of a violation of the trade secret rights of a Third Person, the Party accused of such violation shall have the obligation to defend against such claim and shall indemnify the other Party against all costs associated with such claim.

8.6 LITIGATION EXPENSES. Each Party shall assume and pay all of its own out-of-pocket expenses incurred in connection with all litigation described in this Article 8, including without limitation, the fees and expenses of that Party's counsel.

8.7 SETTLEMENT APPROVAL. No settlement, consent judgment or other voluntary final disposition of a suit being prosecuted by a Party under this Article may be entered into without the consent of the other Party if such settlement, consent judgment or other voluntary final disposition would alter, derogate, or diminish such other Party's rights under the Agreement, which consent will not be unreasonably withheld or delayed.

8.8 PATENT TERM EXTENSIONS. When appropriate, the Parties shall cooperate with each other in gaining patent term extension. All filings for such extension shall be made by the Party that is the owner of the patent.

8.9 AUDIT RIGHTS REGARDING INVOICES. In the event there is a good faith dispute over an amount owed by a Party under this Article, the disputed payment may be delayed, and such payment will not be considered delinquent pending a resolution of the Parties' dispute. Section 7.13 (i.e., "Royalty and Reasonable Expenses Records; Audit Rights") is applicable with regard to all invoices submitted by a Party to the other Party under this Article.

ARTICLE 9

CONFIDENTIALITY

9.1 OBLIGATIONS. Except upon obtaining the other Party's prior written consent to the contrary, each Party agrees that it will, for a period of [**] after the expiration or early termination of the entire Agreement:

(i) maintain in confidence, and not disclose to any person (except as provided in Section 9.2), the other Party's Confidential Information or any Project Confidential Information; and

(ii) not use such Confidential Information for any purpose except as contemplated in this Agreement.

9.2 AUTHORIZED DISCLOSURES OF CONFIDENTIAL INFORMATION.

(a) Permitted Persons. Each Party may disclose Confidential Information of the other Party or Project Confidential Information, without such other Party's prior written consent, to its and its Affiliates' (or the other Party's and its Affiliates') directors, employees, agents, consultants, permitted (sub)licensees, suppliers, and other Third Persons who:

(i) need to know such Confidential Information to assist the Party in fulfilling its obligations or exploiting its rights hereunder (or to determine their interest in providing such assistance); and

(ii) are bound by written confidentiality and non-use obligations no less stringent than those contained herein.

(b) Legally Required or Necessary. Each Party may also disclose the Confidential Information of the other Party or Project Confidential Information, without such other Party's prior written consent, to any person or to a government or regulatory authority to the extent that such disclosure is:

(i) required by Applicable Law; or

(ii) otherwise necessary for filing a patent application, prosecuting, maintaining, or enforcing a patent, obtaining or maintaining authorizations to conduct pre-clinical or clinical studies regarding a product, or obtaining or maintaining a registration regarding a product (provided such Party is entitled at the time to engage in such activities under this Agreement).

Prior to disclosing the other Party's Confidential Information or Project Confidential Information under this Subsection (b), the disclosing Party, to the extent practicable, will give the other Party a copy of the Confidential Information to be disclosed and provide such Party a reasonable opportunity to comment on the necessity and the text of the proposed disclosure. The disclosing Party agrees to consider such comments in good faith and to reasonably avail itself of available means under the applicable law to minimize the disclosure of such Confidential Information.

(c) Court Orders. Each Party may also disclose the Confidential Information of the other Party or Project Confidential Information, without such other Party's prior written consent, pursuant to an order of a regulatory authority or court of competent jurisdiction, provided that it promptly notifies the other Party of the required disclosure in order to provide such Party an opportunity to take legal action to prevent or limit such disclosure and, if asked, reasonably assists the other Party in pursuing such action.

(d) Legal Actions. Each Party may also disclose the Confidential Information of the other Party or Project Confidential Information, without such other Party's prior written consent, as is necessary to pursue or defend against a legal or regulatory action related to this Agreement.

9.3 DISCLOSURE OF THE TERMS OF THE AGREEMENT. Each Party agrees that it will maintain in confidence, and not to disclose, the terms of this Agreement without the prior written consent of the other Party, except as authorized under Subsections (a), (b), (c), or (d) of Section 9.2. In addition, if a Party receives a request from an authorized representative of a U.S. or foreign tax authority for a copy of the Agreement, that Party may provide a copy of the Agreement to such tax authority representative without advance notice to or the consent or cooperation of the other Party, but the disclosing Party must notify the other Party of the disclosure as soon as practical.

9.4 PUBLICITY ABOUT THE AGREEMENT. If a Party desires to issue a press release or other public statement or announcement concerning this Agreement, the subject matter hereof, or the research, development or commercial results of the products hereunder, it must first obtain the other Party's written approval of the proposed release or announcement; provided that such approval shall not be unreasonably withheld if required pursuant to the disclosure requirements of the Securities and Exchange Commission ("SEC") or the national securities exchange or other stock market on which such Party's securities are traded ("Exchange"). All press releases and other publicity will conform to the publicity strategy and policy developed by the Steering Committee in accordance with Section 2.2(v). Without limiting the generality of the foregoing, each Party agrees that the other Party will have no less than [**] to review and provide comment regarding any such proposed press release or publicity, unless a shorter review time is agreed to by both Parties. Neither Party may use any trademarks, logos, or symbols associated with the other Party without the prior written permission of such other Party. In the event that one Party reasonably concludes that a given disclosure is required by law and the other Party disagrees with the substance or extent of the disclosure, then the Party seeking such disclosure shall either (i) limit said disclosure to address the concerns of the other Party, or (ii) provide a written opinion from counsel stating that such disclosure is indeed required by law. With respect to complying with the disclosure requirements of the SEC, in connection with any required SEC filing of this Agreement, the filing Party shall seek confidential treatment of portions of this Agreement from the SEC and the other Party shall have the right to review and comment on such an application for confidential treatment prior to its being filed with the SEC. The non-filing Party shall provide its comments, if any, on such application as soon as practicable and in no event later than [**] after such application is provided to the non-filing Party. Notwithstanding the foregoing, Genentech shall not be prohibited from making a statement regarding the development or commercialization of a Protein Candidate, Licensed Product or Small Molecule Drug and Lexicon shall not be prohibited from making a statement regarding the development or commercialization of a Small Molecule Drug.

9.5 PUBLICATIONS. Genentech and Lexicon (as applicable, the "Publishing Party") may each publish or present data and/or results generated by or on behalf of such Publishing Party utilizing Knock-Out Mice or Progeny, subject to the prior review of the proposed disclosure by the other Party (the "Reviewing Party") solely to determine (i) whether the proposed disclosure contains Confidential Information of the Reviewing Party or Project Confidential Information or (ii) whether information contained in the proposed disclosure should be the subject of a patent application to be filed by Lexicon or Genentech prior to such disclosure. The Publishing Party shall provide the Reviewing Party with the opportunity to review any proposed abstract, manuscript or presentation which discloses the results of research conducted utilizing the Knock-Out Mice or Progeny by delivering a copy thereof to the Reviewing Party no less than [**] before its intended submission for publication or presentation. The Reviewing Party shall have [**] from its receipt of any such abstract, manuscript or presentation in which to notify the Publishing Party in writing of any specific objections to the disclosure, based on either the need to seek patent protection or concern regarding the specific disclosure of the Confidential Information of the Reviewing Party or Project Confidential Information. In the event the Reviewing Party objects to the disclosure, the Publishing Party agrees not to submit the publication or abstract or make the presentation containing the objected-to information until the Reviewing Party is given a reasonable additional period of time (not to exceed an additional [**]) to seek patent protection for any material in the disclosure which the Reviewing Party believes is patentable (subject, in all events, to Article 8) or, in the case of Confidential Information of the Reviewing Party, to allow the Publishing Party to delete any Confidential Information of Reviewing Party from the proposed disclosure. Each Party agrees to delete from the proposed disclosure any Confidential Information of the Reviewing Party upon request. Notwithstanding the foregoing, publication of Patent applications shall not be subject to this Section 9.5

ARTICLE 10

TERM AND TERMINATION OF AGREEMENT

10.1 TERM. This Agreement commences on the Effective Date and will remain in full force and effect, unless earlier terminated as provided in this Article 10, until the later of: (i) [**] after the last Project Gene becomes a Rejected Project hereunder; or (ii) the expiration of all royalty obligations under this Agreement between the Parties.

10.2 [**]

10.3 TERMINATION FOR INSOLVENCY OR BANKRUPTCY. Either Party may, by written notice, terminate this Agreement with immediate effect if the other Party:

(i) makes a general assignment for the benefit of creditors;

(ii) files an insolvency petition in bankruptcy;

(iii) petitions for or acquiesces in the appointment of any receiver, trustee or similar officer to liquidate or conserve its business or any substantial part of its assets;

(iv) commences under the laws of any jurisdiction any proceeding involving its insolvency, bankruptcy, reorganization, adjustment of debt, dissolution, liquidation or any other similar proceeding for the release of financially distressed debtors; or

(v) becomes a party to any proceeding or action of the type described above in (iii) or (iv), and such proceeding or action remains undismissed or unstayed for a period of more than sixty (60) days.

All rights and licenses granted under or pursuant to this Agreement by each Party as a licensor or sublicensor are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title XI, U.S. Code (the "Bankruptcy Code"), licenses (or, if applicable, sublicenses) of rights to "intellectual property" as defined under Section 101(35A) of the Bankruptcy Code. The Parties agree that each licensee (or, if applicable, sublicensee) of such rights under this Agreement shall retain and may fully exercise all rights and elections it would have in the case of a licensor (or sublicensor) bankruptcy under the Bankruptcy Code. Each Party agrees during the term of this Agreement to create or maintain current copies, or if not amenable to copying, detailed descriptions or other appropriate embodiments, of all such intellectual property licensed or sublicensed to the other Party.

10.4 SURVIVING OBLIGATIONS. The rights and obligations of the Parties under Article 1 (Definitions), Article 9 (Confidentiality), Article 11 (Disclaimers, Representations and Warranties), Article 12 (Indemnification), and Article 13 (General Provisions) survive the termination or expiration of this Agreement. Also, termination or expiration of the Agreement shall not affect the rights and obligations of the Parties that by their nature survive, including, but not limited to, those in Article 8 (Intellectual Property Responsibilities) and, to the extent applicable, the effects of termination contained in Sections 10.2 through 10.4. [**] The provisions of Sections 7.7 through 7.13 shall survive termination of this Agreement [**]. Finally, except as specifically provided to the contrary in this Agreement, termination or expiration of the Agreement shall be without prejudice to any rights that shall have accrued to the benefit of either Party prior to such termination or expiration and shall not relieve the Parties of any obligations accrued hereunder prior to such termination or expiration. This Section survives the termination or expiration of this Agreement for any reason.

ARTICLE 11

DISCLAIMERS, REPRESENTATIONS, AND WARRANTIES

11.1 CORPORATE EXISTENCE AND AUTHORITY. Each Party represents and warrants to the other Party that:

(i) it is a corporation or entity duly organized and validly existing under the law of the state or country of its incorporation; and

(ii) it has the full authority to enter into and perform all of the duties and obligations contemplated under this Agreement.

11.2 AUTHORIZED EXECUTION; BINDING OBLIGATION. Each Party represents and warrants to the other Party that its execution, delivery, and performance of this Agreement have been duly authorized and approved by all necessary corporate action and that this Agreement is binding, upon and enforceable against it in accordance with the Agreement's terms (subject to bankruptcy and similar laws affecting the rights of creditors generally).

11.3 NO CONFLICTS. Each Party represents and warrants that its execution, delivery, and performance of this Agreement:

(i) does not, except as otherwise described in this Agreement, require the approval or consent of any Third Person, which has not already been obtained;

(ii) does not, to the best of its knowledge, contravene any Applicable Law; and

(iii) does not contravene the provisions of, nor constitutes a default under, its Certificate of Incorporation or bylaws or any indenture, mortgage, contract or other agreement or instrument to which it is a signatory.

11.4 NO DEBARMENT. Each Party represents and warrants to the other that it is not debarred under the Generic Drug Enforcement Act of 1992 (the "Act") and is in compliance with the provisions of such Act. Each Party also covenants that, while this Agreement is in effect, it will comply with such Act, will not become debarred under the Act, and will not use in connection with this Agreement the services of any person debarred under such Act. Finally, upon request by the other Party, a Party will certify its compliance with the Act and this Section in writing to such other Party. If, at any time, a Party breaches a covenant under this Section, the breaching Party shall immediately notify the other Party of such fact.

11.5 REPRESENTATIONS AND WARRANTIES REGARDING LICENSES. With regard to each license granted under this Agreement, the Party granting such license (the "Granting

Party") will be deemed to represent and warrant to the other Party, at the time any such license is granted, that, to the Granting Party's Actual Knowledge:

(a) the Granting Party's grant of such license does not require the approval or consent of any person or entity, which has not already been obtained;

(b) the Granting Party's grant of such license does not contravene any Applicable Law;

(c) the Granting Party's grant of such license does not contravene the provisions of, nor constitutes a default under, the Granting Party's Certificate of Incorporation or bylaws or any indenture, mortgage, contract or other agreement or instrument to which the Granting Party is a signatory;

(d) the Granting Party has the ability and right to grant the other Party such license;

(e) except as previously identified in a written notice, the Granting Party has not received, nor been made aware of, any communications alleging that its practice of the licensed intellectual property rights has infringed or misappropriated (or that it, or the other Party, will infringe or misappropriate in carrying out such license) the intellectual property rights of any person or entity;

(f) except as previously identified in a written notice, there have been no claims made against the Granting Party asserting the invalidity, abuse, misuse, or unenforceability of the licensed intellectual property rights; and

(g) there are no outstanding encumbrances on, licenses under, or covenants-not-to-sue with respect to the licensed intellectual property rights, which, in the case of licenses or covenants not-to-sue, would conflict with the rights granted herein.

11.6 DISCLAIMER OF IMPLIED WARRANTIES. EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER PARTY MAKES ANY OTHER REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTE, OR OTHERWISE, AND EACH PARTY SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED OR STATUTORY WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE.

11.7 LIMITATION OF LIABILITY. NEITHER PARTY WILL BE LIABLE TO THE OTHER PARTY FOR INDIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOST PROFITS ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. HOWEVER, NOTHING IN THIS SECTION IS INTENDED TO LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY.

ARTICLE 12

INDEMNIFICATION

12.1 INDEMNIFICATION OBLIGATIONS.

(a) Genentech's Obligation. Genentech will defend, indemnify, and hold harmless Lexicon, its Affiliates and their respective directors, officers, shareholders, employees, and agents ("Lexicon Indemnitees"), from and against any and all liabilities, damages, losses, penalties, fines, costs, interest, and expenses, including, without limitation, reasonable attorneys' fees ("Damages"), arising from or occurring as a result of a Third Person's claim, action, suit, judgment, or settlement against a Lexicon Indemnitee that is due to or based upon:

(i) any breach of a representation, warranty, covenant, obligation, or agreement of Genentech under this Agreement;

(ii) any grossly negligent or more culpable act of Genentech or a Genentech Affiliate or sublicensee, or their respective directors, officers, shareholders, employees, and agents related to this Agreement; or

(iii) the development, manufacture, marketing, sale or other disposition, offer to sell, use, importation, or exportation of a Licensed Product, Protein Candidate or other product in the Field by Genentech or Genentech's Affiliates, sublicensees, subcontractors, or customers, or the customers of Genentech's Affiliates and sublicensees (any of clauses of (i) through (iii), a "Lexicon Third Person Claim").

[**] Genentech's obligations under this Subsection shall survive the expiration or termination of this Agreement for any reason.

(b) Lexicon's Obligation. Lexicon will defend, indemnify, and hold harmless Genentech, its Affiliates and their respective directors, officers, shareholders, employees and agents ("Genentech Indemnitees"), from and against any and all Damages arising from or occurring as a result of a Third Person's claim, action, suit, judgment, or settlement against a Genentech Indemnitee that is due to or based upon:

(i) any breach of a representation, warranty, covenant, obligation, or agreement of Lexicon under this Agreement;

(ii) any grossly negligent or more culpable act of Lexicon or a Lexicon Affiliate or sublicensee, or their respective directors, officers, shareholders, employees, and agents related to this Agreement (any of clauses (i) through (ii), a "Genentech Third Person Claim"); or

(iii) the development, manufacture, marketing, sale or other disposition, offer to sell, use, importation, or exportation of a Small Molecule Drug by Lexicon or Lexicon's Affiliates, sublicensees, subcontractors, or customers, or the customers of Lexicon's Affiliates and sublicensees.

[**] Lexicon's obligations under this Subsection shall survive expiration or termination of this Agreement for any reason.

12.2 INDEMNIFICATION PROCEDURES.

(a) Notice. Promptly after a Genentech Indemnitee or a Lexicon Indemnitee (each, an "Indemnitee") receives notice of a pending or threatened Lexicon Third Person Claim or Genentech Third Person Claim, as the case may be (an "Action"), such Indemnitee shall give written notice of the Action to the Party to whom the Indemnitee is entitled to look for indemnification pursuant to this Article 12 (the "Indemnifying Party"). However, an Indemnitee's delay in providing or failure to provide such notice shall not relieve the Indemnifying Party of its indemnification obligations, except to the extent it can demonstrate prejudice due to the delay or lack of notice.

(b) Defense. Upon receipt of notice under Subsection (a) from the Indemnitee, the Indemnifying Party will have the duty to either to compromise or defend, at its own expense and by counsel (reasonably satisfactory to Indemnitee), such Action. The Indemnifying Party will promptly (and in any event not more than [**] after receipt of the Indemnitee's original notice) notify the Indemnitee in writing of its intention to either compromise or defend such Action. Once the Indemnifying Party notifies the Indemnitee of its election to assume the defense of an Action, the Indemnifying Party is not liable to the Indemnitee for the fees of other counsel or any other expenses subsequently incurred by the Indemnitee in connection with such defense, other than the Indemnitee's reasonable costs of investigation and cooperation. However, the Indemnitee shall have the right to employ separate counsel and to participate in the defense of an Action (and the Indemnifying Party shall bear the reasonable fees, costs, and expenses of such counsel) if:

(i) the use of the counsel chosen by the Indemnifying Party would present such counsel with a conflict of interest;

(ii) the actual or potential defendants in, or targets of, such Action include both the Indemnifying Party and the Indemnitee, and the Indemnitee reasonably concludes that there may be legal defenses available to it that are different from or additional to those available to the Indemnifying Party (in which case the Indemnifying Party shall not have the right to assume the defense of such Action on the Indemnitee's behalf);

(iii) the Indemnifying Party does not employ counsel satisfactory to the Indemnitee to represent the Indemnitee within a reasonable time after the Indemnitee's notice of such Action;

(iv) the Indemnifying Party denies or fails to timely admit its obligation to defend and indemnify the Action; or

(v) in the reasonable opinion of counsel to the Indemnitee, the claim could result in the Indemnitee becoming subject to injunctive relief or relief other than the payment of Damages that could have a materially adverse effect on the ongoing business of the Indemnitee.

(c) Cooperation. The Indemnitee shall cooperate fully with the Indemnifying Party and its legal representatives in the investigation and defense of an Action. The Indemnifying Party will keep the Indemnitee informed on a reasonable and timely basis as to the status of such Action (to the extent the Indemnitee is not participating jointly in the defense of such Action) and conduct the defense of such Action in a prudent manner.

(d) Settlement. If an Indemnifying Party assumes the defense of an Action, no compromise or settlement of such Action may be effected by the Indemnifying Party without the Indemnitee's written consent (which consent shall not be unreasonably withheld or delayed), unless (i) there is no finding or admission of any violation of law or any violation of the rights of any person and no effect on any other claims that may be made against the Indemnitee, (ii) the sole relief provided is monetary damages that are paid in full by the Indemnifying Party, and (iii) the Indemnitee's rights under this Agreement are not adversely affected. In any event, the Indemnitee shall have no right to settle any such Action without the prior written consent of the Indemnifying Party, unless (i) there is no finding or admission of any violation of law or any violation of the rights of any person and no effect on any other claims that may be made against the Indemnifying Party, (ii) the sole relief provided is monetary damages that are paid in full by the Indemnitee, and (iii) the Indemnifying Party's rights under this Agreement are not adversely affected; any settlement under this Subsection (d) without the prior written consent of the Indemnifying Party shall relieve the Indemnifying Party of its obligations under this Article 12.

12.3 INSURANCE.

(a) During the term of this Agreement, each Party shall maintain an ongoing basis, Commercial General Liability ("CGL") insurance, including contractual liability, in the minimum amount of [**] per occurrence and [**] annual aggregate combined single limit for bodily injury and property damage liability; provided that Lexicon may satisfy such requirement by maintaining a combination of CGL insurance and umbrella insurance in such combined per occurrence and aggregate amounts. Within [**] of the Effective Date, the Parties shall provide one another with their respective certificates of such insurance. The aggregate deductible under CGL shall be reasonably satisfactory to the other Party. The insurance policy shall be an occurrence or claims-made form, but if only on a claims made form, the insurance coverage shall be maintained for at least [**] following completion of the work performed under this Agreement.

(b) Commencing not later than [**] prior to the first use in humans of the first potential Licensed Product and thereafter for the period of time required below, Genentech shall obtain and maintain on an ongoing basis Products Liability insurance (including contractual liability), with a reputable carrier, in the amount of at least [**] per occurrence and annual aggregate combined single limit for bodily injury and property damage liability. No later than [**] prior to the first use in humans of the first potential Licensed Product with respect to the Product Liability insurance coverage, Genentech shall provide to Lexicon a certificate evidencing all such coverage required hereunder. Thereafter Genentech shall maintain such Products Liability insurance coverage without interruption during the term of this Agreement and for a period of at least [**] after the expiration or termination of the term, except as provided under the next paragraph below.

(c) In addition, the Parties agree with respect to (a) and (b) above that:

(i) The Parties shall use Commercially Reasonable Efforts to name each other as additional insureds under their respective CGL and Products Liability insurance;

(ii) Each of the above insurance policies shall be primary insurance as respects each Party's participation under this Agreement; and

(iii) Each of the above insurance coverage shall be maintained with an insurance company or companies having an A.M. Best rating of "A" or better.

ARTICLE 13

DISPUTE RESOLUTION

13.1 INTERNAL RESOLUTION. The Parties shall attempt to settle any dispute, controversy or claim arising out of or relating to the validity, enforceability or performance of this Agreement, including disputes relating to alleged breach or termination of this Agreement but excluding any determination as to the validity of the Parties' patents (hereinafter, the "Dispute"), in accordance with the provisions of this Section 13.1. The Parties have entered into the Agreement in good faith and in the belief that it is mutually advantageous to them. It is with that same spirit of cooperation that they pledge to attempt to resolve any Dispute amicably. Accordingly, the Parties agree that if any Dispute should arise, it shall be referred to a member of senior management from each of the Parties and from any sublicensee (if any).

13.2 ARBITRATION. Should the senior management be unable to resolve the dispute, any controversy, dispute or claim which may arise out of or in connection with this Agreement, or the breach, termination or validity thereof, shall be settled by final and binding arbitration pursuant to the Arbitration Rules of the American Arbitration Association as hereinafter provided:

(a) The arbitration tribunal shall consist of three arbitrators. Each party shall nominate in the request for arbitration and the answer thereto one arbitrator and the two arbitrators so named will then jointly appoint the third arbitrator as chairman of the arbitration tribunal. If one party fails to nominate its arbitrator or, if the parties' arbitrators cannot agree on the person to be named as chairman within [**], the President of the American Arbitration Association shall make the necessary appointments for arbitrator or chairman.

(b) The place of arbitration shall be in a neutral location (i.e., not California or Texas) to be decided by the Party not initiating such arbitration, and the arbitration proceedings shall be held in English. The procedural law of the State of Delaware shall apply where the said Arbitration Rules are silent.

(c) The decision of the arbitration tribunal must be in writing and must specify the basis on which the decision was made, and the award of the arbitration tribunal shall be final and judgement upon such an award may be entered in any competent court or application may be made to any competent court for juridical acceptance of such an award and order of enforcement.

ARTICLE 14

GENERAL PROVISIONS

14.1 COMMON INFORMATION TECHNOLOGY. In order to facilitate efficient communication between Genentech and Lexicon regarding the Projects, the Parties agree to establish and maintain a secure communication link between Genentech and Lexicon and work together to identify and support hardware, software, and services, in accordance with Genentech's platforms and technology architecture, appropriate for the sharing of Project information. Each Party shall bear its own costs identifying, acquiring, operating, and maintaining such hardware, software, and services.

14.2 LEGAL COMPLIANCE. Each Party will comply with all Applicable Laws in the performance of its obligations or the exercise of its rights hereunder.

14.3 ASSIGNMENT. (a) Neither Party may assign this Agreement (nor any part thereof) without the prior written consent of the other Party. Notwithstanding the foregoing, if either Party is a party to a merger and it will not be the surviving entity of such transaction, such Party may assign, without the other Party's prior written consent (but with [**] prior written notice to the other Party) all of its rights and obligations hereunder to the surviving or new entity resulting from such merger so long as the surviving or new entity expressly agrees in writing to assume all obligations of such Party under this Agreement.

(b) Any attempted assignment of this Agreement, other than as allowed in this Section, will be of no force or effect. Subject to the provisions set forth in this Section, this Agreement will be binding upon and will inure to the benefit of the successors and permitted assigns of the Parties.

14.4 INDEPENDENT CONTRACTORS. It is understood and agreed that the Parties are independent contractors and are engaged in the operation of their own respective businesses, and neither Party is to be considered the agent of the other Party or to have a fiduciary responsibility to such other Party for any purpose whatsoever. The rights and obligations of each Party under this Agreement do not constitute the formation of a partnership for federal, state, or any other tax purpose. Each Party shall file all income tax returns consistent with that position. Neither Party will have any authority to enter into any contracts or assume any obligations for the other Party nor make any warranties or representations on behalf of that other Party.

14.5 GOVERNING LAW. This Agreement and all amendments, modifications, alterations, or supplements hereto, and the rights of the Parties hereunder, will be construed under and governed by the laws of the State of Delaware exclusive of its conflicts of laws principles.

14.6 ENTIRE AGREEMENT. This Agreement, including all Exhibits, Schedules and attachments hereto, constitutes the entire agreement between Lexicon and Genentech with respect to the subject matter hereof, and all previous or other negotiations, representations and understandings with respect to the subject matter hereof between Lexicon and Genentech, including without limitation, the Origianl Agreement, are superceded as of the Effective Date. This Agreement has been prepared jointly and will not be strictly construed against either Party.

14.7 SEVERABILITY. All rights and restrictions contained herein may be exercised and will be applicable and binding only to the extent that they do not violate any applicable laws and are intended to be limited to the extent necessary so that they will not render this Agreement illegal, invalid or unenforceable. If any provision or portion of any provision of this Agreement, not essential to the commercial purpose of this Agreement, will be held to be illegal, invalid or unenforceable by a court of competent jurisdiction, it is the intention of the Parties that the remaining provisions or portions thereof shall constitute their agreement with respect to the subject matter hereof, and all such remaining provisions, or portions thereof, will remain in full force and effect. To the extent legally permissible, any illegal, invalid or unenforceable provision of this Agreement will be replaced by a valid provision which will implement the commercial purpose of the illegal, invalid, or unenforceable provision. In the event that any provision essential to the commercial purpose of this Agreement is held to be illegal, invalid or unenforceable and cannot be replaced by a valid provision which will implement the commercial purpose of this Agreement, the Parties will promptly negotiate a suitable resolution (potentially even termination of the Agreement) in good faith.

14.8 FORCE MAJEURE. Any delays in, or failure of, performance of any obligations of a Party will not constitute a default hereunder or give rise to any claim for damages, if, and to the extent, caused by Force Majeure. The Party asserting this Section will promptly notify the other Party of the event constituting Force Majeure, of all relevant details of the occurrence, and an estimate of how long such Force Majeure event shall continue. The affected Party will also take reasonable and diligent actions to cure such cause, and the Parties will consult with each other in order to find a fair solution and shall use all reasonable endeavors to minimize the consequences of such Force Majeure.

14.9 COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

14.10 NOTICES. All notices, statements, and reports required to be given under this Agreement will be in writing, delivered in person, via registered or certified mail postage prepaid, or through a professional courier service (e.g., FedEx or DHL), and addressed as follows:

To Lexicon:	Lexicon Genetics Incorporated 8800 Technology Forest Place Woodlands, TX 77381-1160 Fax: (281) 863-8088 Phone: (281) 863-3000 Attn: President, CEO
With a copy to:	General Counsel
To Genentech:	Genentech, Inc. 1 DNA Way South San Francisco, California 94080 Fax: (650) 952-9881 Phone: (650) 225-1000 Attn: Corporate Secretary
With a copy to:	Vice President, Research

Notice will be deemed to have been given when delivered if personally delivered on a business day, on the [**] after dispatch if sent by a professional courier, and on the [**] following the date of mailing if sent by registered or certified mail. A Party may change the address to which notices to such Party are to be sent by giving written notice to the other Party at the address and in the manner provided above. Any notice may be given, in addition to the manner set forth above, by facsimile or e-mail, provided that the Party giving such notice obtains acknowledgment by facsimile or e-mail that such notice has been received by the Party to be notified. Notices made in this manner will be deemed to have been given when such acknowledgment has been transmitted.

14.11 WAIVER. The failure of either Party to enforce any provision of this Agreement at any time will not be construed as a present or future waiver of such provision or any other provision of this Agreement. The written waiver by either Party, pursuant to this Section 14.11, of any provision or requirement hereunder will neither be deemed nor operate as a future waiver of such or any other provision or requirement.

14.12 MODIFICATIONS. No amendment, waiver or modification of this Agreement will be valid or binding on either Party unless made in writing and signed by duly authorized representatives of both Parties.

14.13 HEADINGS. All headings and captions used in this Agreement are for convenience only, and are not intended to have any substantive effect.

14.14 NO IMPLIED LICENSES. Except as specifically provided for in this Agreement, neither Party grants, expressed or implied, any license to the other Party under this Agreement.

14.15 NO THIRD PARTY BENEFICIARIES: Except as expressly provided herein, this Agreement shall not confer any rights or remedies upon any Third Person other than the Parties and their respective successors and permitted assigns.

14.16 R&D TAX CREDITS. To the extent permitted by Applicable Law, Genentech will be entitled to any tax credits due on account of research and development expenses it pays to Lexicon under this Agreement.

14.17 RESPONSIBLE FOR SUBLICENSEES. If a Party sublicenses to another person any of the rights it received under this Agreement from the other Party, such Party agrees to remain responsible to other Party for the performance and compliance of such sublicensee with all obligations under this Agreement that apply to such sublicensee.

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14.18 FURTHER ACTIONS. Each Party agrees to execute, acknowledge, and deliver such further instruments, and to do all other acts, as may be necessary or appropriate to carry out the purposes and intent of this Agreement.

IN WITNESS WHEREOF, each Party has executed this Agreement by its respective, duly authorized officer as of the day and year herein written.

GENENTECH, INC.	LEXICON GENETICS INCORPORATED
/s/ Arthur D. Levinson	/s/ Arthur T. Sands
By: Arthur D. Levinson	By: Arthur T. Sands
Title: CEO	Title: President and CEO

EXHIBIT A

Comprehensive Therapeutic Protein Discovery & Validation Program

First Pass Phenotypic Analysis of Project Genes

[**]

EXHIBIT C

NOTE AGREEMENT

THIS NOTE AGREEMENT is entered into as of December 17, 2002 (this "Note Agreement"), between LEXICON GENETICS INCORPORATED, A Delaware corporation (herein called "Borrower"), and GENENTECH, INC., a Delaware corporation (herein called "Lender").

1. COMMITMENT. Subject to all the terms and conditions of this Note Agreement and prior to the termination of its commitment as hereinafter provided, Lender hereby agrees to make a loan (the "Loan"), up to an aggregate principal amount not to exceed $4,000,000, pursuant to Article 7.14 of the Collaboration and License Agreement dated as of the date hereof, between Borrower and Lender (the "Collaboration Agreement"). The Loan shall become available to Borrower on or before December 31, 2002. The Loan shall be evidenced by a convertible promissory note, in the form of the Convertible Promissory Note attached as Exhibit A hereto and incorporated herein by this reference (the "Note"), which Note shall reflect the date of payment of the Loan (the "Effective Date"). The Loan will be advanced to Borrower in immediately available funds by wire transfer to a deposit account of Borrower in accordance with the wire transfer instructions set forth beneath Borrower's signature to this Agreement (as the same may be amended by written notice from Borrower to Lender).

2. LOAN.

A. MATURITY DATE. Borrower promises to pay to Lender the entire outstanding principal balance (and all accrued interest thereon) of the Loan on or before the date (the "Maturity Date") that is the earlier of (i) December 31, 2005, (ii) six (6) months after the termination of the Collaboration Agreement or (iii) the date of an Event of Default as set forth in Section 8 below.

(1) PAYMENT IN NOTE SHARES. At Borrower's option, subject to the limitations set forth in Section 2.A.(3), on the Maturity Date, Borrower may elect to pay the outstanding principal balance (and all accrued interest thereon) of the Loan in (a) shares of Borrower's common stock, par value $0.001 per share (the "Common Stock"), pursuant to the Note (the "Note Shares"), (b) immediately available funds, or (c) a combination of Note Shares and immediately available funds.

(2) OPTIONAL PREPAYMENT. At Borrower's option, subject to the limitations set forth in Section 2.A.(3), Borrower may at any time, upon fifteen (15) days written notice to Lender, prepay all or any portion of the outstanding principal balance (and all accrued interest on the principal amount so prepaid) of the Loan in (a) Note Shares pursuant to the Note, (b) immediately available funds, or (c) a combination of Note Shares and immediately available funds.

(3) LIMITATIONS ON PAYMENT IN NOTE SHARES.

(a) Borrower shall have no right to pay in Note Shares any amounts in respect of principal outstanding under the Loan and accrued interest in respect thereof to the extent that the number of such Note Shares, calculated pursuant to Section 3 of the Note, would, when added to all other shares of Common Stock of Borrower then owned by Lender or issuable to Lender pursuant to the terms of any convertible securities of Borrower then owned by Lender, cause Lender to own, in the aggregate, shares of Common Stock equal to more than 15% of Borrower's issued and outstanding Common Stock plus the Note Shares so contemplated to be issued, calculated at the time such payment in Note Shares is contemplated. In such event, then Borrower shall pay in Note Shares only up to such amount as, in Lender's good faith opinion, based on the advice of legal counsel, would not exceed 15% of Borrower's issued and outstanding Common Stock plus the Note Shares so issued unless Lender elects, in its sole discretion, to receive payment of the entire amount due under the Loan in Note Shares, notwithstanding the foregoing limitation on repayment in Note Shares. Any remaining balance payable to Lender in respect of the Loan shall be paid in immediately available funds.

(b) Borrower may make payments in Note Shares only to the extent that Borrower then has in reserve and available sufficient of its authorized but unissued shares of Common Stock to effect such payment in Note Shares.

B. INTEREST ON LOAN. Interest shall accrue on the sum of the daily unpaid principal balance of the Loan outstanding on each day in lawful money of the United States of America from the Effective Date until all such principal amounts shall have been paid in full, which interest shall accrue at a rate equal to eight percent (8%) per annum. Interest shall be compounded quarterly and computed at the above rate on the basis of the actual number of days elapsed year of 365 days; provided, however, that in no event shall Borrower be bound to pay for the use or forbearance of the money loaned pursuant hereto, interest of more than the maximum rate permitted by law to be charged by Lender; the right to demand any such excess being hereby expressly waived by Lender. All accrued and unpaid interest attributable to the principal amount of the Loan then being paid shall be payable concurrently with such payment of principal, whether in connection with any prepayment, on the Maturity Date or otherwise.

C. USE OF PROCEEDS. The Loan may only be used for the generation and phenotypic analysis of knock-out mice and Over-Expression Mice for Project Genes (as such terms are defined in the Collaboration Agreement).

3. DELIVERY AND APPLICATION OF PAYMENTS. Payment to Lender of all amounts due hereunder shall be made in immediately available funds on the date when due by wire transfer to a deposit account of Lender in accordance with the wire transfer instructions set forth beneath Lender's signature to this Agreement (as the same may be amended by written notice from Lender to Borrower). Payment to Lender of all amounts due hereunder payable in Note Shares shall be made by delivery of an appropriate stock certificate within two business days after the Maturity Date (in the case of a payment pursuant to Section 2.A.(l)) or two business days after the effective date of an election by Borrower to prepay (in the case of a prepayment pursuant to Section 2.A.(2)), to the office of Lender at I DNA Way, South San Francisco, California 94080,

Attention: Treasurer, or at such other place as may be designated in writing by Lender from time to time. If any payment date falls on a day that is not a business day, the payment due date shall be extended to the next business day. Any payment or prepayment received or deemed received in respect of the Loan shall be applied first, to accrued and unpaid interest, and then, to the outstanding principal balance of the Note.

4. BORROWER REPRESENTATIONS AND COVENANTS. Borrower hereby represents, warrants and covenants to Lender as follows:

A. AUTHORITY. Borrower has full right, power, authority and capacity to enter into this Note Agreement and the Note (collectively, the "Loan Documents") and to consummate the transactions contemplated hereby and thereby. Upon due execution and delivery by Borrower, the Loan Documents will constitute a legal, valid and binding obligation of Borrower enforceable in accordance with its terms, subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors and rules of law governing specific performance, injunctive relief or other equitable remedies.

B. GOOD STANDING. Borrower is qualified to do business and is in good standing in the State of Delaware and each jurisdiction in which the failure to so qualify would have a material adverse effect on the business, operations, financial condition or results of operations of Borrower and its subsidiaries, taken as a whole.

C. CONSENTS. The execution and delivery of the Loan Documents, and performance by Borrower of its obligations hereunder and thereunder, have been duly authorized by all necessary corporate action on the part of Borrower. No consent, approval, order or authorization of any federal, state or local governmental authority on the part of Borrower is required in connection with the consummation of the transactions contemplated by this Note Agreement.

D. COMPLIANCE WITH SECURITIES LAWS. Assuming the accuracy of the representations made by Lender in Section 5 hereof, the Note Shares issuable upon conversion of any portion of the Note will be issued to Lender in compliance with (i) the registration and prospectus delivery requirements of the Securities Act of 1933, as amended (the "Securities Act"), and the registration and qualification requirements of all applicable securities laws of the states of the United States or (ii) applicable exemptions therefrom.

E. NO CONFLICTS. The execution and delivery by Borrower of the Loan Documents and consummation of the transactions contemplated thereby do not and will not (i) violate the Certificate of Incorporation or Bylaws of Borrower or any material judgment, order, writ, decree, statute, rule or regulation applicable to Borrower; (ii) violate any provision of, or result in the breach of, any material mortgage, indenture, agreement, instrument, contract, judgment or decrees to which Borrower is a party or by which it is bound; or (iii) result in the creation or imposition of any lien upon any property, asset or revenue of Borrower or the suspension, revocation or nonrenewal of any material permit, license, authorization or approval applicable to Borrower, its business or operations, or any of its assets or properties.

F. DISCLOSURE. No representation or warranty of Borrower contained in the Loan Documents, the Collaboration Agreement or any other documents, certificate or statement furnished to Lender by or on behalf of Borrower in connection with the transactions contemplated hereby or thereby contains any untrue statement of a material fact or omits to state a material fact necessary to make the statement contained herein or therein nor misleading. To the best of Borrower's knowledge, there is no fact known to Borrower that materially adversely affects the business, operations, property, assets, condition or prospects of Borrower that has not been disclosed in any filing with the Securities and Exchange Commission.

5. LENDER REPRESENTATIONS AND COVENANTS. Lender hereby represents, warrants and covenants to Borrower as follows:

A. AUTHORITY. Lender has full right, power, authority and capacity to enter into this Note Agreement and to consummate the transactions contemplated hereby. Upon due execution and delivery by Lender, this Note Agreement will constitute a legal, valid and binding obligation of Lender enforceable in accordance with its terms, subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors and rules of law governing specific performance, injunctive relief or other equitable remedies.

B. INVESTMENT EXPERIENCE; INVESTMENT INTENT; ETC. (i) Lender is knowledgeable, sophisticated and experienced in making, and is qualified to make, decisions with respect to investments in shares presenting an investment decision like that involved in the purchase of the Note and the Note Shares that may be issued in payment thereof (collectively, the "Securities"); (ii) Lender has received all the information it considers necessary or appropriate for deciding whether to purchase the Securities; (iii) Lender is acquiring the Securities in the ordinary course of its business and for its own account solely for investment and with no present intention of distributing any of such Securities, except in accordance with an effective Registration Statement or otherwise pursuant to an available exemption from registration under the Securities Act, and no arrangement or understanding exists with any other person regarding the distribution of such Securities; (iv) Lender will not, directly or indirectly, offer, sell, pledge, transfer or otherwise dispose of (or solicit any offers to buy, purchase or otherwise acquire or take a pledge of) the Securities except in compliance with the Securities Act, and the rules and regulations promulgated thereunder; and (v) Lender is an "accredited investor" within the meaning of Rule 501 of Regulation D promulgated under the Securities Act.

C. LENDER UNDERSTANDING AND AGREEMENTS. Lender acknowledges and agrees that it will acquire the Securities being purchased by it in transactions not involving a public offering and that such Securities are subject to certain restrictions as to resale under the federal and state Securities laws. Lender agrees and understands that each certificate representing Note Shares issued in payment of the Note delivered on transfer of or in substitution for any such certificate, shall bear a legend in substantially the following form:

> THE SECURiTIES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS IMPOSED BY THE SECURiTIES ACT OF 1933, AS AMENDED, AND

APPLICABLE STATE SECURITIES LAW. THE SHARES MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF REGISTRATION OR AN EXEMPTION THEREFROM UNDER THE SECURITIES ACT OF 1933 AND ANY APPLICABLE STATE SECURITIES LAWS.

Lender agrees that it will not sell, pledge, assign, transfer or otherwise dispose (collectively, "Transfer") of any Securities unless the Transfer will be made pursuant to an exemption from the registration requirements of the Securities Act or pursuant to an effective registration statement under the Securities Act and pursuant to an exemption from any applicable state securities laws or an effective registration or other qualification under any applicable state securities laws.

D. CONSENTS. The execution and delivery of this Note Agreement, and performance by Lender of its obligations hereunder, have been duly authorized by all necessary corporate action on the part of Lender.

6. CONDITIONS TO MAKING OF LOAN. Lender's obligation to make the Loan to Borrower under the Loan Documents is subject to satisfaction of each of the following conditions as of the date the Loan is to be made, any of which may be waived in whole or in part by Lender:

A. REPRESENTATIONS AND WARRANTIES. The representations and warranties made by Borrower in Section 4 hereof shall be true and correct as of the date the Loan is to be made, except that to the extent any representation or warranty is made as of a specified date, it shall have been true and correct as of such date.

B. NO DEFAULTS. No Event of Default or event which, with notice or lapse of time or both would become an Event of Default, shall have occurred and be continuing under the Loan Documents, and no breach shall have occurred and be continuing under the Collaboration Agreement.

7. SUBORDINATION. The indebtedness evidenced by the Note is hereby subordinated, only in right of payment to the prior payment of (a) the indebtedness of Borrower outstanding as of the date of this Note Agreement to banks or commercial finance or other lending institutions regularly engaged in the business of lending money, whether or not secured ("Senior Indebtedness") and (b) any indebtedness or debentures, notes or other evidences of indebtedness issued in exchange for Senior Indebtedness.

8. DEFAULT AND REMEDIES. The occurrence of any one or more of the following shall constitute an "Event of Default": (a) default in the payment of any obligation by Borrower under the Note within five (5) business days after the date the same became due and payable; (b) any representation or warranty made by Borrower in Section 4 of this Note Agreement shall prove to have been untrue in any material respect when made or deemed made; (c) except for any failure to pay as described in clause (a) above, breach of any covenant contained in the Loan Documents

if such breach shall not have been cured to the reasonable satisfaction of Lender within sixty (60) days after Borrower shall have received written notice thereof from Lender; (d) Borrower files any petition or action for relief under any bankruptcy, reorganization, insolvency or moratorium law or any other law for the relief of, or relating to, debtors, now or hereafter in effect, or makes any assignment for the benefit of creditors or takes any corporate action in furtherance of any of the foregoing; (e) an involuntary petition is filed against Borrower (unless such petition is dismissed or discharged within sixty (60) days) under any bankruptcy statute now or hereafter in effect, or a custodian, receiver, trustee, assignee for the benefit of creditors (or other similar official) is appointed to take possession, custody or control of any property, of Borrower (provided that no Loan will be made prior to the dismissal of such proceeding); (f) Lender terminates the Collaboration Agreement pursuant to Article 10.2 of the Collaboration Agreement; or (g) failure to pay when due any amount in respect of Senior Indebtedness, or occurrence of any other default in respect of Senior Indebtedness that pursuant to which the holder thereof accelerates the due date thereof. Upon the occurrence and during the continuance of an Event of Default, Lender may, at its option, upon notice to Borrower, do any one or more of the following: (i) terminate its obligation to make the Loan to Borrower as provided in Section 2 hereof if such Loan has not yet been made; provided that in the case of an Event of Default pursuant to clause (d) or (e) above, Lender's obligation to make the Loan to Borrower as provided in Section 3 hereof shall automatically terminate, without notice to Borrower, if such Loan has not yet been made; (ii) declare all sums evidenced hereby immediately due and payable; provided that in the case of an Event of Default pursuant to clause (d) or (e) above, all sums evidenced hereby shall be automatically and immediately due and payable, without notice to or demand on Borrower; or (iii) exercise any remedies of an unsecured creditor under applicable law.

9. GOVERNING LAW. This Agreement shall be deemed to have been made in the State of California and the validity, construction, interpretation, and enforcement hereof, and the rights of the parties hereto, shall be determined under, governed by, and construed in accordance with the internal laws of the State of California, without regard to principles of conflicts of law.

10. MISCELLANEOUS PROVISIONS.

A. Nothing herein shall in any way limit the effect of the conditions set forth in any other security or other agreement executed by Borrower, but each and every condition hereof shall be in addition thereto.

B. No failure or delay on the part of Lender, in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof.

C. All rights and remedies existing under this Note Agreement or any other Loan Document are cumulative to, and not exclusive of, any rights or remedies otherwise available.

D. All headings and captions in this Note Agreement and any related documents are for convenience only and shall not have any substantive effect.

E. This Note Agreement may be executed in any number of counterparts, each of which when so delivered shall be deemed an original, but all such counterparts shall constitute but one and the same instrument. Each such agreement shall become effective upon the execution of a counterpart hereof or thereof by each of the parties hereto and telephonic notification that such executed counterparts has been received by Borrower and Lender.

F. Neither party shall assign any of its rights or obligations hereunder except: (a) as incident to the merger, consolidation, reorganization or acquisition of stock or assets affecting substantially all of the assets or voting control of the assigning party; (b) to any wholly-owned Affiliate of such party; provided, however, that such assignment shall not relieve the assigning party of its responsibilities for performance of its obligations under this Note Agreement; or (c) with the prior written consent of the other party (in its sole discretion). This Note Agreement shall be binding upon the successors and permitted assigns of the parties, and the name of a party appearing herein shall be deemed to include the names of such party's successor's and permitted assigns to the extent necessary to carry out the intent of this Agreement. Any assignment not in accordance with this section shall be null and void.

(Signature page follows)

IN WITNESS WHEREOF, the parties hereto have caused this Note Agreement to be executed as of the date first written above.

LENDER:	BORROWER:
GENENTECH, INC., a Delaware corporation	LEXICON GENETICS INCORPORATED, a Delaware corporation
By: _____	By: _____
	Name: _____
Name: Thomas T. Thomas	Title: _____
Title: Treasurer	
Wire Transfer Instructions:	Wire Transfer Instructions:

Account Name: Genentech, Inc.
Account Number: 040-1699
Bank Name: Mellon Bank, Pittsburgh, PA
ABA Number: 043-000-261

EXHIBIT A

FORM OF CONVERTIBLE PROMISSORY NOTE

THIS CONVERTIBLE PROMISSORY NOTE IS SUBJECT TO RESTRICTIONS IMPOSED BY THE SECURITIES ACT OF 1933, AS AMENDED, AND APPLICABLE STATE SECURITIES LAW. THIS NOTE MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF REGISTRATION OR AN EXEMPTION THEREFROM UNDER THE SECURITIES ACT OF 1933 AND ANY APPLICABLE STATE SECURITIES LAWS.

CONVERTIBLE PROMISSORY NOTE

$4,000,000.00 [DATE]

FOR VALUE RECEIVED, LEXICON GENETICS INCORPORATED, a Delaware corporation ("Borrower"), hereby promises to pay to the order of GENENTECH, INC., a Delaware corporation ("Lender"), in lawful money of the United States of America and in immediately available funds, the principal sum of $4,000,000.00 or such lesser amount as shall have been advanced by Lender and shall remain outstanding (the "Loan"), together with accrued and unpaid interest thereon, due and payable on the date and in the manner set forth below.

This Convertible Promissory Note ("Note") is the note referred to in and is executed and delivered in connection with the Note Agreement dated as of December 17, 2002, between Borrower and Lender (the "Note Agreement"). Additional rights and obligations of Lender and Borrower are set forth in the Note Agreement. All capitalized terms used herein and not otherwise defined shall have the respective meanings given to them in the Note Agreement.

1. MATURITY DATE. Subject to Section 3 below, all amounts payable hereunder shall be due and payable on the Maturity Date. This Note may be, prepaid in whole or in part at any time without penalty, in accordance with the terms of the Note Agreement.

2. INTEREST RATE AND PAYMENT. Borrower further promises to pay interest on the outstanding Loan amount, which interest shall accrue from the date hereof and shall be added to the principal balance of the Loan. Interest shall accrue on the sum of the daily unpaid principal balance of the Loan outstanding on each day in lawful money of the United States of America, from the Effective Date until all such principal amounts shall have been paid in full, which interest shall accrue at a rate equal to eight percent (8%) per annum. Interest shall be compounded quarterly and computed at the above rate on the basis of the actual number of days elapsed year of 365 days; provided, however, that in no event shall Borrower be bound to pay for the use or forbearance of the money loaned pursuant hereto, interest of more than the maximum rate permitted by law to be charged by Lender; the right to demand any such excess being hereby expressly waived by Lender. All accrued and unpaid interest attributable to the principal amount of the Loan then being paid shall be payable concurrently with such payment of principal, whether in connection with any prepayment, on the Maturity Date or otherwise.

3. PAYMENT. At Borrower's sole option and subject to the limitations contained in Section 2.A.(3) of the Note Agreement, (a) on the Maturity Date, the outstanding principal balance of, and accrued interest on, this Note shall be payable in (i) shares of Borrower's Common Stock, (ii) immediately available funds, or (iii) a combination of Common Stock and

immediately available funds; and (b) on any date upon which Borrower desires to prepay all or any portion of the outstanding principal balance of, and accrued interest on the amount so prepaid, such prepayment shall be payable in (i) Common Stock, (ii) immediately available funds, or (iii) a combination of Common Stock and immediately available funds. The number of shares of Common Stock which shall be issuable to make any payment under this Note, including, without limitation, any optional prepayment amount, which may be made by Borrower shall be determined by dividing the amount of such payment by the Fair Market Value. "Fair Market Value" shall mean the average of the closing prices for Borrower's Common Stock as reported in The Wall Street Journal (Western Edition) for the twenty (20) trading days immediately preceding the Maturity Date or the date upon which an optional prepayment amount is paid, as the case may be.

A. MECHANICS AND EFFECT OF PAYMENT IN COMMON STOCK. No fractional shares of Common Stock shall be issued in payment of this Note. In lieu of Borrower issuing any fractional shares to Lender upon payment of this Note (or any amount thereof) in Common Stock, Borrower shall pay to Lender in cash the amount of any such payment that is not so paid in Common Stock, such payment to be in the form provided below. Upon payment of this Note in full pursuant to this Section 3, Lender shall surrender this Note, duly endorsed, at the principal office of Borrower. The payment in Common Stock shall be deemed to have been made immediately prior to the close of business on the date of such surrender of this Note or the date any optional prepayment amount is paid, as the case may be, and the person or persons entitled to receive the shares of Common Stock issuable upon such payment shall be treated for all purposes as the record holder or holders of such shares of Common Stock as of such date. Borrower shall, in accordance with Section 2 of the Note Agreement, issue and deliver to Lender at such principal office a certificate or certificates for the number of shares of Common Stock to which Lender shall be entitled upon such payment bearing such legends as are required by applicable state and federal securities laws and pursuant to Section S.C. of the Note Agreement, together with any other securities and property to which Lender is entitled upon such payment under the terms of this Note, including a check payable to Lender for any cash amounts payable as described above.

4. SUBORDINATION. The indebtedness evidenced by this Note is hereby subordinated, only to the extent set forth in Section 7 of the Note Agreement, in right of payment to the prior payment of the Senior Indebtedness.

5. PLACE OF PAYMENT. All amounts payable hereunder shall be payable in accordance with terms of the Note Agreement, unless otherwise specified in writing by Lender.

6. APPLICATION OF PAYMENTS. Payment on this Note shall be applied first to accrued interest, and thereafter to the outstanding principal balance hereof.

7. DEFAULT. The occurrence of an "Event of Default" under and as defined in the Note Agreement shall constitute an "Event of Default" hereunder. Upon the occurrence of an Event of Default, Lender shall have such rights and remedies as are provided under the Note Agreement or by law.

8. GOVERNING LAW. This Note shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

9. SUCCESSORS AND ASSIGNS. Subject to the limitations of Section 10.F. of the Note Agreement, the provisions of this Note shall inure to the benefit of and be binding on any successor to Borrower and shall extend to any holder hereof.

BORROWER:

LEXICON GENETICS INCORPORATED

By: ----------

Printed Name: ----------

Title: ----------

EXHIBIT 10.15

Confidential materials omitted and filed separately with the Securities and Exchange Commission. Asterisks denote omissions.

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COLLABORATION AND LICENSE AGREEMENT

between

LEXICON GENETICS INCORPORATED

and

BRISTOL-MYERS SQUIBB COMPANY

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COLLABORATION AND LICENSE AGREEMENT

THIS COLLABORATION AND LICENSE AGREEMENT (this "Agreement") is dated as of December 17, 2003 (the "Effective Date") and is made by and between LEXICON GENETICS INCORPORATED, a Delaware corporation ("Lexicon"), and BRISTOL-MYERS SQUIBB COMPANY, a Delaware corporation ("BMS"). Lexicon and BMS are sometimes referred to herein individually as a "party" and collectively as the "parties."

R E C I T A L S

WHEREAS, Lexicon and BMS are each in the business of discovering, developing and commercializing pharmaceutical products; and

WHEREAS, Lexicon is engaged in the identification and validation of targets for use in the discovery of compounds potentially useful to prevent or treat diseases and conditions of the central nervous system;

WHEREAS, Lexicon and BMS are interested in collaborating in the discovery, development and commercialization of compounds for use in the prevention or treatment of such diseases and conditions;

NOW, THEREFORE, in consideration of the premises and of the covenants herein contained, the parties hereto mutually agree as follows:

ARTICLE 1. DEFINITIONS

The terms in this Agreement with initial letters capitalized, whether used in the singular or the plural, shall have the meaning set forth below or, if not listed below, the meaning designated in places throughout this Agreement.

1.1 "Affiliate" means any corporation, company, partnership, joint venture and/or firm that controls, is controlled by or is under common control with a party to this Agreement. For purposes hereof, "control" means (a) in the case of corporate entities, direct or indirect ownership of more than fifty percent (50%) of the stock or shares entitled to vote for the election of directors; and (b) in the case of non-corporate entities, direct or indirect ownership of more than fifty percent (50%) of the equity interest with the power to direct the management and policies of such non-corporate entities.

1.2 "Agreement" means this Collaboration and License Agreement, including all Exhibits hereto.

1.3 "Alliance Manager" has the meaning set forth in Section 3.12.

1.4 "Annual Research Plan" means the plan to be developed by the Joint Scientific Committee and approved by the Joint Management Committee for each Contract Year, to be updated as necessary during each Contract Year, setting forth, among other things, a master plan for the Research Program during the Research Program Term and the matters described in Section 2.7 hereof.

1.5 "Background Materials" means BMS Background Materials and Lexicon Background Materials.

1.6 "Background Technology" means BMS Background Technology and Lexicon Background Technology.

1.7 "Back-up Compound" means a Program Compound acting through the same Selected Target as a Development Candidate and designated by the Joint Management Committee as a back-up for such Development Candidate, including, without limitation, any Program Compound for which the Joint Management Committee authorizes the conduct of preclinical work sufficient to support the filing of an IND.

1.8 "Blended Rate" means (a) the total amount of royalties (stated in U.S. dollars) that would be payable in a Contract Year with respect to a Product under Section 5.5.1 or 5.5.2, as applicable, [**] divided by (b) the total Net Sales (stated in U.S. dollars) of such Product in that Contract Year, expressed as a percentage.

1.9 "BMS" means Bristol-Myers Squibb Company and its Affiliates.

1.10 "BMS Background Materials" means any compounds, assays or other materials that are (a) necessary or useful for the conduct of the Research Program, (b) Controlled by BMS, (c) utilized in the Research Program (but only to the extent so utilized) and (d) either in BMS's or any of its Affiliates' possession as of the Effective Date or are discovered or acquired by BMS or any of its Affiliates during the Research Program Term but outside of the conduct of the Research Program. BMS Background Materials excludes Selected Targets and Program Compounds.

1.11 "BMS Background Technology" means any inventions, information, methods, know-how, trade secrets or data that (a) are necessary or useful for the performance of the Research Program, (b) are Controlled by BMS, (c) are utilized in the Research Program (but only to the extent so utilized) and (d) either are in BMS's or any of its Affiliates' possession as of the Effective Date or are discovered or acquired by BMS or any of its Affiliates during the Research Program Term but outside of the conduct of the Research Program.

1.12 "BMS Development Compound" means any and all of the following:

(a) a Development Candidate for a BMS Target that is so designated under Section 2.5 hereof; and

(b) any Back-up Compound(s) designated for such Development Candidate; and

(c) any other Small Molecule Compound that acts through the same BMS Target:

(i) that is made in the course of performing medicinal chemistry on or optimizing such Development Candidate and Back-up Compound(s), or performing structure activity relationship activities using such Development Candidate, Back-up Compound(s) or other Program Compounds active against such BMS Target; provided that such Small Molecule Compound [**]; or

(ii) that is [**]; and

(d) any salts of any of the foregoing.

1.13 "BMS Inactive Selected Target" has the meaning set forth in Section 2.3.4.4.

1.14 "BMS Product" means a pharmaceutical product containing a BMS Development Compound as an active ingredient.

1.15 "BMS Target" means a Selected Target that is so designated under Section 2.5 hereof.

1.16 "CNS Field" means the prevention, palliation, control or treatment in humans of (a) depression, schizophrenia, [**], (b) Alzheimer's disease and other cognitive disorders, (c) [**] neurodegenerative disorders, [**].

1.17 "Compound Library Screening" means screening of compound libraries to identify Small Molecule Compounds that are active against a Selected Target using an assay that meets requirements (for example, with respect to throughput) established by, or the use of which is otherwise approved by, the Joint Scientific Committee. For purposes of this Agreement, "commencement of Compound Library Screening" for a Selected Target means the initiation of Compound Library Screening for such Selected Target, following Joint Management Committee authorization, by either BMS or Lexicon.

1.18 "Confidential Information" means any information and data received by a party (the "Receiving Party") from the other party or its Affiliates (the "Disclosing Party") in connection with this Agreement (including, without limitation, all information disclosed by the parties under Article 2 hereof and any research, testing, clinical, regulatory, marketing or other scientific or business information, plans, or data pertaining to any Product of the Disclosing Party). Notwithstanding the foregoing, Confidential Information shall not include any part of such information or data that:

(a) is or becomes part of the public domain other than by unauthorized acts of the Receiving Party or its Affiliates;

(b) can be shown by written documents to have been already in the possession of the Receiving Party or its Affiliates prior to disclosure under this Agreement, provided such information or data was not obtained directly or indirectly from the Disclosing Party under an obligation of confidentiality;

(c) can be shown by written documents to have been disclosed to the Receiving Party or its Affiliates by a Third Party, provided such information or data was not obtained directly or indirectly from the Disclosing Party under an obligation of confidentiality; or

(d) can be shown by written documents to have been independently developed by the Receiving Party or its Affiliates without use, aid or application of Confidential Information of the Disclosing Party.

Specific Confidential Information of a Disclosing Party shall not be deemed to come under the foregoing exceptions merely because it is embraced by more general information that is or becomes part of the public domain, or is known by, disclosed to or independently developed by the Receiving Party.

1.19 "Contract Year" means (a) with respect to the first Contract Year, the period beginning on the Effective Date and ending on December 31, 2004 (the "First Contract Year"), and (b) with respect to each subsequent Contract Year, the twelve (12) month period beginning on the day following the end of the First Contract Year and each succeeding twelve (12) month period thereafter during the term of the Agreement (except that the last Contract Year shall end on the effective date of any termination or expiration of this Agreement). Each Contract Year (other than the First and last Contract Year) shall be divided into four (4) "Contract Quarters" comprised of successive three (3) month periods. In the First Contract Year, the first Contract Quarter shall begin on the Effective Date and end on March 31, 2004, and in the last Contract Year, the last Contract Quarter shall end on the effective date of any termination or expiration of this Agreement.

1.20 "Control" or "Controlled" means, with respect to any (a) material, document, item of information, method, data or other know-how or (b) Patent Right or other intellectual property right, the possession (whether by ownership or license, other than by a license granted pursuant to this Agreement) by a party or its Affiliates of the ability to grant to the other party access, ownership, a license and/or a sublicense as provided herein under such item or right without violating the terms of any agreement or other arrangement with any Third Party as of the time such party would first be required hereunder to grant the other party such access, ownership, license or sublicense.

1.21 "Cover," "Covered" or "Covering" means, with respect to a Patent Right, that, but for rights granted to a person or entity under such Patent Right, the practice by such person or entity of an invention claimed in such Patent Right would infringe a Valid Claim included in such Patent Right, or in the case of a Patent Right that is a patent application, would infringe a Valid Claim in such patent application if it were to issue as a patent.

1.22 "Development Candidate" means a Program Compound that has been selected by the Joint Management Committee for full preclinical development in preparation for the commencement of a Phase 1 Trial and that has been designated by the Joint Management Committee as a "Development Candidate" in accordance with Section 3.4, including, without limitation, any Program Compound for which the Joint Management Committee authorizes the commencement of a Phase 1 Trial.

1.23 "Development Compound" means a BMS Development Compound or a Lexicon Development Compound.

1.24 "Diligent Efforts" means the carrying out of obligations or tasks by a party in a sustained manner using good faith commercially reasonable and diligent efforts, which efforts shall be consistent with the exercise of prudent scientific and business judgment in accordance with the efforts such party devotes to products or research, development or marketing projects of similar scientific and commercial potential. Diligent Efforts requires that [**].

1.25 "Disclosing Party" has the meaning specified in Section 1.18 hereof.

1.26 "Effective Date" means the date specified in the initial paragraph of this Agreement.

1.27 "Escrow Agent" means an independent Third Party consultant to the parties with whom BMS shall deposit a list of Excluded Targets and who shall notify Lexicon which, if any, Targets submitted in accordance with Section 2.2.4 are Excluded Targets.

1.28 "Excluded Target" means a Target that [**]. A list of such Excluded Targets shall be provided to the Escrow Agent who shall notify Lexicon which, if any, Targets submitted in accordance with Section 2.2.4 are Excluded Targets. [**].

1.29 "First Commercial Sale" means the first sale for use or consumption by the general public of a Product in a country after Regulatory Approval has been obtained in such country. For clarity, First Commercial Sale shall not include the sale of any Product for use in clinical trials or for compassionate use prior to the approval of an NDA.

1.30 "FDA" means the United States Food and Drug Administration, or the successor thereto.

1.31 "Full Phase Program" means a full medicinal chemistry and supporting biology program involving the commitment of resources of the scope and nature described in Exhibit A. For purposes of this Agreement, "commencement of a Full Phase Program" means the authorization by the Joint

Management Committee of the commencement of activities for the first Full Phase Program for a given Selected Target.

1.32 "FTE" means the equivalent of one employee working on a dedicated full time basis for one year (consisting of [**] hours per year of dedicated effort) performing scientific, technical or managerial work on or directly related to the Target Discovery Program or the Research Program, as applicable. [**].

1.33 "Inactive Selected Target" has the meaning specified in Section 2.3.4 hereof. Any BMS Inactive Selected Target or Lexicon Inactive Selected Target shall remain an Inactive Selected Target unless and until it becomes a BMS Target or Lexicon Target.

1.34 "Indemnitee" has the meaning specified in Section 10.4 hereof.

1.35 "Indemnitor" has the meaning specified in Section 10.4 hereof.

1.36 "IND" means an Investigational New Drug application filed with the U.S. Food and Drug Administration or a similar application for the clinical testing of a Product in human subjects filed with a foreign regulatory authority.

1.37 "Joint Management Committee" has the meaning specified in Section 3.1.1 hereof.

1.38 "Joint Program Inventions" has the meaning specified in Section 7.1.3.3 hereof.

1.39 "Joint Research Project Team" has the meaning specified in Section 3.1.2 hereof.

1.40 "Joint Scientific Committee" has the meaning specified in Section 3.1.2 hereof.

1.41 "Laws" means all laws, statutes, rules, regulations, ordinances and other pronouncements having the effect of law of any federal, national, multinational, state, provincial, county, city or other political subdivision, domestic or foreign.

1.42 "Level 1 Phenotypic Analysis" means the analyses of the phenotypes of Mutant Mice described in Exhibit B.

1.43 "Level 2 Phenotypic Analysis" means any one or more of the analyses of the phenotypes of Mutant Mice described in Exhibit C. The Level 2 Phenotypic Analysis for a given Target shall be as determined by the Joint Scientific Committee as set forth in Section 3.5.

1.44 "Lexicon" means Lexicon Genetics Incorporated and its Affiliates.

1.45 "Lexicon Background Materials" means any compounds, assays or other materials that are (a) necessary or useful for the conduct of the Research Program, (b) Controlled by Lexicon, (c) utilized in the Research Program (but only to the extent so utilized) and (d) either in Lexicon's or any of its Affiliates' possession as of the Effective Date or are discovered or acquired by Lexicon or any of its Affiliates during the Research Program Term but outside of the conduct of the Research Program. Lexicon Background Materials excludes Selected Targets and Program Compounds.

1.46 "Lexicon Background Technology" means any inventions, information, methods, know-how, trade secrets or data that (a) are necessary or useful for the performance of the Research Program, (b) are Controlled by Lexicon, (c) are utilized in the Research Program (but only to the extent so utilized)

and (d) either are in Lexicon's or any of its Affiliates' possession as of the Effective Date or are discovered or acquired by Lexicon or any of its Affiliates during the Research Program Term but outside of the conduct of the Research Program.

1.47 "Lexicon Development Compound" means any and all of the following:

(a) a Development Candidate for a Lexicon Target that is so designated under Section 2.5 hereof; and

(b) any Back-up Compound(s) designated for such Development Candidate; and

(c) any other Small Molecule Compound that acts through the same Lexicon Target:

(i) that is made in the course of performing medicinal chemistry on or optimizing such Development Candidate and Back-up Compound(s), or performing structure activity relationship activities using such Development Candidate, Back-up Compound(s) or other Program Compounds active against such Lexicon Target; provided that such Small Molecule Compound [**]; or

(ii) that is [**]; and

(d) any salts of any of the foregoing.

1.48 "Lexicon Inactive Selected Target" has the meaning set forth in Section 2.3.4.4.

1.49 "Lexicon Product" means a pharmaceutical product containing a Lexicon Development Compound as an active ingredient.

1.50 "Lexicon Target" means a Selected Target that is so designated under Section 2.5 hereof.

1.51 "LexVision Agreement" means the LexVision Database and Collaboration Agreement dated September 26, 2000 between Lexicon and BMS, as amended.

1.52 "LG617 Compound" means a Small Molecule Compound acting through the LG617 Target.

1.53 "LG617 License" has the meaning specified in Section 4.4 hereof.

1.54 "LG617 Negotiation Period" has the meaning specified in Section 4.4 hereof.

1.55 "LG617 Option Period" has the meaning specified in Section 4.4 hereof.

1.56 "LG617 Target" means the Target designated by Lexicon as LG617.

1.57 "Listed Target" means [**].

1.58 "MAA Approval" means the final marketing authorization approval, including full marketing, pricing and reimbursement approval, for the applicable Product, in [**].

1.59 "MAA Filing" means the filing of a marketing authorization application or other application for marketing approval for the applicable Product filed (a) in [**] or (b) in the European Medicines Evaluation Agency under the centralized European procedure.

1.60 "Mid-Phase Program" means a mid-phase medicinal chemistry and supporting biology program involving the commitment of resources of the scope and nature described in Exhibit D.

1.61 "Mutant Mouse" means mouse cell or mouse containing a selected mutation in the murine ortholog of a Target that is made or produced by Lexicon. A "line of Mutant Mice" means Mutant Mice having the same selected mutation.

1.62 "NDA" means a New Drug Application filed with the FDA required for marketing approval for the applicable Product in the U.S.

1.63 "NDA Approval" means the final approval of an NDA by the FDA for the applicable Product in the U.S.

1.64 "NDA Filing" means the acceptance by the FDA of the filing of an NDA for the applicable Product.

1.65 "Net Sales" means, with respect to a Product, the gross amount invoiced by BMS, Lexicon, Sublicensees of BMS or Lexicon, and their respective Affiliates for sales of such Product to customers which are not Affiliates (or which are Affiliates but are end users of such Product), less:

(a) trade, quantity and cash discounts actually allowed;

(b) discounts, refunds, rebates, chargebacks, retroactive price adjustments, billing errors and any other allowances (including, without limitation, government-mandated and managed health care-negotiated rebates) actually granted which effectively reduce the net selling price;

(c) product returns credits and allowances actually granted;

(d) any tax imposed on the production, sale, delivery or use of the product (excluding federal, state or local taxes based on income);

(e) freight, postage, shipping, customs duties, excises, tariffs, surcharges, other governmental charges (excluding federal, state or local taxes based on income) and insurance charges actually allowed or paid for delivery of Products;

(f) payments or rebates paid with respect to such Product in connection with state or federal Medicare, Medicaid or similar programs in the United States or in connection with similar programs in other countries in which there are sales; and

(g) amounts repaid, credited or written off by reason of uncollectible debt, and amounts written off on account of factoring of receivables to the extent consistent with the selling party's normal business practices.

Such amounts shall be determined from the books and records of BMS, Lexicon, Sublicensees of BMS or Lexicon, and their respective Affiliates, as the case may be, maintained in accordance with U.S. generally accepted accounting principles, consistently applied.

In the event the Product is sold as part of a Combination Product (as defined below), the Net Sales from the Combination Product, for the purposes of determining royalty payments, will be determined by multiplying the actual Net Sales of the Combination Product by the fraction A/(A+B) where A is the average sale price of the Product when sold separately in finished form and B is the total average sale price of the other active ingredient or ingredients in the Combination Product sold separately in finished form.

In the event that the average sales price of both the Product and the other active compounds or ingredients in the Combination Product cannot be determined, the adjusted Net Sales of the Combination Product for the purpose of determining royalties shall be negotiated by the parties in good faith and in an equitable manner consistent with the intent of this Agreement.

The Net Sales price for a Combination Product in a given country will be calculated once each Contract Year and such price will be used during all applicable royalty reporting periods for the entire Contract Year for such country, absent extraordinary conditions or events. When determining the average sale price of a Product or the other active compounds or ingredients in the Combination Product, the average sale price will be calculated using data arising from the twelve (12) months preceding the calculation of the Net Sales price for the Combination Product. As used above, the term "Combination Product" means any Product sold in conjunction with any other active component(s) (whether packaged together or in the same therapeutic formulation).

If BMS, Lexicon, Sublicensees of BMS or Lexicon, or any of their respective Affiliates sells any Product to a customer which also purchases other products or services from such seller or any of its Affiliates in a bundled, combination or capitated transaction (a "Bundled Transaction"), and such seller discounts the sales price of the Product to a greater degree than such seller or its Affiliates generally discount the price of its other products to such customer, then the aggregate amount received with respect to such Bundled Transaction shall be allocated to Net Sales pursuant to the formula set forth in Exhibit E hereto. For purposes of the foregoing, "discounting" includes establishing the list price at lower than the seller's normal pricing level.

Free samples of Product and/or the disposition of Product for, or the use of Product in, pre-clinical or clinical (Phase 1 - 3) trials or other market-focused (Phase 4) trials in which Product is provided to patients without any payment shall not result in any Net Sales.

1.66 "Patent Prosecution" has the meaning specified in Section 7.2.1 hereof.

1.67 "Patent Rights" means all existing patents and patent applications and all patent applications hereafter filed and patents hereafter issued, including, without limitation, any continuations, continuations-in-part, divisions, provisionals or any substitute applications, any patent issued with respect to any such patent applications, any reissue, reexamination, renewal or extension (including any supplemental protection certificate) of any such patent, and any confirmation patent or registration patent or patent of addition based on any such patent, and all foreign counterparts of any of the foregoing.

1.68 "Phase 1 Trial" shall mean a human clinical trial [**] that is intended to initially evaluate the safety, pharmacokinetic and/or pharmacological effect of a Product in subjects in accordance with or otherwise in satisfaction of the requirements of 21 CFR 312.21(a). For purposes of this Agreement, "commencement of a Phase 1 Trial" for a Product shall mean the first dosing of such Product into a human patient in a Phase 1 Trial.

1.69 "Phase 2 Trial" means a human clinical trial [**] that is intended to initially evaluate the dosing and effectiveness of a Product for a particular indication or indications in patients with the disease

or indication under study in accordance with or otherwise in satisfaction of the requirements of 21 CFR 312.21(b). For purposes of this Agreement, "commencement of a Phase 2 Trial" for a Product shall mean the first dosing of such Product into a human patient in a Phase 2 Trial.

1.70 "Phase 3 Trial" means a pivotal human clinical trial [**] the results of which could be used to establish safety and efficacy of a Product as a basis for an NDA in accordance with or otherwise in satisfaction of the requirements of 21 CFR 312.21(c). For purposes of this Agreement, "commencement of a Phase 3 Trial" for a Product shall mean the first dosing of such Product into a human patient in a Phase 3 Trial.

1.71 "Post Opt-out Product" has the meaning set forth in Section 2.5.3.3.

1.72 "Pre-existing Obligations" means:

(a) [**]; and

(b) [**].

1.73 "Product" means a BMS Product or a Lexicon Product.

1.74 "Product Licensee" means (a) with respect to a BMS Product, BMS, and (b) with respect to a Lexicon Product, Lexicon.

1.75 "Product Licensor" means (a) with respect to a BMS Product, Lexicon, and (b) with respect to a Lexicon Product, BMS.

1.76 "Program Committee" means the Joint Management Committee or the Joint Scientific Committee.

1.77 "Program Compound" means a Small Molecule Compound that:

(a) (i) is selected by the Joint Scientific Committee for optimization, characterization and/or preclinical evaluation in the conduct of the Research Program,

(ii) is Controlled by a party,

(iii) either is in a party's or any of its Affiliates' possession as of the Effective Date or is discovered or acquired by either or both parties or any of their respective Affiliates during the Research Program Term but outside the conduct of the Research Program, and

(iv) inhibits, agonizes or otherwise modulates (i.e., acts through) a Selected Target; or

(b) is first [**] in the conduct of the Research Program; or

(c) is [**]; or

(d) is otherwise designated a Program Compound by the Joint Management Committee;

provided, however, that in no event shall [**] become a Program Compound unless such designation is affirmatively agreed to by the Joint Management Committee.

1.78 "Program Director" has the meaning specified in Section 3.2 hereof.

1.79 "Program Intellectual Property" means Program Patent Rights and any other proprietary rights in Program Material and Program Technology.

1.80 "Program Invention" has the meaning specified in Section 7.1.3.3 hereof.

1.81 "Program Material" means (a) any Program Compounds and (b) any material first identified or discovered in the conduct of the Research Program.

1.82 "Program Patent Rights" means any Patent Rights that are Controlled by one or both parties and that Cover any Program Technology or Program Materials. For clarification, such Program Patent Rights include the entire scope of all of the claims contained in such Patent Rights.

1.83 "Program Technology" means any invention, information, methods, know-how, trade secrets or data that (a) is Controlled by a party or jointly by the parties and (b) either (i) relates to the use in the CNS Field of Small Molecule Compounds acting through a Selected Target, or the use in the CNS Field of a Selected Target to identify Small Molecule Compounds acting through such Selected Target, or (ii) is first identified or discovered in the conduct of the Research Program. [**]. Program Technology excludes any invention, information, methods, know-how, trade secrets or data with respect to [**], or the [**] acting through such Selected Target, in each case that is first identified or discovered by a party outside of the conduct of the Research Program; provided, however, that, [**]. In addition, Program Technology excludes Program Materials.

1.84 "Proposed Target" means a Target proposed for designation as a Selected Target in accordance with Section 2.3.1 hereof

1.85 "Receiving Party" has the meaning specified in Section 1.18 hereof.

1.86 "Regulatory Approval" means any and all approvals (including any applicable governmental price and reimbursement approvals), licenses, registrations, or authorizations of any federal, national, multinational, state, provincial or local regulatory agency, department bureau or other governmental entity that are necessary for the manufacture, use, storage, import, transport, promotion, marketing and sale of a Product in a country or group of countries.

1.87 "Released Target" means [**] or a Target designated as a Released Target in accordance with Section 2.3.2 hereof.

1.88 "Research Program" has the meaning specified in Section 2.1.1 hereof.

1.89 "Research Program Activities" has the meaning specified in Section 2.1.1 hereof.

1.90 "Research Program Term" has the meaning specified in Section 2.1.2 hereof.

1.91 "Research Program Costs" means the FTE costs and out-of-pocket expenditures that are incurred after the Effective Date by a party in performing activities approved by the Joint Management Committee in support of the Research Program, for purposes of which the cost of an FTE shall be [**] per

FTE per year. Research Program Costs shall not include [**]. In addition, Research Program Costs shall not include [**].

1.92 [**]

1.93 "Reviewing Party" has the meaning specified in Section 8.4 hereof.

1.94 "Selected Target" means any Target that is selected for research by the Joint Management Committee in accordance with Section 2.3.2 hereof.

1.95 "Selected Target Inventions" has the meaning specified in Section 7.1.3.2 hereof.

1.96 "Small Molecule Compound" means a chemical compound [**]. For clarity, Small Molecule Compound specifically excludes any compound that consists of or incorporates as an active ingredient [**] (a) a protein, (b) an antibody or any fragment thereof, (c) an antisense product or (d) an oligonucleotide.

1.97 "Sole Program Inventions" has the meaning specified in Section 7.1.3.3 hereof.

1.98 "Sublicensee" means (a) in the case of a BMS Product, any Third Party which is licensed by BMS to market and sell such BMS Product, and (b) in the case of a Lexicon Product, any Third Party which is licensed by Lexicon to market and sell such Lexicon Product.

1.99 "Submitting Party" has the meaning specified in Section 8.4 hereof.

1.100 "Target" means [**]. Each Target shall be identified by [**].

1.101 "Target Discovery Program" has the meaning specified in Section 2.1.1 hereof.

1.102 "Target Discovery Program Term" has the meaning specified in Section 2.2.2 hereof.

1.103 "Territory" means all countries and jurisdictions throughout the world.

1.104 "Third Party" means any person or entity other than Lexicon, BMS and their respective Affiliates.

1.105 "Third Party Opportunity" has the meaning specified in Section 2.11 hereof.

1.106 "Valid Claim" means either (a) a claim of an issued and unexpired patent which has not been held permanently revoked, unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal and that is not admitted to be invalid or unenforceable through reissue, disclaimer or otherwise, or (b) a claim of a [**], provided, however, that (x) [**] and (y) [**].

ARTICLE 2. RESEARCH PROGRAM

2.1 General.

2.1.1 Objectives. The parties intend to carry out a research program (the "Research Program") in which Lexicon and BMS will collaborate to identify, characterize and carry out the preclinical development of Small Molecule Compounds that act through Selected Targets for use in the CNS Field, consistent with the objectives set forth in and the resources allocated to such

activities in the then-current Annual Research Plan ("Research Program Activities"). It is intended that the Research Program will be conducted as a unified collaborative effort with activities by the parties carried out primarily at each party's respective facilities, and this intent shall be reflected in the Annual Research Plans. It is further intended that each party shall contribute to fifty (50%) of the Research Program Costs, and the Annual Research Plans will be consistent with and provide for such equal contribution. In support of the Research Program, Lexicon will continue its efforts, using its technology for the generation and analysis of the phenotypes of Mutant Mice, to identify and validate Targets with potential utility in the CNS Field (the "Target Discovery Program").

2.1.2 Research Program Term. The Research Program shall commence on the Effective Date and continue during the Target Discovery Program Term and thereafter until all Selected Targets have become BMS Targets, Lexicon Targets or Inactive Selected Targets and thereafter for so long as the parties continue to conduct Research Program Activities with respect to any BMS Targets or Lexicon Targets (the "Research Program Term").

2.2 Target Discovery Program.

2.2.1 Generation and Analysis of Mutant Mice. In the Target Discovery Program, Lexicon shall complete (a) the development and Level 1 Phenotypic Analysis of [**] lines of Mutant Mice and (b) Level 2 Phenotypic Analysis of such lines of Mutant Mice, from the first [**] lines of Mutant Mice for which Level 1 Phenotypic Analysis was completed, that displayed a phenotype suggestive, as determined by [**], of the potential utility of the corresponding Target in the CNS Field. [**]. Lexicon shall use Diligent Efforts to complete such work by the end of the third Contract Year of the Research Term and, if necessary, shall continue to use Diligent Efforts thereafter until such work is complete, [**]. The Target Discovery Program Term shall continue until such work is complete.

2.2.2 Target Discovery Program Term. The Target Discovery Program shall continue until the end of the third Contract Year of the Research Program Term (and thereafter until the work set forth in Section 2.2.1 is completed) (the "Target Discovery Program Term"); provided that BMS shall have the option to extend the Target Discovery Program Term for an additional two Contract Years (which two-year period may be further extended as set forth below) on the terms set forth below:

(a) BMS may extend the Target Discovery Program to include the completion by Lexicon in the Target Discovery Program of (i) the development and Level 1 Phenotypic Analysis of [**] lines of Mutant Mice (to the extent not already completed by the end of the third Contract Year of the Research Program Term) and (ii) Level 2 Phenotypic Analysis of such lines of Mutant Mice, from such [**] lines of Mutant Mice, that displayed a phenotype suggestive, as determined by [**], of the potential utility of the corresponding Target in the CNS Field. Lexicon shall use Diligent Efforts to complete such work by the end of the fifth Contract Year of the Research Term and, if necessary, shall continue to use Diligent Efforts thereafter until such work is complete, [**]. The Target Discovery Program Term shall continue until such work is complete.

(b) BMS may extend the Target Discovery Program to include the completion by Lexicon in the Target Discovery Program of (i) the development and Level 1 Phenotypic Analysis of [**] lines of Mutant Mice and (ii) Level 2 Phenotypic Analysis of such lines of Mutant Mice, from such [**] lines of Mutant Mice, that

displayed a phenotype suggestive, as determined by [**], of the potential utility of the corresponding Target in the CNS Field. Lexicon shall use Diligent Efforts to complete such work by the end of the fifth Contract Year of the Research Term and, if necessary, shall continue to use Diligent Efforts thereafter until such work is complete, [**]. The Target Discovery Program Term shall continue until such work is complete.

BMS may exercise the foregoing option by delivery to Lexicon of written notice of such exercise (specifying the subsection above under which such option is being exercised) no fewer than [**] days before the end of the third Contract Year of the Research Program Term.

2.2.3 Reporting and Oversight of Target Discovery Program Progress. Lexicon shall keep the Joint Scientific Committee fully informed of the progress of its activities under this Section 2.2. At a minimum, within [**] days following [**] during the Target Discovery Program Term, Lexicon shall prepare, and provide to the Joint Scientific Committee, a reasonably detailed written summary report which shall describe (a) the work performed by Lexicon during the preceding [**], including, without limitation, the status of Lexicon's development of Mutant Mice and the conduct of Level 1 Phenotypic Analysis and Level 2 Phenotypic Analysis (or only Level 1 Phenotypic Analysis if Level 2 Phenotypic Analysis has not been performed) of such Mutant Mice, and (b) identify phenotypes identified through such Level 1 Phenotypic Analysis and Level 2 Phenotypic Analysis that are suggestive, in Lexicon's good faith scientific judgment, of the potential utility of the corresponding Targets in the CNS Field. [**].

2.2.4 Disclosure of Target Identity. Prior to first disclosing to BMS the identity of any Target (by sequence or otherwise in a manner that would reveal the identity of the Target), Lexicon shall submit the identity of the Target to the Escrow Agent, who will notify Lexicon whether such Target matches any Excluded Target. [**]. In the event a Target matches an Excluded Target, as determined by the Escrow Agent, Lexicon shall promptly notify BMS of such fact and, if requested by BMS within [**] days thereafter, shall provide BMS with the phenotypic data relating to the corresponding line of Mutant Mice and such additional information with respect to any Target (without disclosing the identity of such Target) that is [**]. In such event, BMS shall have the right, within [**] days after receiving such information, to submit to the Escrow Agent a second list of Excluded Targets, in which case the Escrow Agent shall determine whether the Target in question matches any Target on the second list of Excluded Targets. If the Target in question does not match any Target on the second list of Excluded Targets, the Escrow Agent shall so notify Lexicon and BMS, and such Target shall not be considered an Excluded Target and may be considered for proposal as a Proposed Target. BMS shall not be entitled to designate a Target as an Excluded Target following Lexicon's disclosure to BMS of the identity of such Target in accordance with this Section 2.2.4. The parties may mutually agree in writing to redesignate any Excluded Target as a non-Excluded Target that may be considered for proposal as a Proposed Target.

2.2.5 [**].

2.3 Target Selection.

2.3.1 Proposal of Targets. Following Lexicon's completion of Level 2 Phenotypic Analysis of a line of Mutant Mice corresponding to a Target [**], BMS and Lexicon shall each have the right to propose such Target for inclusion in the Research Program as a Selected Target. Within [**] following the proposal by either party that such Proposed Target be considered for designation as a Selected Target [**], BMS and Lexicon shall provide the Joint Scientific Committee with the following information:

(a) all relevant scientific data in BMS's possession (and which BMS has the right to disclose to Lexicon) and all relevant scientific data in Lexicon's possession (and which Lexicon has the right to disclose to BMS) relating specifically to such Proposed Target, including, without limitation, any bioinformatics and expression analyses conducted by BMS or Lexicon with respect to such Proposed Target, and any phenotypic data with respect to mice (including, without limitation, Mutant Mice) with a mutation in the murine ortholog of such Proposed Target;

(b) the results of genomic analysis and druggability assessment with respect to such Proposed Target by BMS and/or Lexicon;

(c) [**]; and

(d) [**].

2.3.2 Designation of Proposed Targets as Selected Targets or Released Targets. Within [**] following receipt by the Joint Scientific Committee of a complete package of all of the information set forth in Section 2.3.1 for a Proposed Target, the Joint Scientific Committee shall make a recommendation to the Joint Management Committee as to whether to designate such Proposed Target as a Selected Target or a Released Target. [**] In the event the members of the Joint Management Committee are unable to reach agreement by consensus regarding such designation within [**] following its receipt of the Joint Scientific Committee recommendation, [**].

2.3.3 [**].

2.3.4 Inactive Selected Targets.

2.3.4.1 A Selected Target shall become an "Inactive Selected Target" upon the occurrence of any of the following: (a) at such time that there has been no material activity by either party with respect to studies to further evaluate the utility of such Selected Target or the development of assays or the discovery or development of Program Compounds acting through such Selected Target for a period of [**], and [**]; (b) upon the election of a party that does not wish to proceed with the discovery or development of Program Compounds acting through a Selected Target, when the other party does wish to proceed, such that such other party could proceed with the discovery or development of Program Compounds acting through such Inactive Selected Target, without the participation of the party making such election [**]; or (c) upon the election of the Joint Management Committee, in order to equalize each party's participation in the Research Program (measured by Research Program Costs), such that one party could proceed with the discovery or development of Program Compounds acting through such Inactive Selected Target, without the participation of the other party.

2.3.4.2 The Joint Management Committee shall determine how the parties shall proceed with respect to the Inactive Selected Target; provided that, in the event that one party desires to proceed with the discovery or development of Program Compounds acting through such Inactive Selected Target, and the other party does not wish to proceed with such discovery and development efforts in the Research Program (or if one party has been given the opportunity to pursue the discovery or development of Program Compounds acting through such Inactive Selected Target under Section 2.3.4.1(b) or (c) above), such party may elect to proceed with such discovery or development for its own

account (using Diligent Efforts), without participation of the other party. In such case, (a) the other party shall reasonably cooperate with the party electing to proceed with the discovery and development of Program Compounds acting through such Inactive Selected Target, at the developing party's expense, in transitioning such activities to such developing party (including, without limitation, the transfer of relevant Program Material) and (b) upon the commencement of a Phase 1 Trial for a Program Compound acting through such Inactive Selected Target (and notwithstanding anything to the contrary in Section 2.5), such Inactive Selected Target shall then be designated as and treated as a BMS Target or Lexicon Target (depending on the party that proceeds with such discovery and development) for all purposes, except that the milestone payments and royalties payable with respect to BMS Products (under Sections 5.4.1 and 5.5.1) or Lexicon Products (under Sections 5.4.2 and 5.5.2), as the case may be, shall be [**] of those otherwise payable. Prior to the commencement of a Phase 1 Trial for a Product acting through an Inactive Selected Target, such Inactive Selected Target shall remain designated as an Inactive Selected Target.

2.3.4.3 If neither party elects to proceed with such discovery and development of Program Compounds acting through such Inactive Selected Target for its own account, [**].

2.3.4.4 An Inactive Selected Target for which BMS proceeds with the discovery and development of Program Compounds acting through such Inactive Selected Target, without the participation of Lexicon, as set forth above, shall be designated as a "BMS Inactive Selected Target." An Inactive Selected Target for which Lexicon proceeds with the discovery and development of Program Compounds acting through such Inactive Selected Target, without the participation of BMS, as set forth above, shall be designated as a "Lexicon Inactive Selected Target."

2.4 Conduct of Research Program.

2.4.1 Scope. Following the designation of a Selected Target, the parties will use Diligent Efforts, under the direction of the Joint Management Committee and Joint Scientific Committee, to carry out the following principal activities with respect to the Selected Target: (a) to carry out studies to further evaluate the biology and the utility of the Selected Target ([**]), (b) to develop assays for such Selected Target amenable to Compound Library Screening, (c) to conduct Compound Library Screening against such Selected Target, (d) to carry out a Mid-Phase Program to develop lead compounds suitable to chemically recapitulate the phenotype seen in the Mutant Mice for the Selected Target, (e) to carry out a follow-up Full Phase Program with the objective of identifying Program Compounds meeting the criteria required for designation as Development Candidates that are suitable for further development, and (f) to carry out preclinical work on selected Development Candidates and Back-up Compounds in preparation for Phase 1 Trials. The parties will carry out other specific activities in support of these principal activities.

2.4.2 Efforts. The Joint Management Committee shall adopt project progression guidelines, including criteria for the selection of Program Compounds, Development Candidates and Back-up Compounds for the Research Program. [**]. The parties shall conduct the Research Program in good scientific manner in accordance with such project progression guidelines and in compliance with applicable Laws. Each party shall use Diligent Efforts to conduct the activities of the Research Program that are assigned to it in the then-applicable Annual Research Plan, and each shall devote sufficient resources to timely perform such respective activities. While the parties acknowledge and agree that neither party guarantees the success of the Research Program

or any individual task undertaken thereunder, each party agrees that it will perform the activities assigned to it under the Research Program in a professional manner in accordance with the highest industry standards.

2.4.3 Resources. Over the course of the Research Program, tasks under the Research Program will be allocated between the parties with the goal that each party's participation in the Research Program (based on FTE utilization and out-of-pocket expenditures) and Research Program Costs will be substantially equal. Particular tasks and responsibilities shall be assigned in a manner consistent with each party's respective capabilities, capacity and expertise. For purposes of this Agreement, "out-of-pocket expenditures" includes, but is not limited to, the cost of subcontractors related to the Research Program, but specifically excludes the cost of laboratory supplies, laboratory space and capital equipment. Either party may at its sole discretion reduce its required contribution to the Research Program Costs by designating one or more Selected Targets as Inactive Selected Targets that may be pursued by the other party as contemplated in Section 2.3.4.

2.4.4 FTE Levels. The parties anticipate that the combined total personnel the parties will commit to the Research Program will start at an average of [**] FTEs for the First Contract Year and will escalate to an average of [**] FTEs for the Second Contract Year, [**] FTEs in the Third Contract Year and [**] FTEs for the Fourth Contract Year (i.e., these are the expected number of FTEs to be included in the Research Program Costs). For clarification, the number of FTEs referenced in the previous sentence shall not include Lexicon FTEs working on the Target Discovery Program, except as set forth in Section 2.2.5. Each party agrees in good faith to expedite the hiring and utility of such FTEs as early in the applicable Contract Year as possible. In the event that the Research Program generates more projects that qualify for lead optimization than are contemplated by the foregoing resource commitment, the parties agree to discuss in good faith a possible increase in the number of FTEs devoted to the Research Program, and may discuss changes in the allocation of Research Program Costs; provided that any such increase in the number of FTEs or change in the allocation of Research Program Costs shall be subject to the mutual agreement of the parties. The Annual Research Plans shall set forth specific FTE levels for each Contract Year to be assigned to specific activities.

2.4.5 Subcontractors. In accordance with Section 2.4.3, the parties will endeavor to optimize the allocation of their resources for the conduct of the Research Program. As necessary and in furtherance of the Research Program, however, either party may enter into research-related agreements or subcontracts in accordance with this Section 2.4.5; provided that (a) none of the rights of the other party hereunder are diminished or otherwise adversely affected as a result of such subcontracting, (b) such party obtains the written approval of the other party prior to engaging any subcontractor, which approval shall not be unreasonably withheld or delayed, (c) the subcontractor undertakes in writing obligations of confidentiality and non-use regarding the other party's Confidential Information that are substantially the same as those undertaken by BMS and Lexicon pursuant to Article 8 hereof, and (d) where possible, the subcontractor agrees in writing to assign to the party inventions made by such subcontractor in performing services for the party. In the event a party performs one or more of its obligations under the Research Program through a subcontractor, then such Party shall at all times be responsible for the performance of such subcontractor. The Joint Management Committee shall decide whether the cost of such agreement shall be shared equally between the parties or if the cost is to be borne by one party and whether it can be allocated to offset obligations with respect to FTE levels as set forth in Section 2.4.4 of this Agreement.

2.4.6 Reports. Each party shall submit [**] reports to the Joint Management Committee, and additional reports as may be required by the then-current Annual Research Plans, detailing its activities under the Research Program. The Joint Management Committee shall use such [**] reports to monitor the parties' respective contributions to the Research Program. The Joint Management Committee may amend the Annual Research Plan as necessary to maintain substantial equality in resources devoted and participation by the parties over the course of the Research Program, as measured by Research Program Costs.

2.4.7 Adjustments. If either party believes that the parties are not devoting substantially equal resources and participation to the Research Program, measured by the aggregated Research Program Costs incurred by each party, such party may submit the matter to the Joint Management Committee in writing, providing a reasonably detailed description of its reasons for such belief. Taking into account historical and prospective participation and resource devotion of the parties during the current Contract Quarter and the immediately following Contract Quarter, the Joint Management Committee shall take such steps as may be reasonably necessary to ensure substantial equality in resources devoted to and participation by the parties in the Research Program including, with respect to any out-of-pocket expenditures, a reimbursement by one party to the other party. In addition or as an alternative to taking steps to reallocate resources and participation in the Research Program, the Joint Management Committee may, by agreement, take one or more of the following actions in order to equalize each party's participation in the Research Program (measured by the aggregated Research Program Costs): (a) designate a Selected Target as an Inactive Selected Target, such that one party could proceed with the discovery or development of Program Compounds acting through such Inactive Selected Target, without the participation of the other party (and such that the developing party's activities with respect to such Inactive Selected Target would no longer be included in the Research Program Costs) or (b) provide for the payment by one party to the other party of one-half of the Research Program Costs attributable to unmatched FTEs provided by such other party in support of Research Program Activities. In addition, a party may elect to designate a Selected Target as an Inactive Selected Target to be pursued by the other party as set forth in Section 2.3.4.1(b), and upon such election, the party making such election shall notify the Joint Management Committee if it wishes to maintain the level of its FTE contribution to the Research Program Costs by allocating FTEs to another Selected Target or to reduce the total number of FTEs the party contributes to the Research Program Costs. At the request of a party, the other party shall permit an independent, certified accountant appointed by the requesting party and reasonably acceptable to the other party, at reasonable times and upon reasonable notice but no more than [**], to examine, at the sole cost of the requesting party, the records of the other party to verify the accuracy of any reports submitted by the other party to the Joint Management Committee regarding the Research Program Costs devoted to the Research Program by such party.

2.5 Development and Commercialization of Products.

2.5.1 Designation of BMS Targets and Lexicon Targets. Upon the commencement of a Phase 1 Trial for the first pharmaceutical product acting through a given Selected Target that contains a Development Candidate as an active ingredient, BMS will have the first option, exercisable by written notice to Lexicon, to obtain exclusive rights under Section 4.1.1.3 and Section 4.2.1 with respect to such Selected Target, upon the exercise of which option (a) such Selected Target shall be designated as a "BMS Target," (b) BMS shall then be the Product Licensee with respect to such BMS Target and (c) the exclusive licenses granted to BMS under Section 4.1.1.3 and Section 4.2.1 shall apply to such BMS Target. BMS shall deliver written notice to Lexicon within [**] days of the commencement of such Phase 1 Trial of its election whether or not to be the Product Licensee for such Selected Target. If BMS fails, within such

[**] period, to deliver written notice to Lexicon of its election whether or not to be the Product Licensee for such Selected Target, Lexicon shall provide notice to BMS advising BMS that such notice by BMS is required. If BMS does not remedy such failure within [**] days following Lexicon's notice, then Lexicon shall have the option to obtain exclusive rights under Section 4.1.2.3 and Section 4.2.2 with respect to such Selected Target, upon the exercise of which option (a) such Selected Target shall be designated as a "Lexicon Target," (b) Lexicon shall then be the Product Licensee with respect to such Lexicon Target and (c) the exclusive licenses granted to Lexicon under Section 4.1.2.3 and Section 4.2.2 shall apply to such Lexicon Target.

2.5.2 Responsibility for Development and Commercialization Activities. From and after the time that a party is designated as the Product Licensee with respect to a Selected Target, such party shall then have full responsibility (including responsibility for funding, resourcing and decision-making) for all research, development and commercialization activities relating to Development Compounds and Products that act through such Selected Target, subject to the provisions of Section 2.5.3 and Article 6 hereof.

2.5.3 Continuation of Research Program Activities.

2.5.3.1 The party that is designated as the Product Licensee with respect to a Selected Target may, at its option, request that Research Program Activities (including but not limited to work on Back-up Compounds) continue following the designation of such Selected Target as a BMS Target or Lexicon Target, as applicable. In such event, the parties shall continue to carry out such Research Program Activities with respect to such Selected Target as may be reasonably requested by the Product Licensee (with the allocation of responsibilities determined by the Joint Management Committee and reflected in the Annual Research Plans) until the earlier of (a) the first NDA Approval or MAA Approval of a Product acting through such Selected Target or (b) the Product Licensor notifies the Product Licensee of its election to discontinue further Research Program Activities with respect to such Selected Target.

2.5.3.2 In the event the Product Licensor notifies the Product Licensee of its election to discontinue further Research Program Activities with respect to such Selected Target, (a) the Product Licensor shall have no further obligation with respect to further Research Program Activities related to such Selected Target other than to reasonably cooperate with the Product Licensee, at the Product Licensee's expense, in transitioning such activities to the Product Licensee (including, without limitation, the transfer of relevant Program Material), (b) no further activities of the Product Licensee related to such Selected Target shall be considered Research Program Activities for purposes of the parties' participation in the Research Program or Research Program Costs and (c) the milestone payments and royalties with respect to BMS Products (under Sections 5.4.1 and 5.5.1) or Lexicon Products (under Sections 5.4.2 and 5.5.2), as the case may be, that are Post Opt-out Products (as defined below) shall be [**].

2.5.3.3 As used in this Agreement, a "Post Opt-out Product" shall mean a Product acting through a Selected Target for which the Product Licensor has elected to discontinue further Research Program Activities under this Section 2.5.3, which Product does not contain as an active ingredient a Development Candidate or Back-up Compound for which [**].

2.5.3.4 The milestone payments and royalties with respect to BMS Products (under Sections 5.4.1 and 5.5.1) or Lexicon Products (under Sections 5.4.2 and 5.5.2) (a)

that are Post Opt-out Products and that contain [**] as an active ingredient shall be [**] and (b) that are Post Opt-out Products and that do not contain [**] as an active ingredient shall be [**].

2.6 Exclusivity.

2.6.1 During the Research Program Term, each party shall work exclusively with the other party under the terms of the Agreement with respect to discovery and development activities directed to identifying and developing Small Molecule Compounds that act through Selected Targets, on a Selected Target-by-Selected Target basis, until the later to occur of:

(a) such time as the applicable Selected Target either:

(i) becomes an Inactive Selected Target, or

(ii) is designated as a BMS Target or a Lexicon Target and either (A) the Product Licensee has obtained an NDA Approval or MAA Approval of a Product acting through such Selected Target or (B) the Product Licensor has notified the Product Licensee of its election to discontinue further Research Program Activities with respect to such Selected Target; or

(b) such time as the specific and substantial medical utility of such Selected Target in the CNS Field is or becomes [**].

The expiration or termination of the parties' exclusivity obligations with respect to a Selected Target under this Section 2.6.1 shall not be construed as granting any right or license under any Background Materials, Background Technology or Program Intellectual Property related thereto.

2.6.2 During the Target Discovery Program Term, Lexicon shall work exclusively with BMS and shall not enter into discussions with any Third Party with respect to activities directed to the identification of novel Targets for the identification and development of Small Molecule Compounds for use in the CNS Field, provided that Lexicon may pursue discussions with third parties with respect to Released Targets and Inactive Selected Targets that the parties have agreed to out-license. During the Target Discovery Program Term, Lexicon shall work exclusively with BMS under the terms of the Agreement with respect to all Targets identified by Lexicon as of the Effective Date and thereafter as having potential utility in the CNS Field, with the exception of Lexicon's LG617 Target (which is subject to Section 4.4) and Released Targets.

2.6.3 Except as otherwise provided for in this Agreement, and without granting any right or license under any Lexicon Background Materials or Lexicon Background Technology with respect thereto, for a period of [**] years following the proposal that a Proposed Target be considered for designation as a Selected Target under Section 2.3.2, BMS shall not, unless such Proposed Target was so designated, research, develop or commercialize any pharmaceutical product for any indication within the CNS Field that specifically targets such Proposed Target. For the avoidance of doubt, the parties agree that this covenant not to compete is not meant to restrict BMS from researching, developing and/or commercializing pharmaceutical products that do not specifically target a Proposed Target but that nevertheless bind to such Proposed Target; provided that such pharmaceutical products specifically target, and achieve their intended physiological effects by binding to, a Target other than the Proposed Target. Without granting any right or license, BMS's obligations under this Section 2.6.3 with respect to a Proposed Target shall terminate on the earlier of:

(a) the medical utility in the disclosed indication of the Proposed Target is or becomes [**]; or

(b) [**].

2.7 Annual Research Plan.

2.7.1 The Joint Scientific Committee shall prepare and the Joint Management Committee shall approve the Annual Research Plan for every Contract Year (other than the First Contract Year) at least [**] prior to the commencement of such Contract Year. The Annual Research Plan for the First Contract Year shall be prepared by the Joint Scientific Committee and approved by the Joint Management Committee within [**] after the Effective Date.

2.7.2 The Joint Management Committee shall update and amend, as appropriate, the then-current Annual Research Plan from time to time.

2.7.3 Each Annual Research Plan shall contain the specific research objectives to be achieved during the relevant Contract Year, the specific activities to be performed under the Research Program during such year and the timeline for performing such activities, and shall designate which party shall be responsible for performing each of such activities.

2.7.4 Each Annual Research Plan shall be consistent with the other terms and conditions of this Agreement, including without limitation the objectives set forth in Section 2.1.1 and the terms and conditions set forth in Section 2.4, and each Annual Research Plan for Contract Years after the First Contract Year shall be substantially the same in form, including the items itemized in, the Annual Research Plan for the First Contract Year.

2.8 Research Program Records.

2.8.1 All work conducted by each party in the course of the Research Program shall be completely and accurately recorded, in reasonable detail and in good scientific manner, in separate laboratory notebooks. On reasonable notice, and at reasonable intervals, each party shall have the right to inspect and copy all such records of the other party reflecting Program Technology or work done under the Research Program, to the extent reasonably required to carry out its respective obligations and to exercise its respective rights hereunder. The parties acknowledge and agree that neither party guarantees the success of the Research Program tasks undertaken hereunder.

2.8.2 In order to protect the parties' Patent Rights under U.S. law in any inventions conceived or reduced to practice during or as a result of the Research Program, each party agrees to maintain a policy that requires its employees to record and maintain all data and information developed during the Research Program in such a manner as to enable the parties to use such records to establish the earliest date of invention and/or diligence to reduction to practice. At a minimum, the policy shall require such individuals to record all inventions generated by them in standard laboratory notebooks or other suitable means that are dated and corroborated by non-inventors on a regular, contemporaneous basis.

2.9 Disclosure of Research Program Results. Subject to restrictions imposed by a party's confidentiality obligations to any Third Party with respect to Background Materials or Background Technology, each party will disclose to the Joint Scientific Committee all Program Technology that is discovered, invented or made by such party during the course of the Research Program and that is useful

in or relates to the Research Program, including, without limitation, information regarding Selected Targets, Small Molecule Compounds identified in the Research Program through the use of Selected Targets, activities of such Small Molecule Compounds, derivatives and results of in vitro and in vivo studies, assay techniques and new assays. Such Program Technology will be promptly disclosed to the Joint Scientific Committee, with meaningful discoveries or advances being communicated as promptly as practicable after such information is obtained or its significance is appreciated. Upon written request by any member of the Joint Scientific Committee, each party will provide the other with copies of the raw data generated in the course of the Research Program, if reasonably necessary to the other party's work under the Research Program. Any information disclosed pursuant to this Section 2.9 may be used by the other party solely for the purposes of the Research Program or as otherwise expressly permitted in this Agreement.

2.10 Material Transfer. In order to facilitate the Research Program, either party may provide to the other party certain Program Materials and Background Materials Controlled by the supplying Party for use by the other party in furtherance of the Research Program. All such Program Materials shall be considered the Confidential Information of both parties and shall be subject to the restrictions in Article 8. All Background Materials shall be considered the Confidential Information of the supplying Party and shall be subject to the restrictions in Article 8. Except as otherwise provided under this Agreement, all such Program Materials and Background Materials delivered to the other party shall remain the sole property of the supplying party, shall be used only in furtherance of the Research Program and solely under the control of the other party and its Affiliates, shall not be used or delivered to or for the benefit of any Third Party without the prior written consent of the supplying party and shall not be used in research or testing involving human subjects. The Program Materials and Background Materials supplied under this Section 2.10 must be used with prudence and appropriate caution in any experimental work, since not all of their characteristics may be known. THE PROGRAM MATERIALS AND BACKGROUND MATERIALS ARE PROVIDED "AS IS" AND WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY WARRANTY THAT THE USE OF THE MATERIALS WILL NOT INFRINGE OR VIOLATE ANY PATENT OR OTHER PROPRIETARY RIGHTS OF ANY THIRD PARTY.

2.11 Third Party Opportunities. In the event that a party is presented with an opportunity to obtain a license from a Third Party for the development and commercialization of a Small Molecule Compound acting through a Selected Target (a "Third Party Opportunity"), then the party may pursue such Third Party Opportunity, but only in the manner provided in this Section 2.11. For purposes of Third Party Opportunities, Section 2.6.1.(a) shall not apply [**]

2.11.1 Third Party Opportunities for Selected Targets. In the event that a party is presented with a Third Party Opportunity for the development and commercialization of a Small Molecule Compound acting through a Selected Target that has not been previously designated as an Inactive Selected Target, a BMS Target or a Lexicon Target, then the party may pursue such Third Party Opportunity, but only in the manner provided in this Section 2.11.1. The party shall present the Third Party Opportunity, including all relevant terms and conditions relating thereto (subject to any confidentiality obligations to the Third Party), to the Joint Management Committee. In the event that the Joint Management Committee elects to pursue such Third Party Opportunity, then the parties shall negotiate (with one another and with the Third Party, as appropriate) in a good faith effort to reach an agreement whereby the Third Party Opportunity can be included as a Product under the Agreement. In the event that the parties and the Third Party reach an agreement to include such Third Party Opportunity as a Product under the Agreement, then (a) [**], and (b) [**]. In the event that the Joint Management Committee does not elect to pursue such Third Party Opportunity, then, subject to the parties' obligations under Section

2.6.1(b) and Article 8, either party shall have the right to pursue such Third Party Opportunity and, upon completion of an agreement with such Third Party for such Third Party Opportunity, shall, by notice to the other party, either (i) include such Third Party Opportunity as a Product under this Agreement, [**], or (ii) designate such Selected Target as an Inactive Selected Target to be pursued by the other party.

2.11.2 Third Party Opportunities for Inactive Selected Targets, BMS Targets or Lexicon Targets. In the event that a party is presented with a Third Party Opportunity for the development and commercialization of a Small Molecule Compound acting through a Selected Target that has been previously designated as an Inactive Selected Target, a BMS Target or a Lexicon Target, then the party may pursue such Third Party Opportunity, but only in the manner provided in this Section 2.11.2 and subject to the parties' obligations under Section 2.6.1(b) and Article 8.

2.11.2.1 If the party pursuing such Third Party Opportunity [**], the party shall present the Third Party Opportunity, including all relevant terms and conditions relating thereto (subject to any confidentiality obligations to the Third Party), to the Joint Management Committee. In the event that the Joint Management Committee elects to pursue such Third Party Opportunity, then the parties shall negotiate (with one another and with the Third Party, as appropriate) in a good faith effort to reach an agreement whereby the Third Party Opportunity can be included as a Product under the Agreement. In the event that the parties and the Third Party reach an agreement to include such Third Party Opportunity as a Product under the Agreement, then (a) [**], and (b) [**]. In the event that the Joint Management Committee does not elect to pursue such Third Party Opportunity, then, subject to the parties' obligations under Section 2.6.1(b) and Article 8, [**] shall have the right to pursue such Third Party Opportunity. [**].

2.11.2.2 [**].

2.11.2.3 [**].

ARTICLE 3. COLLABORATION MANAGEMENT

3.1 Program Committees.

3.1.1 Joint Management Committee. As soon as practicable after the Effective Date, BMS and Lexicon shall establish a Joint Management Committee (the "Joint Management Committee") comprised of [**] representatives designated by BMS and [**] representatives designated by Lexicon, each of whom shall have experience and seniority sufficient to enable him or her to make decisions on behalf of the party he or she represents; provided that BMS and Lexicon may, by mutual agreement, designate an appropriate number of additional representatives from time to time.

3.1.2 Joint Scientific Committee. As soon as practicable after the Effective Date, BMS and Lexicon shall establish a Joint Scientific Committee (the "Joint Scientific Committee") comprised of [**] representatives designated by BMS and [**] representatives designated by Lexicon, each of whom shall have experience and seniority sufficient to enable him or her to make decisions on behalf of the party he or she represents; provided that BMS and Lexicon may, by mutual agreement, designate an appropriate number of additional representatives from time to time. From time to time during the Research Program Term, the Joint Scientific Committee may establish one or more Joint Research Project Teams (each, a "Joint Research Project Team") to implement various aspects of the Annual Research Plan. Such teams shall be governed in the

same manner and subject to the relevant requirements as set forth herein for the Joint Scientific Committee.

3.2 Program Directors. Each party shall appoint one of its designees on the Joint Management Committee or the Joint Scientific Committee to serve as a program director (each, a "Program Director") with responsibility for overseeing the day-to-day activities of the parties with respect to the Research Program and for being the primary point of contact between the parties with respect to the Research Program.

3.3 Replacement of Program Committee Representatives and Program Directors. Each party shall be free to replace its representative members of any Program Committee and its Program Director with new appointees who have authority to act on behalf of such party, on notice to the other party.

3.4 Responsibilities of Joint Management Committee. The Joint Management Committee shall be responsible for overseeing and directing the parties' interaction and performance of their respective obligations under this Agreement. Without limiting the generality of the foregoing, its duties shall include, and it shall be responsible for decisions with respect to, the following:

(a) designation of Selected Targets and Released Targets in accordance with Section 2.3.2 hereof;

(b) review and approval of Annual Research Plans;

(c) oversight of the implementation of Annual Research Plans and allocation of resources and other activities in support of the Research Program, including the matters contemplated by Section 2.4 hereof;

(d) [**];

(e) classification of Selected Targets as Inactive Selected Targets in accordance with Section 2.3.4 hereof;

(f) authorization of the commencement of Compound Library Screening for a Selected Target;

(g) determination as to which Selected Targets should be pursued with a Mid-Phase Program and which party should perform such Mid-Phase Program;

(h) determination as to which Selected Targets should be pursued with a Full Phase Program and which party should perform such Full Phase Program;

(i) establishment of criteria for designation of Development Candidates [**] and Back-up Compounds;

(j) designation of Development Candidates [**] and Back-up Compounds;

(k) decisions with respect to the preclinical development of Development Candidates and Back-up Compounds leading to the commencement of a Phase 1 Trial;

(l) prioritization of programs and activities where resources are constrained;

(m) resolving matters within the responsibilities of the Joint Scientific Committee as to which the members of the Joint Scientific Committee are unable to reach a consensus; and

(n) addressing scientific issues and resolving differences that may arise between the parties related to the performance of the Target Discovery Program or the Research Program.

The Joint Management Committee shall not have the power to amend or waive compliance with this Agreement.

3.5 Responsibilities of Joint Scientific Committee. The Joint Scientific Committee shall be responsible for preparing for approval by the Joint Management Committee and implementing the Annual Research Plans, allocation of resources and other activities in support of the Research Program, with the objective of expeditiously identifying Selected Targets and identifying compounds meeting the criteria for designation as Development Candidates. Without limiting the generality of the foregoing, its duties shall include (a) establishing requirements (including, for example, with respect to throughput) for, or otherwise approving the use of, assays for Compound Library Screening, (b) selecting Small Molecule Compounds for optimization, characterization and/or preclinical evaluation in the conduct of the Research Program, (c) monitoring, reviewing and reporting on the progress of the Research Program, and (d) setting the agenda for the Joint Management Committee for scientific and technical matters relating to the Research Program and recommending actions by the Joint Management Committee. The Joint Scientific Committee shall further have responsibility during the Target Discovery Program Term for [**] monitoring and reviewing the progress of the Target Discovery Program. The Joint Scientific Committee shall not have the power to amend or waive compliance with this Agreement. As appropriate, the Joint Scientific Committee shall establish subcommittees and working groups, having an equal number of representatives of Lexicon and BMS, which will work closely and meet frequently to further the objectives of this Agreement.

3.6 Meetings of Program Committees. Each Program Committee shall meet at least [**], and more frequently as the parties deem appropriate, on such dates and at such times as the parties shall agree, on [**] days' written notice to the other party unless such notice is waived by the parties. The first meeting of the Joint Management Committee shall take place within [**] days after the Effective Date, at Lexicon's facility in The Woodlands, Texas. Each Program Committee may convene or be polled or consulted from time to time by means of telecommunications, videoconferences or correspondence, as deemed necessary or appropriate by the parties. To the extent that meetings are held in person, they shall alternate between the offices of the parties unless the parties otherwise agree.

3.7 Decisions.

3.7.1 Quorum; Voting. A quorum for a meeting of a Program Committee shall require the presence of at least one Lexicon member (or designee) and at least one BMS member (or designee) in person or by telephone. All decisions made or actions taken by a Program Committee shall be made unanimously by its members, with the Lexicon members cumulatively having one vote and the BMS members cumulatively having one vote; provided that, in the event the members of the Joint Management Committee are unable to reach unanimity as to a decision under Section [**], [**]; and provided further, that at such time that a party is designated as a Product Licensee with respect to a Selected Target under Section 2.5, such Product Licensee shall then have final decision-making authority with respect to decisions concerning all further research and development activities with respect to such Selected Target.

3.7.2 Dispute Resolution.

3.7.2.1 In the event that unanimity cannot be reached by the Joint Scientific Committee with respect to a matter that is a subject of its decision-making authority, then the matter shall be referred for further review and resolution to the Alliance Managers and the Joint Management Committee. Except as provided in Section 3.7.1, in the event that unanimity cannot be reached by the Joint Management Committee with respect to a matter that is a subject of its decision-making authority, then the matter shall be referred for further review and resolution to [**]. The designated officers of each party shall use reasonable efforts to resolve the matter within [**] days after the matter is referred to them.

3.7.2.2 If the designated officers cannot resolve any matter described in Section 3.4 within such [**] period, the matter shall be referred to a Third Party arbitrator or arbitrators, in accordance with the following procedures, whose decision shall be [**]. In such event, the parties shall attempt to mutually agree upon a single independent Third Party arbitrator, who shall be a scientific professional with appropriate experience in the subject matter at issue in such disagreement, within [**] days after the initial referral of such matter to the designated officers. If the parties are unable to mutually agree upon one such person, then each party shall appoint one independent Third Party scientific professional with appropriate experience in the subject matter at issue in such disagreement prior to the expiration of such [**] period, and within [**] days after the initial referral of such matter to the designated officers, such person(s) shall select a single independent Third Party arbitrator, who shall be a scientific professional with appropriate experience in the subject matter at issue in such disagreement. Each party shall present all information presented to the Joint Management Committee and all other information as such party reasonably desires regarding such disagreement. Within [**] days after the initial referral of such matter to the designated officers, the arbitrator shall provide written notice to the parties regarding his or her determination regarding such disagreement.

3.8 Administration. The chairperson of each Program Committee shall be designated annually on an alternating basis between the parties. The initial chairperson shall be selected by BMS. The party not designating the chairperson shall designate one of its representative members as secretary to such Program Committee for such year. The chairperson shall be responsible for calling meetings of such Program Committee, sending notices of meetings to all members and for leading such meetings.

3.9 Minutes. Within [**] days after each Program Committee meeting, the secretary of such Program Committee shall prepare and distribute minutes of the meeting, which shall provide a description in reasonable detail of the discussions had at the meeting and a list of any actions, decisions or determinations approved by such Program Committee. The secretary shall be responsible for circulation of all draft and final minutes. Draft minutes shall be first circulated to the chairperson, edited by the chairperson and then circulated in final draft form to all members of such Program Committee sufficiently in advance of the next meeting to allow adequate review and comment prior to the meeting. Minutes shall be approved or disapproved, and revised as necessary, at the next meeting. Final minutes shall be distributed to the members of such Program Committee.

3.10 Term. The Joint Scientific Committee and the Joint Management Committee shall exist until the termination or expiration of the Research Program Term and for such longer period as necessary to perform the responsibilities assigned to it under this Agreement.

3.11 Expenses. Each party shall be responsible for all travel and related costs for its representatives to attend meetings of, and otherwise participate on, the Joint Scientific Committee and the Joint Management Committee.

3.12 Alliance Managers. Each party shall appoint one senior representative who possesses a general understanding of the scientific and business issues relevant to this Agreement to act as its respective alliance manager (each, an "Alliance Manager") for the relationship of the parties under this Agreement. Each party may change its designated Alliance Manager from time to time upon notice to the other party. Any Alliance Manager may designate a substitute to temporarily perform the functions of that Alliance Manager. Each Alliance Manager shall be charged with creating and maintaining a collaborative work environment within and among the Joint Management Committee and Joint Scientific Committee and any other committees or working groups that may be formed pursuant to this Agreement. Each Alliance Manager will also:

(a) be the point of first referral in all matters of conflict resolution;

(b) provide a single point of communication for seeking consensus both internally within the respective parties organizations and together regarding key strategy and plan issues;

(c) plan and coordinate cooperative efforts and internal and external communications; and

(d) take responsibility for ensuring that governance activities occur as set forth in this Agreement, in particular ensuring that Joint Scientific Committee and Joint Management Committee meetings occur, and that minutes are developed from such meetings, in accordance with this Agreement, and that action items determined at such meetings are appropriately carried out or otherwise addressed.

The Alliance Managers shall be entitled to attend meetings of any of the Joint Scientific Committee and Joint Management Committee and other committees that may be formed, but shall not have, or be deemed to have, any rights or responsibilities of a member of any committee. Each Alliance Manager may bring any matter to the attention of any committee where such Alliance Manager reasonably believes that such matter requires such attention.

Any dispute between the parties arising under this Agreement shall be brought to the attention of the Alliance Managers for resolution. The Alliance Managers will endeavor to propose and define mutually acceptable solutions and facilitate communications in an attempt to bring the dispute to a mutually agreeable resolution. If the Alliance Managers cannot find an acceptable solution to a dispute and if the Joint Management Committee cannot resolve any matter properly referred to it, such dispute shall be resolved as set forth in Section 3.7.2 or Section 12.6, as applicable.

ARTICLE 4. GRANTS OF RIGHTS

4.1 Grants of Research Licenses.

4.1.1 By Lexicon.

4.1.1.1 Selected Targets. Subject to the terms of this Agreement and any applicable [**], during the Research Program Term, Lexicon hereby grants to BMS and its Affiliates, within the Territory, (a) a non-exclusive right and license (without any right to sublicense, except as set forth below) under Lexicon's rights in the Lexicon

Background Materials and the Lexicon Background Technology and (b) a co-exclusive right and license (without any right to sublicense, except as set forth below) under Lexicon's rights in the Program Intellectual Property to (i) identify and validate Selected Targets (other than Selected Targets that have become BMS Inactive Selected Targets, Lexicon Inactive Selected Targets, BMS Targets or Lexicon Targets) for the identification, evaluation and optimization of Small Molecule Compounds that are active against such Selected Targets for use in the CNS Field, (ii) identify Small Molecule Compounds that are active against such Selected Targets through the use of such Selected Targets and (iii) undertake preclinical research and evaluation of Program Compounds, in each case in the conduct of the Research Program. Such right and license shall include the right to grant sublicenses to Third Parties that are approved by the Joint Management Committee.

4.1.1.2 BMS Inactive Selected Targets. Subject to the terms of this Agreement and any applicable [**], Lexicon hereby grants to BMS and its Affiliates, within the Territory, (a) a non-exclusive right and license (without any right to sublicense, except as set forth below) under Lexicon's rights in the Lexicon Background Materials and the Lexicon Background Technology and (b) an exclusive right and license (without any right to sublicense, except as set forth below) under Lexicon's rights in the Program Intellectual Property to (i) validate BMS Inactive Selected Targets for the identification, evaluation and optimization of Small Molecule Compounds that are active against such Selected Targets for use in the CNS Field, (ii) identify Small Molecule Compounds that are active against such BMS Inactive Selected Targets through the use of such BMS Inactive Selected Targets and (iii) undertake preclinical research and evaluation of Small Molecule Compounds that are active against such BMS Inactive Selected Targets. Such right and license shall include the right to grant sublicenses to Third Parties in connection with, and incident to, a sublicense granted to such Third Party under the rights and licenses granted under Section 4.2.1. The rights and licenses granted under this Section 4.1.1.2 shall be in effect during the Research Program Term and thereafter so long as BMS is using Diligent Efforts in exercising its rights under this license.

4.1.1.3 BMS Targets. Subject to the terms of this Agreement and any applicable [**], Lexicon hereby grants to BMS and its Affiliates, within the Territory, (a) a non-exclusive right and license (without any right to sublicense, except as set forth below) under Lexicon's rights in the Lexicon Background Materials and the Lexicon Background Technology and (b) an exclusive right and license (without any right to sublicense, except as set forth below) under Lexicon's rights in the Program Intellectual Property to (i) identify Small Molecule Compounds that are active against BMS Targets through the use of such BMS Targets and (ii) undertake preclinical research and evaluation of Small Molecule Compounds that are active against such BMS Targets. Such right and license shall include the right to grant sublicenses to Third Parties in connection with, and incident to, a sublicense granted to such Third Party under the rights and licenses granted under Section 4.2.1.

4.1.2 By BMS.

4.1.2.1 Selected Targets. Subject to the terms of this Agreement and any applicable [**], during the Research Program Term, BMS hereby grants to Lexicon and its Affiliates, within the Territory, (a) a non-exclusive right and license (without any right to sublicense, except as set forth below) under BMS's rights in the BMS Background Materials and the BMS Background Technology and (b) a co-exclusive right and license

(without any right to sublicense, except as set forth below) under BMS's rights in the Program Intellectual Property to (i) identify and validate Selected Targets (other than Selected Targets that have become BMS Inactive Selected Targets, Lexicon Inactive Selected Targets, BMS Targets or Lexicon Targets) for the identification, evaluation and optimization of Small Molecule Compounds that are active against such Selected Targets for use in the CNS Field, (ii) identify Small Molecule Compounds that are active against such Selected Targets through the use of such Selected Targets and (iii) undertake preclinical research and evaluation of Program Compounds, in each case in the conduct of the Research Program. Such right and license shall include the right to grant sublicenses to Third Parties that are approved by the Joint Management Committee.

4.1.2.2 Lexicon Inactive Selected Targets. Subject to the terms of this Agreement and any applicable [**], BMS hereby grants to Lexicon and its Affiliates, within the Territory, (a) a non-exclusive right and license (without any right to sublicense, except as set forth below) under BMS's rights in the BMS Background Materials and the BMS Background Technology and (b) an exclusive right and license (without any right to sublicense, except as set forth below) under BMS's rights in the Program Intellectual Property to (i) validate Lexicon Inactive Selected Targets for the identification, evaluation and optimization of Small Molecule Compounds that are active against such Selected Targets for use in the CNS Field, (ii) identify Small Molecule Compounds that are active against such Lexicon Inactive Selected Targets through the use of such Lexicon Inactive Selected Targets and (iii) undertake preclinical research and evaluation of Small Molecule Compounds that are active against such Lexicon Inactive Selected Targets. Such right and license shall include the right to grant sublicenses to Third Parties in connection with, and incident to, a sublicense granted to such Third Party under the rights and licenses granted under Section 4.2.2. The rights and licenses granted under this Section 4.1.2.2 shall be in effect during the Research Program Term and thereafter so long as Lexicon is using Diligent Efforts in exercising its rights under this license.

4.1.2.3 Lexicon Targets. Subject to the terms of this Agreement and any applicable [**], BMS hereby grants to Lexicon and its Affiliates, within the Territory, (a) a non-exclusive right and license (without any right to sublicense, except as set forth below) under BMS's rights in the BMS Background Materials and the BMS Background Technology and (b) an exclusive right and license (without any right to sublicense, except as set forth below) under BMS's rights in the Program Intellectual Property to (i) identify Small Molecule Compounds that are active against Lexicon Targets through the use of such Lexicon Targets and (ii) undertake preclinical research and evaluation of Small Molecule Compounds that are active against such Lexicon Targets. Such right and license shall include the right to grant sublicenses to Third Parties in connection with, and incident to, a sublicense granted to such Third Party under the rights and licenses granted under Section 4.2.2.

4.1.3 Restrictions on Clinical Development of Products. Neither party nor their respective Affiliates shall administer to humans any Product that incorporates or is derived from any Program Compound, unless and until (and then only to the extent that) such party has received Joint Management Committee approval or has received a license under Section 4.2 for the clinical development and commercialization of such Product.

4.2 Grants of Development and Commercialization Licenses.

4.2.1 By Lexicon. Subject to the terms of this Agreement and any applicable [**], Lexicon hereby grants to BMS and its Affiliates, within the Territory, an exclusive right and license, with the right to sublicense, under Lexicon's rights in the Program Intellectual Property to develop, make, have made, import, use, have used, offer for sale, sell and have sold BMS Development Compounds and BMS Products. Any sublicense under this Section 4.2.1 shall be set forth in a written agreement containing confidentiality, non-use, ownership of intellectual property and audit provisions consistent with and no less restrictive than those contained herein, shall be subject and subordinate to the terms and conditions of this Agreement, and shall obligate the Sublicensee to make the milestone and royalty payments required hereunder; provided that BMS shall remain responsible for all payments due to Lexicon hereunder. BMS shall provide Lexicon with an [**] copy of each sublicense agreement promptly after executing the same; provided, however, that subject to the exceptions set forth in Section 1.18, each such sublicense agreement shall be Confidential Information of BMS.

4.2.2 By BMS. Subject to the terms of this Agreement and any applicable [**], BMS hereby grants to Lexicon and its Affiliates, within the Territory, an exclusive right and license, with the right to sublicense, under BMS's rights in the Program Intellectual Property to develop, make, have made, import, use, have used, offer for sale, sell and have sold Lexicon Development Compounds and Lexicon Products. Any sublicense under this Section 4.2.2 shall be set forth in a written agreement containing confidentiality, non-use, ownership of intellectual property and audit provisions consistent with and no less restrictive than those contained herein, shall be subject and subordinate to the terms and conditions of this Agreement, and shall obligate the Sublicensee to make the milestone and royalty payments required hereunder; provided that Lexicon shall remain responsible for all payments due to BMS hereunder. Lexicon shall provide BMS with an [**] copy of each sublicense agreement promptly after executing the same; provided, however, that subject to the exceptions set forth in Section 1.18, each such sublicense agreement shall be Confidential Information of Lexicon.

4.3 No Grant of Other Technology or Patent Rights. Except as otherwise expressly provided in this Agreement, under no circumstances shall a party hereto, as a result of this Agreement, obtain any ownership interest in or other right to any technology, know-how, patents, patent applications, gene or genomic sequence data or information, products, or biological materials of the other party, including items owned, controlled or developed by, or licensed to, the other party, or transferred by the other party to said party, at any time pursuant to this Agreement.

4.4 Right of First Offer for LG617 Target Collaboration. Lexicon agrees that, during the period beginning on the Effective Date and ending on the later of (a) the expiration of the Target Discovery Program Term or (b) the commencement of a Phase 1 Trial in the U.S. for an LG617 Compound (the "LG617 Option Period"), BMS shall have the following right of first offer. During the LG617 Option Period, Lexicon shall not grant any license or otherwise transfer rights to any Third Party for the development or commercialization of any LG617 Compound (any such arrangement being referred to herein as an "LG617 License"), [**] unless and until [**]. In the event that, at any time during the LG617 Option Period after an LG617 Compound [**], Lexicon desires to enter into an LG617 License (or after the LG617 Option Period, if Lexicon has not previously notified BMS of such desire), [**], Lexicon shall first notify BMS of its desire to enter into an LG617 License and, if requested by BMS within [**] days of such notice, shall enter into good faith negotiations with BMS with respect to an LG617 License for a period of [**] days following such notice (the "LG617 Negotiation Period"). In the event Lexicon and BMS do not enter into an LG617 License within such LG617 Negotiation Period, Lexicon will be free, at any time thereafter, to enter into negotiations with respect to an LG617 License with any Third Party; provided that, during the LG617 Option Period (but not thereafter), [**]. [**].

ARTICLE 5. PAYMENTS

5.1 Upfront Payment. In consideration of the rights granted to BMS under this Agreement, BMS shall pay to Lexicon an upfront payment of thirty-six million dollars (U.S. $36,000,000), which shall be due and payable within ten (10) business days of the Effective Date, but in no event later than December 31, 2003.

5.2 Target Discovery Program Payments. Subject to the other terms and conditions of this Agreement, in consideration for and as a contribution toward the Lexicon's costs of development and analysis of Mutant Mice in the Target Discovery Program, BMS shall make the following payments to Lexicon on the following schedule:

(a) annual research payments of ten million dollars (U.S. $10,000,000) for each of the first three Contract Years of the Target Discovery Program Term, which annual research payments shall be payable [**];

(b) in the event BMS elects to extend the Target Discovery Program Term under Section 2.2.2(a), annual research payments of [**] for each of the fourth and fifth Contract Years of the Target Discovery Program Term, which annual research payments shall be payable [**]; and

(c) in the event BMS elects to extend the Target Discovery Program Term under Section 2.2.2(b), annual research payments of [**] for each of the fourth and fifth Contract Years of the Target Discovery Program Term, which annual research payments shall be payable [**].

5.3 Research Program Milestone Payments. BMS shall pay Lexicon the following Research Program milestone payments within [**] days of the occurrence of the event giving rise to such payment:

(a) after Compound Library Screening has been first commenced for a total of [**] Selected Targets [**], BMS shall pay Lexicon [**] for each subsequent Selected Target for which Compound Library Screening is first commenced [**];

(b) during the Target Discovery Program Term, after a Full Phase Program has been first commenced for [**] Selected Target [**], BMS shall pay Lexicon [**] for each subsequent Selected Target [**] for which a Full Phase Program is first commenced; and

(c) during the period beginning after the Target Discovery Program Term, after Full Phase Programs have been first commenced for a total of [**] Selected Targets in the Research Program (a total of [**] Selected Targets in the event BMS elected to extend the Target Discovery Program Term under Section 2.2.2), BMS shall pay Lexicon [**] for each subsequent Selected Target for which a Full Phase Program is first commenced;

provided that [**]. The Research Program milestone payments payable under this Section 5.3 shall not be considered part of, or included in the calculation of the Research Program Costs contributed by BMS to the Research Program. For clarification, for purposes of determining the above Research Program milestone payments, [**].

5.4 Product Development Milestone Payments.

5.4.1 BMS Products. For each BMS Target, BMS shall pay Lexicon the following milestone payments for [**]:

MILESTONE EVENT	PAYMENTS FOR BMS TARGET FOR WHICH [**]	PAYMENTS FOR BMS TARGET FOR WHICH [**]
IND filing	U.S. $ [**]	U.S. $ [**]
Commencement of a Phase 2 Trial	[**]	[**]
Commencement of a Phase 3 Trial	[**]	[**]
NDA Filing	[**]	[**]
MAA Filing	[**]	[**]
NDA Approval or MAA Approval (upon the first to occur)	[**]	[**]
TOTAL	U.S. $ [**]	U.S. $ 76,000,000

Subject to Section 5.4.3, BMS shall pay Lexicon milestone payments for [**]. For each BMS Product that is a Post Opt-out Product, milestone payment [**] as set forth in Section 2.5.3.4. For each BMS Product that acts through a BMS Target that was designated from a BMS Inactive Selected Target, the milestone payment [**] as set forth in Section 2.3.4.2.

5.4.2 Lexicon Products. For each Lexicon Target, Lexicon shall pay BMS the following milestone payments for [**]:

MILESTONE EVENT	PAYMENTS FOR LEXICON TARGET
IND filing	U.S. $ [**]
Commencement of a Phase 2 Trial	[**]
Commencement of a Phase 3 Trial	[**]
NDA Filing	[**]
MAA Filing	[**]
NDA Approval or MAA Approval (upon the first to occur)	[**]
TOTAL	U.S. $ 25,000,000

Subject to Section 5.4.3, Lexicon shall pay BMS milestone payments for [**]. For each Lexicon Product that is a Post Opt-out Product, milestone payment [**] as set forth in Section 2.5.3.4. For each Lexicon Product that acts through a Lexicon Target that was designated from a Lexicon Inactive Selected Target, the milestone payment [**] as set forth in Section 2.3.4.2.

5.4.3 Milestone Conditions. The milestone payments payable under Sections 5.4.1 and 5.4.2 with respect to Products acting through a given BMS Target or Lexicon Target, as the case may be, shall be subject to the following conditions.

(a) Only one set of milestone payments will be paid for all Products containing a given Development Compound (including all forms and formulations of Products containing such Development Compound) upon the first occurrence of the milestone event for a Product containing that Development Compound, regardless of the number of times a milestone event may be achieved for Products containing such

Development Compound (for example, regardless of the number of Phase 3 Trials and NDA Filings and Approvals that may be obtained for Products containing such Development Compound).

(b) Each milestone payment shall be payable upon the first achievement of the milestone event for a given Development Compound; provided, however, [**].

(c) Subject to the foregoing provisions of this Section 5.4.3, if any milestone event for a Product is achieved prior to or in the absence of the achievement of any preceding milestone event for such Product (e.g., an NDA filing for a Product without a Phase 3 Trial) then, effective upon achievement of any such milestone event, all previously unpaid payments for any such preceding milestone event(s) shall also become due and payable.

5.4.4 Notice of Milestone Achievement. Each Product Licensee shall promptly notify the Product Licensor of the first occurrence of any milestone with respect to each Selected Target, and milestone payments shall be made within [**] days after such occurrence. Such milestone payments shall be non-refundable and shall not be credited against royalties payable to the Product Licensee under this Agreement, subject to Section 6.2.

5.5 Product Royalties.

5.5.1 BMS Products. For each BMS Product, BMS shall pay to Lexicon the following royalties on aggregate annual Net Sales in the Territory of such BMS Product:

AGGREGATE ANNUAL WORLDWIDE NET SALES OF BMS PRODUCT IN CONTRACT YEAR	ROYALTY ON NET SALES FOR BMS PRODUCT ACTING THROUGH A BMS TARGET THAT IS NOT A LISTED TARGET	ROYALTY ON NET SALES FOR BMS PRODUCT ACTING THROUGH A BMS TARGET THAT IS A LISTED TARGET
Under U.S. $[**]	[**]%	[**]%
From U.S. $[**]to U.S. $[**]	[**]%	[**]%
Above $[**]	[**]%	[**]%

By way of example, in a given Contract Year, if the aggregate annual worldwide Net Sales of a given BMS Product acting through a BMS Target that is not a Listed Target is [**], the following royalty payment would be payable under this Section 5.5.1: [**]. For BMS Products which are Post Opt-out Products, the foregoing royalty payment amounts [**] as provided in Section 2.5.3.4. For BMS Products that act through a BMS Target that was designated from a BMS Inactive Selected Target, the above royalty payment amounts shall be reduced as set forth in Section 2.3.4.2.

5.5.2 Lexicon Products. For each Lexicon Product, Lexicon shall pay to BMS the following royalties on aggregate annual Net Sales in the Territory of such Lexicon Product:

AGGREGATE ANNUAL WORLDWIDE NET SALES OF LEXICON PRODUCT IN CONTRACT YEAR	ROYALTY ON NET SALES
Under U.S. $[**]	[**]%
From U.S. $[**] to U.S. $[**]	[**]%
Above $[**]	[**]%

By way of example, in a given Contract Year, if the aggregate annual worldwide Net Sales of a given Lexicon Product is [**], the following royalty payment would be payable under this Section 5.5.2: [**]. For Lexicon Products which are Post Opt-out Products, the foregoing royalty payment amounts [**] as provided in Section 2.5.3.4. For Lexicon Products that act through a Lexicon Target that was designated from a Lexicon Inactive Selected Target, the above royalty payment [**] as set forth in Section 2.3.4.2.

5.5.3 Royalty Term. Royalties shall be payable, on a Product-by-Product and country-by-country basis, on Net Sales of Products for the longer of (a) the term of any Patents Rights Controlled by a party with a Valid Claim Covering the composition of matter or therapeutic use of such Product and providing marketing exclusivity for such Product in such country or (b) [**] years after the First Commercial Sale of such Product in such country.

5.5.4 Royalty Reduction. [**].

5.5.5 Third Party Patents. If the Product Licensee, in its reasonable judgment, is required to obtain a license from any Third Party under any patent in order to [**], and if the Product Licensee is required to pay to such Third Party a royalty under such license calculated on sales of a Product, and the infringement of such patent cannot reasonably be avoided by the Product Licensee, or if the Product Licensee is required by a court of competent jurisdiction to pay such a royalty to such a Third Party (and the infringement of such patent cannot reasonably be avoided by the Product Licensee), then the Product Licensee's obligation to pay royalties under Section 5.5.1 and 5.5.2 hereof shall [**], provided however, that [**]. In addition, if the Product Licensee is required to pay upfront payments or milestone payments to such Third Party in consideration for such license, or if the Product Licensee is required by a court of competent jurisdiction to pay a similar such payment, then the royalties payable under Section 5.5.1 and 5.5.2 shall [**], provided however, that [**]. The Product Licensee shall use its commercially reasonable efforts to minimize the amount of any of the foregoing payments owed by the Product Licensee to a Third Party. Prior to the Product Licensee exercising its reasonable judgment under this Section 5.5.5, the Product Licensee shall provide the Product Licensor with written notice of a potential need to obtain any license from Third Parties. The parties shall discuss the best course of action to resolve such potential license requirement(s), provided that such discussions shall not limit the Product Licensee's right to exercise its reasonable judgment.

5.5.6 Royalty Conditions. The royalties under Section 5.5.1 and 5.5.2 shall be subject to the following conditions:

(a) that only one royalty shall be due with respect to the same unit of Product;

(b) that no royalties shall be due upon the sale or other transfer among Product Licensee, its Affiliates or Sublicensees, but in such cases the royalty shall be due and calculated upon Product Licensee's or its Affiliate's or Sublicensee's Net Sales of Product to the first independent Third Party; and

(c) no royalties shall accrue on the disposition of Product in reasonable quantities by Product Licensee, its Affiliates or Sublicensees as part of an expanded access program or as bona fide samples or as donations to non-profit institutions or government agencies for non-commercial purposes, provided, in each case, that neither Product Licensee, its Affiliate or Sublicensees receives any payment for such Product.

5.5.7 Royalty Reports; Exchange Rates. During the term of this Agreement following the First Commercial Sale of any Product, the Product Licensee shall provide Product Licensor, within [**] days after the end of each Contract Quarter, an initial quarterly royalty report in a manner sufficient to enable Product Licensor to comply with its reporting requirements. Within [**] days after each Contract Quarter, Product Licensee shall furnish to the Product Licensor a written quarterly report showing, on a Product-by-Product basis:

(a) the gross sales and Net Sales of Products sold by such Product Licensee, its Sublicensees and their respective Affiliates during the reporting period and the calculation of Net Sales from such gross sales;

(b) the royalties payable in United States dollars which shall have accrued hereunder in respect of such Net Sales;

(c) withholding taxes, if any, required by applicable Law to be deducted in respect of such royalties;

(d) the dates of the First Commercial Sales of Products in any country during the reporting period; and

(e) the exchange rates used in determining the amount of United States dollars payable hereunder.

Royalties payable on sales in countries other than the United States shall be calculated in accordance with the standard exchange rate conversion practices used by the Product Licensee for financial accounting purposes. If no royalty or payment is due for any royalty period hereunder, the Product Licensee shall so report. Each Product Licensee shall keep, and shall require its Sublicensees to keep (all in accordance with generally accepted accounting principles, consistently applied), complete and accurate records in sufficient detail to properly reflect all gross sales and Net Sales and to enable the royalties payable hereunder to be determined.

5.5.8 Audits. Upon the written request of a Product Licensor, the Product Licensee shall permit an independent certified public accountant selected by the Product Licensor and acceptable to the Product Licensee, which acceptance shall not be unreasonably withheld, to have access, at reasonable times and during normal business hours, to such records of the Product Licensee as may be reasonably necessary to verify the accuracy of the royalty reports described herein, in respect of any fiscal year ending not more than [**] prior to the date of such request. The Product Licensor and the Product Licensee shall use commercially reasonable efforts to schedule all such verifications within [**] days after the Product Licensor makes its written request. All such verifications shall be conducted not more than [**]. The report of the Product Licensor's independent certified public accountant shall be made available to both parties. Subject to the Product Licensee's rights under Section 12.6, in the event the Product Licensor's independent certified public accountant concludes that additional royalties were owed to the Product Licensor for such period, the additional royalty shall be paid by the Product Licensee within [**] days of the date the Product Licensor delivers to the Product Licensee such independent certified public accountant's written report so concluding, unless such report contains manifest error. In the event the Product Licensor's independent certified public accountant concludes that there was an overpayment of royalties to the Product Licensor during such period, the overpayment shall be repaid by the Product Licensor within [**] days of the date the Product Licensor received such independent certified public accountant's written report so concluding, unless such report contains manifest error. The fees charged by such independent

certified public accountant shall be paid by the Product Licensor unless such audit discloses an underpayment of more than [**] of the amount due under this Agreement for the period in question, in which case the Product Licensee will bear the full cost of such audit. The Product Licensee shall include in each agreement with each applicable Sublicensee a provision requiring such Sublicensee to make reports to the Product Licensee, to keep and maintain records of sales made pursuant to such agreement and to grant access to such records by the Product Licensor's independent certified public accountant to the same extent required of the Product Licensee under this Agreement. The Product Licensor agrees that all information subject to review under this Section 5.5.8 or under any agreement with a Sublicensee of the Product Licensee is confidential and that the Product Licensor shall cause its independent certified public accountant to retain all such information in confidence. The Product Licensor's independent certified public accountant shall only report to the Product Licensor as to the computation of the royalties and other payments due to the Product Licensor under this Agreement and shall not disclose to the Product Licensor any other information of the Product Licensee or its Sublicensee.

5.5.9 Royalty Payment Terms. Royalty payments for each Contract Quarter shall be due at the time the Product Licensee's report under Section 5.5.7 for such Contract Quarter shall be due.

5.6 Withholding Taxes. In the event that any royalties or other payments due to a Product Licensor are subject to withholding tax required by applicable Law to be paid to the taxing authority of any foreign country, the amount of such tax may be withheld from the applicable royalties or other payment due the Product Licensor. The Product Licensee shall promptly pay such tax on behalf of the Product Licensor and shall furnish the Product Licensor with a certificate of withholding tax so deducted for the Product Licensor's avoidance of duplicate taxation in United States. The Product Licensee may not deduct any other withholding or any other governmental charges from the payments agreed upon under this Agreement, except to the extent same are paid on behalf of, or for the benefit of, the Product Licensor. The Product Licensee shall maintain official receipts of payment of any such withholding taxes and shall forward such receipts to the Product Licensor.

5.7 Blocked Currency. If by applicable Law or fiscal policy of a particular country, conversion into United States dollars or transfer of funds of a convertible currency to the United States is restricted or forbidden, the Product Licensee shall give the Product Licensor prompt written notice and shall pay the royalty due under this Article 5 through such means or methods as are lawful in such country as the Product Licensor may reasonably designate. Failing the designation by the Product Licensor of such lawful means or methods within [**] days after such written notice is given to the Product Licensor, the Product Licensee shall deposit such royalty payment in local currency to the credit of the Product Licensor in a recognized banking institution designated by the Product Licensor, or if none is designated by the Product Licensor within the [**] period described above, in a recognized banking institution selected by the Product Licensee and identified in a written notice to the Product Licensor by the Product Licensee, and such deposit shall fulfill all obligations of the Product Licensee to the Product Licensor with respect to such royalties.

5.8 Interest on Late Payments. A Product Licensor shall have the right to seek to collect interest on any payments that are not paid on or before [**] days after the date such payments are due under this Agreement at a rate equal to [**], calculated on the total number of days payment is delinquent.

5.9 Manner of Payment. Except as provided in Section 5.7, payments to be made by a Product Licensee to the Product Licensor under this Agreement shall be payable in United States dollars and shall be paid by check delivered to the Product Licensor at its principal office at the address for notice indicated in this Agreement or bank wire transfer in immediately available funds to such bank account in

the state in which such principal office is located as is designated in writing by the Product Licensor from time to time.

ARTICLE 6. PRODUCT DEVELOPMENT DILIGENCE

6.1 Diligence Obligations. Each Product Licensee shall use Diligent Efforts to pursue the research and development of, and to obtain Regulatory Approvals in major markets throughout the world as expeditiously as possible for, at least one Product that acts through each Selected Target for which such Product Licensee holds a license under Section 4.2 and, following such Regulatory Approvals, to maximize Net Sales of such Product(s), in each case in a manner consistent with the efforts such party devotes to products or research, development or marketing projects of similar market potential, profit potential or strategic value resulting from its own research efforts, based on conditions then prevailing, without any diminution on account of any interest of such Product Licensee in any competitive product in development or being marketed for the same indication(s).

6.2 Effect of Failure to Satisfy Diligence Obligations.

6.2.1 With respect to each Selected Target for which the Product Licensee fails to satisfy its Product diligence obligations under Section 6.1 above, at the option of the other party as its sole and exclusive remedy therefor, (a) the commercial licenses granted under Section 4.2 with respect to such Product(s) and related Selected Target shall terminate and [**]; provided, however, that Product Licensee's exclusive rights under Section 4.1 and 4.2 shall not terminate as set forth above [**] unless (i) Product Licensee is given [**] days' prior written notice by Product Licensor of Product Licensor's intent to terminate such licenses, stating the reasons and justification for such termination and recommending steps which Product Licensee should take, and (ii) Product Licensee, or any Sublicensee, has not used Diligent Efforts during such [**] period to pursue the research and/or development of, and/or to obtain Regulatory Approvals for, Products with respect to such Selected Target. The Product Licensor shall have the right, within the period of [**] days following the Product Licensee's [**] by delivering written notice thereof to the Product Licensee, subject to [**].

6.2.2 With respect to each Selected Target and related Products and Development Compounds for which a party exercises its right, under Section 6.2.1, [**] relating to such Product and related Development Compounds.

6.3 Research and Development Reports. Each party shall keep complete and accurate records of its activities conducted under this Agreement and the results thereof. Within [**] after the end of each [**] following the end of the Research Program Term, each party shall prepare and provide the other party with a reasonably detailed written report of the activities conducted under this Agreement, and the results thereof, through such date with respect to the development and/or commercialization of Products.

ARTICLE 7. INTELLECTUAL PROPERTY

7.1 Ownership of Intellectual Property.

7.1.1 Ownership by BMS of the BMS Background Materials and BMS Background Technology. Subject to the rights and licenses granted under this Agreement, BMS (and its licensors, as applicable) shall own and retain all rights to the BMS Background Materials and BMS Background Technology.

7.1.2 Ownership by Lexicon of the Lexicon Background Materials and Lexicon Background Technology. Subject to the rights and licenses granted under this Agreement, Lexicon (and its licensors, as applicable) shall own and retain all rights to the Lexicon Background Materials and Lexicon Background Technology. Without limiting the foregoing, subject to the rights and licenses granted under this Agreement, Lexicon shall own and retain all rights to (a) all Mutant Mice and progeny thereof and any cells or other materials derived by Lexicon therefrom and (b) any invention or discovery that is conceived or first reduced to practice by Lexicon or any of its Affiliates during the course of any analysis of Mutant Mice performed in the Target Discovery Program.

7.1.3 Ownership of Program Intellectual Property.

7.1.3.1 Inventorship. Inventorship for patentable inventions and discoveries conceived or reduced to practice during the course of the performance of activities pursuant to this Agreement shall be determined in accordance with U.S. patent laws for determining inventorship. In the event of a dispute regarding inventorship, if the parties are unable to resolve such inventorship dispute, the Joint Management Committee shall establish a procedure to resolve such dispute, which may include engaging a Third Party patent attorney jointly selected by the parties to resolve such dispute, which resolution by such patent attorney shall be binding upon the parties.

7.1.3.2 Ownership of Program Technology and Program Intellectual Property for Selected Targets. Subject to the rights and licenses granted under this Agreement, Lexicon shall own all Program Technology and Program Intellectual Property that directly relates to [**] ("Selected Target Inventions"), whether such Selected Target Invention was invented or discovered by employees, Affiliates, agents, independent contractors or consultants of BMS, Lexicon or both parties; provided, however, that Selected Target Inventions shall not include Program Technology and Program Intellectual Property [**].

7.1.3.3 Ownership of Other Program Technology and Program Intellectual Property. Except as set forth in Section 7.1.3.2, title to all Program Technology and Program Intellectual Property shall be based upon the inventorship for such Program Technology and Program Intellectual Property. Except as set forth in Section 7.1.3.2, Lexicon shall own, Program Technology and Program Intellectual Property invented solely by employees, agents, consultants and/or contractors of Lexicon or a Lexicon Affiliate ("Lexicon Sole Program Inventions"). Except as set forth in Section 7.1.3.2, BMS shall own, Program Technology and Program Intellectual Property invented solely by employees, agents, consultants and/or contractors of BMS or a BMS Affiliate ("BMS Sole Program Inventions"). Lexicon and BMS shall jointly own Program Technology and Program Intellectual Property invented jointly by employees, agents, consultants and/or contractors of both Lexicon and BMS or Affiliates of Lexicon and BMS ("Joint Program Inventions"). All Joint Program Inventions, BMS Sole Program Inventions, Lexicon Sole Program Inventions and Selected Target Inventions shall be collectively the "Program Inventions." Each party shall disclose to the other party promptly any Program Inventions made by such party's Affiliates, employees, agents or consultants.

7.2 Prosecution and Maintenance of Program Patent Rights.

7.2.1 Primary Prosecution Rights. The responsibility for (a) preparing, filing and prosecuting patent applications (including, but not limited to, provisional, reissue, continuing,

continuation, continuation-in-part, divisional, and substitute applications and any foreign counterparts thereof) Covering a Program Invention; (b) maintaining any Program Patent Rights; and (c) managing any interference or opposition or similar proceedings relating to the foregoing ((a) through (c), collectively, "Patent Prosecution") shall be the responsibility of the party owning such Program Invention; provided, however, that with respect to any Joint Program Inventions, such responsibility shall be assigned by the Joint Management Committee on a case-by-case basis. In determining which party shall be responsible for Patent Prosecution of a jointly owned patent application, the Joint Management Committee shall consider, among other factors, the relative contribution of each party to the claimed subject matter and the relatedness of the claimed subject matter to that in other patent applications being prosecuted by each party. Each party shall bear all Patent Prosecution expenses, including attorneys' fees, incurred by such party in the performance of Patent Prosecution, except that, unless the parties agree otherwise the Patent Prosecution expenses, including attorneys' fees, for Joint Program Inventions shall be shared equally by the parties.

7.2.2 Secondary Prosecution Rights. If the prosecuting party elects not to continue pursuing Patent Prosecution for Program Inventions (and the other party has joint ownership of or a license under such Program Patent Rights pursuant to this Agreement), then the prosecuting party shall notify the other party in writing of such election at least [**] days prior to the last available date for action to preserve such Program Patent Rights. If such other party elects to continue Patent Prosecution, it may do so at its own expense. The party taking over Patent Prosecution responsibility will not be liable to the other party in any way with respect to its handling of, or the results obtained from, such Patent Prosecution. The other party will provide the party taking over Patent Prosecution with such assistance and execute such documents as are necessary to continue or permit such Patent Prosecution.

7.2.3 Cooperation. Each party hereby agrees:

(a) to take all reasonable additional actions and execute such agreements, instruments and documents as may be reasonably required to perfect the other's ownership interest in accordance with the intent of this Agreement;

(b) to make its employees, Affiliates, agents, independent contractors and consultants reasonably available to the other party (or to the other party's authorized attorneys, agents or representatives), to the extent reasonably necessary to enable the prosecuting party to undertake Patent Prosecution;

(c) to provide the other party with copies of all material correspondence with the U.S. Patent and Trademark Office or its foreign counterparts;

(d) to cooperate, if necessary and appropriate, with the other party in gaining patent term extensions wherever applicable to Program Patent Rights for Program Inventions; and

(e) to endeavor in good faith to coordinate its efforts with the other party to minimize or avoid interference with the Patent Prosecution of the other party's patent applications related to Program Inventions.

7.3 Patent Term Extension. The Product Licensor shall cooperate with the Product Licensee in obtaining patent term extension or supplemental protection certificates or their equivalents in any country with respect to the Program Patent Rights. In the event that elections with respect to obtaining

such patent term extension, supplemental protection certificates or their equivalents are to be made, the Product Licensee shall have the right to make the election and the Product Licensor agrees to abide by such election, provided that such election by the Product Licensee will be made so as to maximize the period of marketing exclusivity for the Product.

7.4 Enforcement of the Program Patent Rights.

7.4.1 Notices of Third Party Infringement. Each Party shall promptly provide the other Party with written notice reasonably detailing any known or alleged infringement of Program Patent Rights by a Third Party.

7.4.2 Hatch-Waxman Notifications. Each party shall provide to the other party copies of any allegations of alleged patent invalidity, unenforceability or non-infringement of a patent or patents with respect to Program Technology, Program Materials or Products pursuant to a Paragraph IV Patent Certification by a Third Party filing an Abbreviated New Drug Application (i.e., an action under the Hatch-Waxman Act). Such copies shall be provided promptly after receipt of such certification.

7.4.3 Other Notifications. Each party shall provide to the other party copies of any notices it receives from Third Parties regarding any patent nullity actions, any declaratory judgment actions, any alleged infringement of Program Patent Rights or any alleged misappropriation of intellectual property with respect to Program Technology, Program Materials or Products. Such copies shall be provided promptly following receipt thereof.

7.4.4 Product-Related Infringement.

7.4.4.1 The Product Licensee for a Product shall have the sole right, but not the obligation, to institute and direct legal proceedings against any Third Party believed to be infringing the Program Patent Rights of either party (including, without limitation, the Program Patent Rights Claiming Selected Target Inventions related to the Selected Target through which such Product acts) by the manufacture, use, importation, offer for sale or sale of a product competitive with such Product (whether a clinical or commercial product). Each party will bear its own costs, including attorneys' fees, relating to such legal proceedings; provided that the Product Licensee shall bear the Product Licensor's out-of-pocket expenses, including attorneys' fees, incurred in complying with requests for cooperation made by the Product Licensee. Any recovery in connection with such suit or proceeding will first be applied to reimburse the parties for their out-of-pocket expenses, including attorney's fees. All recoveries resulting from such legal proceedings that are in excess of the parties' costs of bringing or participating in such action, including attorney's fees, shall be allocated fifty percent (50%) to BMS and fifty percent (50%) to Lexicon; provided, however, that, [**]. The Product Licensee and the Product Licensor shall share in any enhanced damages due to willful infringement in proportion to their entitlement to actual damages.

7.4.4.2 In the event that a Product Licensee takes action under this Section 7.3.2, the other party shall cooperate to the extent reasonably necessary at the sole expense of the Product Licensee. Upon the reasonable request of the Product Licensee, the other party shall join the suit and shall be represented in any such legal proceedings using counsel of its own choice. Neither party shall settle any claim or proceeding relating to Program Patent Rights Controlled in whole or in part by the other party or licensed under

this Agreement to the other party without the prior written consent of such other party, which consent shall not be unreasonably withheld.

7.4.5 Non-Product-Related Infringement. Each party shall have the sole right, but not the obligation, to institute and direct legal proceedings against any Third Party believed to be infringing the Sole Program Patent Rights of such party other than infringement relating to a Product. All costs, including attorneys' fees, relating to such legal proceedings shall be borne by the party instituting such legal proceedings, and all recoveries resulting from such legal proceedings shall be retained by such party. The parties shall consult with each other regarding the institution, prosecution and control of any action or proceeding with respect to infringement of any of the Joint Program Patent Rights other than infringement relating to a Product.

7.5 Notices of Other Proceedings.

7.5.1 Each party shall notify the other in writing of any allegations it receives from a Third Party that the manufacture, use, sale, offer for sale or import of Program Technology, Program Materials or any Product infringes the intellectual property rights of such Third Party. Such notice shall be provided promptly following receipt of such allegations.

7.5.2 In the event that a party receives notice that it or any of its Affiliates have been individually named as a defendant in a legal proceeding by a Third Party alleging infringement of a Third Party patent or other intellectual property right as a result of the manufacture, use, sale, offer for sale or import of Program Technology, Program Materials or a Product, such party shall immediately notify the other party in writing after the receipt of such notice. Such written notice shall include a copy of any summons or complaint (or the equivalent thereof) received regarding the foregoing.

ARTICLE 8. CONFIDENTIALITY

8.1 Nondisclosure Obligations.

8.1.1 General. Except as otherwise provided in this Article 8, each Receiving Party shall maintain the Confidential Information of each Disclosing Party in confidence and use it only for purposes specifically authorized under this Agreement. Except as otherwise specifically provided in this Article 8, each party shall disclose Confidential Information of the other party only to those employees, representatives and agents requiring knowledge thereof in connection with fulfilling the party's obligations under this Agreement, and not to any other Third Party. Each party further agrees to inform all such employees, representatives and agents of the terms and provisions of this Agreement relating to Confidential Information and their duties hereunder and to have obtained their prior written agreement to keep such Confidential Information in confidence under terms and conditions no less restrictive than those contained herein. Each party shall exercise the same standard of care as it would itself exercise in relation to its own confidential information (but in no event less than a reasonable standard of care) to protect and preserve the proprietary and confidential nature of the Confidential Information disclosed to it by the other party. Upon termination or expiration of this Agreement, each party shall promptly, upon request of the other party, use good faith commercially reasonable efforts to return or destroy (as requested by the disclosing party) all documents and any copies thereof containing Confidential Information belonging to, or disclosed by, such other party, save that it may retain one copy of the same solely for the purposes of ensuring compliance with this Section 8.1. Any breach of this Section 8.1 by any person to whom Confidential Information is disclosed by a party is considered a breach by the party itself.

8.1.2 Limitations. To the extent it is reasonably necessary or appropriate to fulfill its obligations or exercise its rights under this Agreement and subject to advance written notification to the Disclosing Party: (a) a party may disclose to Third Parties Confidential Information it is otherwise obligated not to disclose under this Section 8.1, to its Affiliates, Sublicensees, consultants, outside contractors and clinical investigators, on a strict need-to-know basis for the purposes contemplated by this Agreement and on the condition that such entities or persons agree to keep the Confidential Information confidential for the same time periods and to the same extent as such party is required to keep the Confidential Information confidential hereunder; and (b) a party or its Sublicensees may disclose, using appropriate measures to preserve confidentiality, such Confidential Information to government or other regulatory authorities to the extent that such disclosure is reasonably necessary to obtain authorizations to conduct clinical trials of, and to commercially market, Products pursuant to this Agreement. Furthermore, a Receiving Party may request permission from the Disclosing Party to disclose such Confidential Information to the extent that such disclosure is [**].

8.1.3 Required Disclosure. A Receiving Party may disclose Confidential Information pursuant to interrogatories, requests for information or documents, subpoena, civil investigative demand issued by a court or governmental agency or as otherwise required by Law; provided, however, that the Receiving Party shall notify the Disclosing Party promptly upon receipt thereof, giving [**] the Disclosing Party sufficient advance notice to permit it to oppose, limit or seek confidential treatment for such disclosure; and provided, further, that the Receiving Party shall furnish only that portion of the Confidential Information which it is advised by counsel is legally required whether or not a protective order or other similar order is obtained by the Disclosing Party.

8.1.4 Securities Filings. In the event either party proposes to file with the Securities and Exchange Commission or the securities regulators of any state or other jurisdiction a registration statement or any other disclosure document which describes or refers to this Agreement under the Securities Act of 1933, as amended, the Securities Exchange Act, of 1934, as amended, or any other applicable securities law, the party shall notify the other party of such intention and shall provide such other party with a copy of relevant portions of the proposed filing not less than ten (10) business days prior to such filing (and any revisions to such portions of the proposed filing a reasonable time prior to the filing thereof), including any exhibits thereto relating to the Agreement, and shall [**] to obtain confidential treatment of any information concerning the Agreement that such other party requests be kept confidential, and shall only disclose Confidential Information which it is advised by counsel is legally required to be disclosed. No such notice shall be required under this Section 8.1.4 if the substance of the description of or reference to this Agreement contained in the proposed filing has been included in any previous filing made by the either party hereunder or otherwise approved by the other party.

8.2 Terms of Agreement. The existence and the terms and conditions of the Agreement that the parties have not specifically agreed to disclose pursuant to Section 8.1.4 and Section 12.8 shall be considered Confidential Information of both parties. Either party may disclose such terms to bona fide potential Sublicensee, investor, investment banker, acquiror, merger partner or other potential financial partner, and their attorneys and agents, provided that each such person to whom such information is to be disclosed is informed of the confidential nature of such information and has entered into a written agreement with the party requiring such person to keep such information confidential.

8.3 Injunctive Relief. The parties hereto understand and agree that remedies at law may be inadequate to protect against any breach of any of the provisions of this Article 8 by either party or their

employees, agents, officers or directors or any other person acting in concert with it or on its behalf. Accordingly, each party shall be entitled to the granting of injunctive relief by a court of competent jurisdiction against any action that constitutes any such breach of this Article 8.

8.4 Publication. BMS and/or Lexicon (each, a "Submitting Party") may each publish or present data and/or results relating to a Product for which the Submitting Party holds a commercial license, subject to the prior written approval of the other party and the prior review of the proposed disclosure by the other party (each, a "Reviewing Party"), solely to determine (a) whether the proposed disclosure contains the Confidential Information of the Reviewing Party or (b) whether the information contained in the proposed disclosure should be the subject of a patent application to be filed prior to such disclosure. The Submitting Party shall provide the Reviewing Party with the opportunity to review any proposed abstract, manuscript or presentation which discloses the results of research relating to the Product by delivering a copy thereof to the Reviewing Party no less than [**] days before its intended submission for publication or presentation. The Reviewing Party shall have [**] days from its receipt of any such abstract, manuscript or presentation in which to notify the Submitting Party in writing of any specific objections to the disclosure, based on either the need to seek patent protection or concern regarding the specific disclosure of the Confidential Information of the Reviewing Party. In the event the Reviewing Party objects to the disclosure, the Submitting Party agrees not to submit the publication or abstract or make the presentation containing the objected-to information until the Reviewing Party is given a reasonable additional period of time (not to exceed an additional [**] days) to seek patent protection for any material in the disclosure which the Reviewing Party believes is patentable (subject, in all events, to Section 8.3) or, in the case of Confidential Information, to allow the Submitting Party to delete any Confidential Information of the Reviewing Party from the proposed disclosure. The Submitting Party agrees to delete from the proposed disclosure any Confidential Information of the Reviewing Party upon request.

ARTICLE 9. REPRESENTATIONS AND WARRANTIES

9.1 Representations, Warranties and Covenants of Lexicon. Lexicon represents and warrants to and covenants with BMS that:

9.1.1 Lexicon is a corporation duly organized, validly existing and in corporate good standing under the Laws of the state of Delaware;

9.1.2 Lexicon has the corporate and legal right, authority and power to enter into this Agreement, and to extend the rights and licenses granted to BMS in this Agreement;

9.1.3 Lexicon has taken all necessary action to authorize the execution, delivery and performance of this Agreement;

9.1.4 upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of Lexicon, enforceable in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar Laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law);

9.1.5 the performance of Lexicon's obligations under this Agreement will not conflict with its charter documents or result in a breach of any agreements, contracts or other arrangements to which it is a party; and

9.1.6 Lexicon will not after the Effective Date enter into any agreements, contracts or other arrangements with others that would be inconsistent with or in conflict with or in derogation of BMS's rights and licenses under this Agreement or Lexicon's obligations under this Agreement;

9.1.7 except as otherwise disclosed to BMS prior to the Effective Date, Lexicon is not aware of any legal obstacles, including the patent rights of others, that are likely to prevent it from carrying out the provisions of this Agreement;

9.1.8 Lexicon has enforceable written agreements with all of its employees who receive Confidential Information under this Agreement assigning to Lexicon ownership of all intellectual property rights created in the course of their employment;

9.1.9 [**];

9.1.10 [**]; and

9.1.11 [**].

9.2 Representations, Warranties and Covenants of BMS. BMS represents and warrants to and covenants with Lexicon that:

9.2.1 BMS is a corporation duly organized, validly existing and in corporate good standing under the Laws of the state of Delaware;

9.2.2 BMS has the corporate and legal right, authority and power to enter into this Agreement, and to extend the rights and licenses granted to Lexicon in this Agreement;

9.2.3 BMS has taken all necessary action to authorize the execution, delivery and performance of this Agreement;

9.2.4 upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of BMS enforceable in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar Laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law);

9.2.5 the performance of its obligations under this Agreement will not conflict with BMS's charter documents or result in a breach of any agreements, contracts or other arrangements to which it is a party; and

9.2.6 BMS will not after the Effective Date enter into any agreements, contracts or other arrangements with others that would be inconsistent with or in conflict with or in derogation of its obligations under this Agreement;

9.2.7 except as otherwise disclosed to Lexicon prior to the Effective Date, BMS is not aware of any legal obstacles, including the patent rights of others, that are likely to prevent it from carrying out the provisions of this Agreement;

9.2.8 BMS has enforceable written agreements with all of its employees who receive Confidential Information under this Agreement assigning to BMS ownership of all intellectual property rights created in the course of their employment; and

9.2.9 [**].

9.3 Warranty Disclaimer. EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER PARTY MAKES ANY WARRANTY WITH RESPECT TO ANY PRODUCT, PATENT RIGHTS, GOODS, SERVICES, PROGRAM MATERIALS, BACKGROUND MATERIALS OR ANY OTHER SUBJECT MATTER OF THIS AGREEMENT, AND EACH PARTY HEREBY DISCLAIMS WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT WITH RESPECT TO ANY AND ALL OF THE FOREGOING.

9.4 Limited Liability. EXCEPT AS SPECIFICALLY SET FORTH IN THIS AGREEMENT, NEITHER LEXICON NOR BMS WILL BE LIABLE WITH RESPECT TO ANY MATTER ARISING UNDER THIS AGREEMENT UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY PUNITIVE, EXEMPLARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOST PROFITS.

ARTICLE 10. INDEMNITY

10.1 BMS Indemnity Obligations. BMS agrees to defend, indemnify and hold Lexicon, its Affiliates and their respective employees and agents harmless from all claims, losses, damages or expenses (including reasonable attorneys' fees and costs of litigation) in connection with any claims made or suits brought against Lexicon by a Third Party relating to this Agreement arising as a result of: (a) actual or asserted violations of any applicable Law by BMS, its Sublicensees and their respective Affiliates by virtue of which any BMS Products manufactured, distributed or sold hereunder shall be alleged or determined to be adulterated, misbranded, mislabeled or otherwise not in compliance with any applicable Law; (b) claims for bodily injury, death or property damage attributable to the manufacture, distribution, sale or use of any BMS Products by BMS, its Sublicensees and their respective Affiliates; (c) a BMS Product recall ordered by a governmental agency or required by a confirmed BMS Product failure as reasonably determined by the parties hereto; (d) BMS's breach of any of its representations, warranties or covenants hereunder; or (e) the negligence or willful misconduct of BMS, its officers, employees or agents.

10.2 Lexicon Indemnity Obligations. Lexicon agrees to defend, indemnify and hold BMS, its Affiliates and their respective employees and agents harmless from all claims, losses, damages or expenses (including reasonable attorneys' fees and costs of litigation) in connection with any claims made or suits brought against BMS by a Third Party relating to this Agreement arising as a result of: (a) actual or asserted violations of any applicable Law by Lexicon, its Sublicensees and their respective Affiliates by virtue of which any Lexicon Products manufactured, distributed or sold hereunder shall be alleged or determined to be adulterated, misbranded, mislabeled or otherwise not in compliance with any applicable Law; (b) claims for bodily injury, death or property damage attributable to the manufacture, distribution, sale or use of any Lexicon Products by Lexicon, its Sublicensees and their respective Affiliates; (c) a Lexicon Product recall ordered by a governmental agency or required by a confirmed Lexicon Product failure as reasonably determined by the parties hereto; (d) Lexicon's breach of any of its representations, warranties or covenants hereunder; or (e) the negligence or willful misconduct of Lexicon, its officers, employees or agents.

10.3 Limitation on Indemnity Obligations. Neither party, its Affiliates or their respective employees and agents shall be entitled to the indemnities set forth in Sections 10.1 or 10.2, respectively, to the comparative extent the claim, loss, damage or expense for which indemnification is sought was caused by the negligence, willful misconduct, reckless or intentional act or omission or material breach of this Agreement by such party, its directors, officers, employees or authorized agents.

10.4 Procedure. If a party or any of its Affiliates or their respective employees or agents (collectively, the "Indemnitee") intends to claim indemnification under this Article 10, the Indemnitee shall promptly notify the other party (the "Indemnitor") of any loss, claim, damage, liability or action in respect of which the Indemnitee intends to claim such indemnification, and the Indemnitor shall assume the defense thereof with counsel selected by the Indemnitor and reasonably acceptable to the Indemnitee, provided, however, that an Indemnitee shall have the right to retain its own counsel, with the fees and expenses to be paid by the Indemnitee, if representation of such Indemnitee by the counsel retained by the Indemnitor would be inappropriate due to actual or potential differing interests between such Indemnitee and any other party represented by such counsel in such proceedings. The Indemnitor shall have the right to settle or compromise any claims for which it is providing indemnification under this Article 10, provided that the consent of the Indemnitee (which shall not be unreasonably withheld or delayed) shall be required in the event any such settlement or compromise would adversely affect the interests of the Indemnitee. The indemnity agreement in this Article 10 shall not apply to amounts paid in settlement of any loss, claim, damage, liability or action if such settlement is effected without the consent of the Indemnitor. The failure to deliver notice to the Indemnitor within a reasonable time after the commencement of any such action, if prejudicial to the Indemnitor's ability to defend such action, shall relieve such Indemnitor of any liability to the Indemnitee under this Article 10, but the omission so to deliver notice to the Indemnitor will not relieve it of any liability that it may have to any Indemnitee otherwise than under this Article 10. The Indemnitee under this Article 10, its employees and agents, shall cooperate fully with the Indemnitor and its legal representatives in the investigation of any action, claim or liability covered by this indemnification.

10.5 Insurance. Each party shall maintain appropriate product liability insurance (and/or self-insurance) with respect to development, manufacture and sale of Products by such party in such amount as such party customarily maintains with respect to sales of its other products. Each party shall maintain such insurance for so long as it continues to manufacture or sell Products, and thereafter for so long as such party customarily maintains insurance with respect to sales of its other products.

ARTICLE 11. EXPIRATION AND TERMINATION

11.1 Term of Agreement. The term of this Agreement shall commence on the Effective Date and shall continue, unless earlier terminated under Section 11.2, until the later of (a) the expiration of the obligations of both parties to pay royalties under this Agreement and (b) the expiration or termination of the last to expire of any Valid Claim included in the Program Patent Rights. The expiration or termination of the Target Discovery Term and Research Program Term shall not affect the term of this Agreement.

11.2 Termination for Material Breach.

11.2.1 If either party believes that the other is in material breach of this Agreement, then the non-breaching party may deliver notice of such breach to the other party. In such notice, the non-breaching party shall identify the actions or conduct that such party would consider to be an acceptable cure of such breach. For any breach arising from a failure to make a payment set forth in Article 5, the allegedly breaching party shall have [**] days to cure such breach, unless such payment is in dispute. For all material breaches other than a failure to make a payment set forth

in Article 5, the allegedly breaching party shall have [**] days to either cure such breach or, if cure cannot be reasonably effected within such [**] period, to deliver to the other party a plan for curing such breach that is reasonably sufficient to effect a cure. Such a plan shall set forth a program for achieving cure as rapidly as practicable. Following delivery of such plan, the breaching party shall use Diligent Efforts to carry out the plan and cure the material breach.

11.2.2 If the party receiving notice of material breach fails to cure such breach within the [**] period or [**] period (as applicable), the party originally delivering the notice shall have the right, at its option exercisable in its sole discretion, in addition to any other rights or remedies available to it at law or in equity and subject to the limitations set forth in Sections 3.7.2, 9.4 and 12.6 hereof, to terminate this Agreement upon [**] days' notice thereof to the other party, in which case the licenses granted to the defaulting party pursuant to Article 4 shall terminate; provided [**]. The provisions of Sections 5.3 through 5.9 hereof and Article 6 shall survive any such termination of this Agreement. The rights and licenses granted to the defaulting party under Section 4.2 with respect to any Selected Target and related Products and Development Compounds with respect to which no default has occurred shall, subject to such party's obligations to pay milestones and royalties pursuant to Article 5, continue.

11.3 Effect of Expiration or Termination of Agreement. The expiration or termination of this Agreement shall not relieve the parties of any obligation accruing prior to such expiration or termination. The provisions of Articles 7, 8, 9, 10 and 11, and Sections 12.2 through 12.6 hereof shall survive the expiration or termination of this Agreement. The provisions of Sections 5.3 through 5.9 hereof and Article 6 shall survive any termination of this Agreement under which a party, its Sublicensees or their respective Affiliates retains the right to sell Products until such time as all royalty payment obligations applicable to such Products under Section 5.5 have expired in accordance with their terms.

ARTICLE 12. MISCELLANEOUS

12.1 Force Majeure. Neither party shall be held liable or responsible to the other party nor be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any obligation under this Agreement when such failure or delay is caused by or results from causes beyond the reasonable control of the affected party, including but not limited to fire, floods, embargoes, war, acts of war (whether war is declared or not), insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, acts of God or acts, omissions or delays in acting by any governmental authority; provided, however, that the party so affected shall use reasonable commercial efforts to avoid or remove such causes of nonperformance, and shall continue performance hereunder with reasonable dispatch whenever such causes are removed. Either party shall provide the other party with prompt written notice of any delay or failure to perform that occurs by reason of force majeure. The parties shall mutually seek a resolution of the delay or the failure to perform as noted above.

12.2 Assignment. This Agreement may not be assigned or otherwise transferred, in whole or in part, by either party without the consent of the other party; provided, however, that either Lexicon or BMS may, without such consent, assign its rights and obligations under this Agreement (a) to any Affiliate, or (b) in connection with a merger, consolidation or sale of all or substantially all of its business assets to an unrelated Third Party; provided, further, that such party's rights and obligations under this Agreement shall be assumed by its successor in interest in any such transaction and shall not be transferred separate from all or substantially all of its other business assets, including those business assets that are the subject of this Agreement. Any purported assignment in violation of the preceding sentence shall be void. Any permitted assignee shall assume all obligations of its assignor under this Agreement, unless the parties otherwise agree.

12.3 Severability. Each party hereby agrees that it does not intend to violate any public policy, statutory or common laws, rules, regulations, treaty or decision of any government agency or executive body thereof of any country or community or association of countries. Should one or more provisions of this Agreement be or become invalid, the parties hereto shall substitute, by mutual consent, valid provisions for such invalid provisions which valid provisions in their economic effect are sufficiently similar to the invalid provisions that it can be reasonably assumed that the parties would have entered into this Agreement with such valid provisions in lieu of such invalid provisions. In case such valid provisions cannot be agreed upon, the invalidity of one or several provisions of this Agreement shall not affect the validity of this Agreement as a whole, unless the invalid provisions are of such essential importance to this Agreement that it is to be reasonably assumed that the parties would not have entered into this Agreement without the invalid provisions.

12.4 Notices. Any consent, notice or report required or permitted to be given or made under this Agreement by one of the notification parties hereto to the other shall be in writing, delivered personally or by facsimile (and promptly confirmed by telephone, personal delivery or courier) or courier, postage prepaid (where applicable), addressed to such other party at its address indicated below, or to such other address as the addressee shall have last furnished in writing to the addressor and shall be effective upon receipt by the addressee.

If to Lexicon:
Lexicon Genetics Incorporated
8800 Technology Forest Place
The Woodlands, Texas 77381
Attention: President and Chief Executive Officer
Telephone: (281) 863-3000
Facsimile: (281) 863-8095

With a copy to:
Lexicon Genetics Incorporated
8800 Technology Forest Place
The Woodlands, Texas 77381
Attention: General Counsel
Telephone: (281) 863-3000
Facsimile: (281) 863-8010

If to BMS:
Bristol-Myers Squibb Company
P.O. Box 4000
Route 206 & Province Line Road
Princeton, New Jersey 08543-4000
Attention: Vice President, External Science, Technology & Licensing
Telephone: 609-252-4712
Facsimile: 609-252-7212

With a copy to:
Bristol-Myers Squibb Company
P.O. Box 4000
Route 206 & Province Line Road
Princeton, New Jersey 08543-4000
Attention: Vice President & Senior Counsel, Corporate Development
Telephone: 609-252-4311
Facsimile: 609-252-4232

All such communications shall be effective upon receipt.

12.5 Applicable Law. This Agreement shall be governed by and construed in accordance with the Laws of the State of Delaware, without reference to the conflicts of law principles thereof.

12.6 Dispute Resolution. Subject to Section 3.7.2, the parties hereby agree that they will first attempt in good faith to resolve any dispute arising out of or relating to this Agreement promptly by negotiations. Any such dispute shall be brought to the attention of the Alliance Managers for resolution. The Alliance Managers will endeavor to propose and define mutually acceptable solutions and facilitate communications in an attempt to bring the dispute to a mutually agreeable resolution. If after discussing the matter in good faith and attempting to find a mutually satisfactory resolution to the issue, the parties are unable to resolve such dispute, the matter shall be referred to the [**] (the "Representatives"). If the matter has not been resolved within [**] days of the first meeting of the Representatives of the parties (which period may be extended by mutual agreement) concerning such matter, the parties shall be free to pursue all available recourse both at law and in equity, subject to the following. Any dispute between the parties arising out of or relating to the validity or interpretation of, compliance with, breach or alleged breach of or termination of this Agreement that is not finally resolved by the Joint Management Committee or executive officers as described above will be resolved through binding arbitration as set forth below. Any such binding arbitration shall be conducted in accordance with the then current Commercial Arbitration Rules of the American Arbitration Association. To the extent the parties cannot agree on a single arbitrator, each party shall have the right to designate one arbitrator, who shall have no prior or existing personal or financial relationship with the designating party, and the two (2) arbitrators shall designate a third arbitrator. If the two (2) arbitrators cannot agree on the designation of the third arbitrator, the American Arbitration Association shall designate the third arbitrator. Unless otherwise agreed by the parties, any arbitration initiated by BMS shall be conducted in Houston, Texas and any arbitration initiated by Lexicon shall be conducted in New York, New York. In any such arbitration proceeding, the parties shall be entitled to all remedies to which they would be entitled in a United States District Court and to full discovery to the same degree permitted under the Federal Rules of Civil Procedure. Any such arbitration shall be completed and an award rendered within [**] days of the notice of dispute. The arbitrator shall render a "reasoned decision" within the meaning of the Commercial Arbitration Rules which shall include findings of fact and conclusions of law. For avoidance of doubt, the decisions set forth in Section 3.4 shall not be subject to arbitration under this Section.

12.7 Entire Agreement. This Agreement, together with the exhibits and appendices hereto and any confidentiality agreement(s) executed in contemplation of this Agreement, contains the entire understanding of the parties with respect to the subject matter hereof. All express or implied agreements and understandings, either oral or written, heretofore made are expressly merged in and made a part of this Agreement. This Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by both parties hereto. Notwithstanding the foregoing, the LexVision Agreement shall remain in full force and effect in accordance with its terms.

12.8 Publicity. Upon execution of this Agreement, the parties shall issue the press release announcing the existence of this Agreement in the form and substance previously agreed to by the parties. Any announcements or similar publicity with respect to this Agreement shall be agreed upon between the parties in advance of such announcement. The parties understand that this Agreement is likely to be of significant interest to investors, analysts and others, and that the parties therefore may make such public announcements with respect thereto, subject to the remainder of this Section 12.8. The parties agree that any such announcement will not contain confidential business or technical information and, if disclosure of confidential business or technical information is required by Law, the parties will use reasonable efforts to minimize such disclosure and obtain confidential treatment for any such information which is disclosed to a governmental agency. Each party agrees to provide to the other party a copy of any public announcement regarding this Agreement or the subject matter thereof as soon as reasonably practicable under the circumstances prior to its scheduled release. Except under extraordinary circumstances, each

party shall provide the other with an advance copy of any such announcement at least [**] prior to its scheduled release. Each party shall have the right to expeditiously review and recommend changes to any such announcement and, except as otherwise required by Law, the party whose announcement has been reviewed shall remove any information the reviewing party reasonably deems to be inappropriate for disclosure. The contents of any announcement or similar publicity which has been reviewed and approved by the reviewing party can be re-released by either party without a requirement for re-approval.

12.9 Headings. The captions to the several Articles and Sections hereof are not a part of this Agreement, but are merely guides or labels to assist in locating and reading the several Articles and Sections hereof.

12.10 No Partnership. It is expressly agreed that the relationship between Lexicon and BMS shall not constitute a partnership, joint venture or agency. Neither Lexicon nor BMS shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other, without the prior consent of the other party to do so.

12.11 Exports. The parties acknowledge that the export of technical data, materials or products is subject to the exporting party receiving any necessary export licenses and that the parties cannot be responsible for any delays attributable to export controls which are beyond the reasonable control of either party. Lexicon and BMS agree not to export or re-export, directly or indirectly, any information, technical data, the direct product of such data, samples or equipment received or generated under this Agreement in violation of any applicable export control Laws. Lexicon and BMS agree to obtain similar covenants from their Sublicensees and contractors with respect to the subject matter of this Section 12.11.

12.12 Interpretation.

12.12.1 In the event an ambiguity or a question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.

12.12.2 The definitions of the terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation". The word "will" shall be construed to have the same meaning and effect as the word "shall". The word "any" shall mean "any and all" unless otherwise clearly indicated by context.

12.12.3 Unless the context requires otherwise, (a) any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein or therein), (b) any reference to any laws herein shall be construed as referring to such laws as from time to time enacted, repealed or amended, (c) any reference herein to any person shall be construed to include the person's successors and assigns, (d) the words "herein", "hereof" and "hereunder", and words of similar import, shall be construed to refer to this Agreement in its entirety and not to any particular provision hereof, and (e) all references herein to Articles, Sections, Appendices or Schedules, unless otherwise specifically provided, shall be construed to refer to Articles, Sections, Appendices and Schedules of this Agreement.

12.12.4 References to sections of the Code of Federal Regulations and to the United States Code shall mean the cited sections, as these may be amended from time to time.

12.13 Waiver. The waiver by either party hereto of any right hereunder or the failure to perform or of a breach by the other party shall not be deemed a waiver of any other right hereunder or of any other breach or failure by said other party whether of a similar nature or otherwise.

12.14 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

* * *

[signature page follows]

IN WITNESS WHEREOF, the parties have caused their duly authorized officers to execute and deliver this Agreement as of the Effective Date.

LEXICON GENETICS INCORPORATED

By: /s/ Arthur T. Sands Date: December 17, 2003

Arthur T. Sands, M.D., Ph.D.
President and Chief Executive Officer

BRISTOL-MYERS SQUIBB COMPANY

By: /s/ James B. D. Palmer Date: December 17, 2003

Name: James B. D. Palmer

Title: President, Research and Development

EXHIBIT A

DESCRIPTION OF FULL PHASE PROGRAM (SEE SECTION 1.31)

OBJECTIVE:	Optimization and characterization of lead Program Compounds with the objective of identifying Development Candidate(s) and Back-up Compound(s) acting through a Selected Target for full pre-clinical and clinical development.
ESTIMATED ANNUALIZED FTE COMMITMENTS:	[**]

EXHIBIT B

DESCRIPTION OF LEVEL 1 PHENOTYPIC ANALYSIS (SEE SECTION 1.42)

Level 1 Phenotypic Analysis is an initial screen designed to identify primary characteristics resulting from selected mutations in Mutant Mice. Level 1 Phenotypic Analysis currently includes the following assays, which may be changed from time to time (a) by the Joint Scientific Committee, at the Joint Scientific Committee's reasonable scientific discretion, for assays employed in behavioral analysis, and (b) at Lexicon's reasonable scientific discretion, for assays in other categories.

[**]

EXHIBIT C

DESCRIPTION OF LEVEL 2 PHENOTYPIC ANALYSIS (SEE SECTION 1.43)

Level 2 Phenotypic Analysis involves one or more of the following analyses, as appropriate, of the effects of selected mutations in Mutant Mice.

[**]

EXHIBIT D

DESCRIPTION OF MID-PHASE PROGRAM (SEE SECTION 1.60)

OBJECTIVE:	Identification and characterization of Program Compounds with the objective of identifying lead Program Compounds that justify optimization efforts in a Full Phase Program and that can be used to [**].
ESTIMATED ANNUALIZED FTE COMMITMENTS:	[**]

EXHIBIT E

ALLOCATION OF NET SALES IN BUNDLED TRANSACTION (SEE SECTION 1.65)

With respect to Products sold in a Bundled Transaction in which BMS, Lexicon or any of their respective Affiliates or Sublicensees discounts the sales price of the Products to a greater degree than BMS, Lexicon, their Affiliates or Sublicensees, respectively, generally discounts the price of its other products to such customer, the amount to be included in Net Sales of such Products shall be calculated in accordance with the following formula:

$$NS\text{-}P = \frac{(ASP\text{-}P) \times (N\text{-}P)}{\sum_{(SIGMA)=1} (ASP\text{-}pi) \times (N\text{-}pi) + (ASP\text{-}P) \times (N\text{-}P)} \times BTF$$

Where:

NS-P	=	Amount allocated to Net Sales of the Product
ASP-P	=	Average Selling Price (as defined below) per unit, during the applicable period, of the Product when sold alone
ASP-pi	=	Average Selling Price per unit, during the applicable period, of each product, other than a Product, in the Bundled Transaction when sold alone
N-P	=	Total number of units of Product included in the Bundled Transaction during the applicable period
N-pi	=	Total number of units (i.e., corresponding to the same ASP-pi) of each product, other than a Product, included in the Bundled Transaction during the applicable period
(SIGMA)=1	=	The sum of the products of the formula (ASP-pi) x (N-pi) for each and every product, other than a Product, included in the Bundled Transaction during the applicable period
BTF	=	The aggregate amounts paid to the seller for the Bundled Transaction during the applicable period

The Average Selling Price shall be based on the actual average selling price of the applicable Product or product other than a Product, as the case may be, determined for the applicable period.

If a Product or other product is not sold separately, the Average Selling Price with respect thereto shall be the bona fide list price.

If a Product or other product is not sold separately and no bona fide list price exists for such Product or other product, the Parties shall agree upon an imputed bona fide list price for such Product or other product, and the Average Selling Price with respect thereto shall be based on such imputed list price.

EXHIBIT F

FORM OF MATERIAL TRANSFER AGREEMENT FOR TRANSFER OF MUTANT MICE TO BMS (SEE SECTION 2.2.5)

EXHIBIT 23.1

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the incorporation by reference in the previously filed Registration Statements on Form S-8 (Registration Nos. 333-41532 and 333-66380) pertaining to the 2000 Equity Incentive Plan, the 2000 Non-Employee Directors' Stock Option Plan and the Coelacanth Corporation 1999 Stock Option Plan and on Form S-3 (Registration Nos. 333-67294, 333-101549, 333-108855 and 333-111821) and in the related prospectus of Lexicon Genetics Incorporated, of our report dated February 12, 2004, with respect to the consolidated financial statements of Lexicon Genetics Incorporated included in this Annual Report (Form 10-K) for the year ended December 31, 2003.

/s/ ERNST & YOUNG LLP

Houston, Texas
March 11, 2004

EXHIBIT 23.2

NOTICE REGARDING CONSENT OF ARTHUR ANDERSEN LLP

The financial statements of Lexicon Genetics Incorporated as of December 31, 2001, and for the year then ended, included in this annual report on Form 10-K have been audited by Arthur Andersen LLP, independent public accountants. Arthur Andersen LLP has since ceased operations.

This annual report on Form 10-K is incorporated by reference into Lexicon's registration statements on Form S-8 (Registration Nos. 333-41532 and 333-66380) and on Form S-3 (Registration Nos. Nos. 333-67294, 333-101549, 333-108855 and 333-111821) and the prospectuses relating thereto. Arthur Andersen LLP has not reissued its report on Lexicon's financial statements as of December 31, 2001, and for the year then ended, in connection with this annual report on Form 10-K. In addition, after reasonable efforts, and in reliance upon Rule 437a under the Securities Act of 1933, we have not been able to obtain the consent of Arthur Andersen LLP with respect to the incorporation by reference of such report in the registration statements and prospectuses referenced above. Because Arthur Andersen LLP has not consented to the inclusion of such report in the registration statements and prospectuses referenced above, purchasers under such prospectuses will not be able to recover against Arthur Andersen LLP under Section 11(a) of the Securities Act for any untrue statements of a material fact contained in the financial statements audited by Arthur Andersen LLP or any omissions to state a material fact required to be stated therein.

EXHIBIT 31.1

CERTIFICATIONS

I, Arthur T. Sands, certify that:

1. I have reviewed this annual report on Form 10-K of Lexicon Genetics Incorporated;

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

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

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

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

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

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

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

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

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

Date: March 12, 2004

/s/ Arthur T. Sands

Arthur T. Sands, M.D., Ph.D.
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATIONS

I, Julia P. Gregory, certify that:

1. I have reviewed this annual report on Form 10-K of Lexicon Genetics Incorporated;

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

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

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

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

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

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

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

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

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

Date: March 12, 2004

/s/ Julia P. Gregory

Julia P. Gregory
Executive Vice President, Corporate Development
and Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. 1350, as adopted), Arthur T. Sands, M.D., Ph.D., Chief Executive Officer of Lexicon Genetics Incorporated ("Lexicon"), and Julia P. Gregory, Chief Financial Officer of Lexicon, each hereby certify that:

1. Lexicon's Annual Report on Form 10-K for the year ended December 31, 2003, and to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of section 13(a) or section 15(d) of the Securities Exchange Act of 1934, and

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

IN WITNESS WHEREOF, the undersigned have set their hands hereto as of the 12th day of March, 2004.

By: /s/ ARTHUR T. SANDS

Arthur T. Sands, M.D., Ph.D.
President and Chief Executive Officer

By: /s/ JULIA P. GREGORY

Julia P. Gregory
Executive Vice President, Corporate Development
and Chief Financial Officer