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, 2005

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 if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act of 1933. Yes [ ] No [X]

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

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 a large accelerated filer, an accelerated filer or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Securities Exchange Act of 1934. (check one): Large accelerated filer [ ] Accelerated filer [X] Non-accelerated filer [ ]

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

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 $261.9 million, based on the closing price of the common stock on the Nasdaq National Market on June 30, 2005 of $4.94 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 February 28, 2006, 64,559,340 shares of common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Certain sections of the registrant's definitive proxy statement relating to the registrant's 2006 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, 2005, are incorporated by reference into Part III of this annual report on Form 10-K.

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 and development 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 these 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, antibody and protein drugs. 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.

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 60% of these genes, and we expect to complete the analysis of the remaining genes by the end of 2008. Through the end of 2005, we had identified and validated in living mammals, or in vivo, more than 90 targets with promising profiles for drug discovery. As of February 28, 2006, we had advanced compounds for two of these targets into preclinical development and had advanced compounds from drug discovery programs for a number of additional targets into preclinical research. To date, none of our programs has yet advanced into clinical development.

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, and to develop new biotherapeutic drugs based on certain targets selected from the alliance. We are working with N.V. Organon to discover, develop and commercialize new biotherapeutic drugs based on another group of secreted proteins and potential antibody targets. We are working with Takeda Pharmaceutical Company Limited for the discovery of new drugs for the treatment of high blood pressure. In addition, we have established collaborations and license agreements with other leading pharmaceutical and biotechnology companies under which we receive fees and, in some cases, are eligible to receive milestone and royalty payments, in return for granting access to some of our technologies and discoveries for use in 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 60% of these 5,000 genes, and we expect to complete the analysis of the remaining genes by the end of 2008.

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. The study of the effects of knocking out genes in mice has historically proven to be a powerful tool for understanding human genes because of the close similarity of gene function and physiology between mice and humans, with approximately 99% of all human genes having a counterpart in the mouse genome. Our 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 encoded by the corresponding human genes.

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 and may limit the utility of potential therapeutics directed at the drug target. We believe these advantages will contribute to better target selection and, therefore, to the success of our drug discovery and development efforts.

The value 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, antibody and protein drugs for those in vivo-validated drug targets that we consider to have high pharmaceutical value. We have established internal small molecule drug discovery capabilities, in which we use our own sophisticated libraries of drug-like chemical compounds in high-throughput screening assays to identify "hits," or chemical compounds demonstrating activity, against these targets. We then employ medicinal chemistry efforts to optimize the potency and selectivity of these hits and to identify lead compounds for potential development. We have also established internal antibody and protein drug discovery capabilities, in which we use protein expansion and antibody technologies to generate and optimize molecules with appropriate characteristics for development.

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. 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 may increase our likelihood of success in discovering breakthrough therapeutics.

OUR LEAD DRUG DISCOVERY PROGRAMS

We have advanced two of our drug discovery programs into preclinical development in preparation for regulatory filings for the commencement of clinical trials.

- LX-6171 is a novel small molecule compound with potential for treating cognitive disorders such as Alzheimer's disease.

- LX-1031 is a novel small molecule compound with potential for treating irritable bowel syndrome.

We have advanced compounds from drug discovery programs for a number of additional targets into preclinical research.

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

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

PHYSIOLOGICAL ANALYSIS TECHNOLOGIES

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

We employ the same physiological analysis technology platform that we use in the discovery of gene function to analyze the in vivo efficacy and safety profiles of 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 and behavior of each of those knockout mice by utilizing our broad range of analytical 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 3,000 genes and expect to complete our analysis of an aggregate of 5,000 genes by the end of 2008. We are not aware of any existing competitive effort 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. When we identify a hit against one of our in vivo-validated targets, we can rapidly reassemble these building blocks to create hundreds or thousands of variations around the structure of the initial compound, enabling us to accelerate our medicinal chemistry efforts.

Our medicinal chemistry 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.

RESEARCH AND DEVELOPMENT EXPENSES

In 2005, 2004 and 2003, respectively, we incurred expenses of $93.6 million, $90.6 million and $82.2 million in company-sponsored as well as collaborative research and development activities, including $0.4 million and $5.0 million, of stock-based compensation expense in 2004 and 2003, respectively.

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 internal resources to discover and develop therapeutics based on some of our drug target discoveries, allocating 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 cash and revenues in exchange for access to some of our

technologies and discoveries for use by these third parties in their own drug discovery efforts. These collaborations and licenses also offer us the potential, in many cases, to receive milestone payments and royalties on products that our collaborators and licensees develop using our technology.

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

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

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

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

manufacturing biotherapeutic products resulting from the collaboration for use in clinical trials and for worldwide sales.

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

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

OTHER COMMERCIAL COLLABORATIONS

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

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

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

E-BIOLOGY COLLABORATION PROGRAM

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

GOVERNMENT GRANTS AND CONTRACTS

Texas Institute for Genomic Medicine. In July 2005, we received an award from the Texas Enterprise Fund for the creation of a knockout mouse embryonic stem cell library containing 350,000 cell lines using our proprietary gene trapping technology. We are creating the library for the Texas Institute for Genomic Medicine, or TIGM, a newly formed non-profit institute whose founding members are Texas A&M University, the Texas A&M University System Health Science Center and us. TIGM researchers may also access specific cells from our current OmniBank library of 270,000 mouse embryonic stem cell lines and will have certain rights to utilize our gene targeting technologies. In addition, we will equip TIGM with the bioinformatics software required for the management and analysis of data relating to the library. The Texas Enterprise Fund also made an award to the Texas A&M University System for the creation of facilities and infrastructure to house the library.

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

TECHNOLOGY LICENSES

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

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 nine issued United States patents that are directed to our gene trapping technology, 84 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 77 additional United States patents, and corresponding foreign patents and patent applications, directed to gene targeting, gene trapping and genetic manipulation of mouse embryonic stem cells. These include patents to which we hold exclusive rights in certain fields, including a total of nine United States patents directed to the use of gene targeting technologies known as positive-negative selection and isogenic DNA targeting, as well as patents directed to the use of site specific genetic recombination technology known as Cre/lox technology.

We have filed or have exclusive rights to more than 700 pending patent applications in the United States Patent and Trademark Office, the European Patent Office, the national patent offices of other foreign countries or

under the Patent Cooperation Treaty, directed to our gene trapping technology, the DNA sequences of genes, the uses of specific drug targets, drug discovery assays, and other products and processes. Collectively, these patent applications are directed to, among other things, approximately 200 full-length human gene sequences, more than 50,000 partial human gene sequences, and more than 45,000 knockout mouse clones and corresponding mouse gene sequence tags. Patents typically have a term of no longer than 20 years from the date of filing.

As noted above, we hold rights to a number of these patents and patent applications under license agreements with third parties. In particular, we license our principal gene targeting technologies from GenPharm International, Inc. and our Cre/lox technology from DuPont Pharmaceuticals Company, now a subsidiary of Bristol-Myers Squibb. Many of these licenses are nonexclusive, although some are exclusive in specified fields. Most of the licenses, including those licensed from GenPharm and DuPont, have terms that extend for the life of the licensed patents. In the case of our license from GenPharm, the license generally is exclusive in specified fields, subject to specific rights held by third parties, and we are permitted to grant sublicenses.

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, 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 knockout mouse ES cell libraries, 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 or criminal penalties.

In addition to regulatory approvals that must be obtained in the United States, a drug or biological product is also subject to regulatory approval in other countries in which it is marketed. The conduct of clinical trials of drugs and biological products in countries other than the United States is likewise subject to regulatory oversight in such countries. The requirements governing the conduct of clinical trials, product licensing, pricing, and reimbursement vary widely from country to country. No action can be taken to market any drug or biological product in a country until the regulatory authorities in that country have approved an appropriate application. FDA approval does not assure approval by other regulatory authorities. The current approval process varies from country

to country, and the time spent in gaining approval varies from that required for FDA approval. In some countries, the sale price of a drug or biological product must also be approved. The pricing review period often begins after marketing approval is granted. Even if a foreign regulatory authority approves a drug or biological product, it may not approve satisfactory prices for the product.

OTHER REGULATIONS

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

EMPLOYEES AND CONSULTANTS

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

As of February 28, 2006, we employed 755 persons, of whom 156 hold M.D., Ph.D. or D.V.M. degrees and another 109 hold other advanced degrees. We believe that our relationship with our employees is good.

RISK FACTORS

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

RISKS RELATED TO OUR NEED FOR ADDITIONAL FINANCING AND OUR FINANCIAL RESULTS

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

As of December 31, 2005, we had cash, cash equivalents and short-term investments (net of restricted cash and investments) of $99.3 million. We anticipate that our existing capital resources and the cash and revenues we expect to derive from drug discovery alliances, collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice, government grants and contracts and technology licenses will enable us to fund our currently planned operations for approximately the next two years. Our currently planned operations for that time period consist of the continuation of our efforts to discover the physiological functions of 5,000 human genes that we consider to be pharmaceutically important, the expansion of our medicinal chemistry, biotherapeutics and preclinical research operations and the initiation of clinical trials. However, we caution you that we may generate less cash and revenues or incur expenses more rapidly than we currently anticipate.

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

- our ability to obtain additional funds from alliances, collaborations, government grants and contracts and technology licenses;
- the amount and timing of payments under such agreements;
- the level and timing of our research and development expenditures;
- future results from clinical trials that we initiate;

- the cost and timing of regulatory approvals of products that we successfully develop; and

- market acceptance of products that we successfully develop and commercially launch.

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

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

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

We have incurred net losses since our inception, including net losses of $36.3 million for the year ended December 31, 2005, $47.2 million for the year ended December 31, 2004 and $64.2 million for the year ended December 31, 2003. As of December 31, 2005, we had an accumulated deficit of $297.4 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, collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice, government grants and contracts and technology licenses, and will continue to do so for the foreseeable future. Our future revenues from alliances, collaborations and government grants and contracts are uncertain because our existing agreements have fixed terms or relate to specific projects of limited duration. Our future revenues from technology licenses are uncertain because they depend, in part, on securing new agreements. Our ability to secure future revenue-generating agreements will depend upon our ability to address the needs of our potential future collaborators, granting agencies and licensees, and to negotiate agreements that we believe are in our long-term best interests. We may determine that our interests are better served by retaining rights to our discoveries and advancing our therapeutic programs to a later stage, which could limit our near-term revenues. Given the early-stage nature of our operations, we do not currently derive any revenues from sales of pharmaceutical products.

A large portion of our expenses is fixed, including expenses related to facilities, equipment and personnel. In addition, we expect to spend significant amounts to enhance our core technologies and fund our research and development activities, including the advancement of potential therapeutics into clinical development. 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.

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

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

- our ability to establish new collaborations and alliances, government grants and contracts, and technology licenses, and the timing of such arrangements;

- the expiration or other termination of collaborations and alliances, which may not be renewed or replaced;

- the success rate of our discovery efforts leading to opportunities for new collaborations, alliances and licenses, as well as milestone payments and royalties;

- the timing and willingness of our collaborators to commercialize pharmaceutical products that would result in milestone payments and royalties; and

- general and industry-specific economic conditions, which may affect our and our collaborators' research and development expenditures.

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

RISKS RELATED TO OUR BUSINESS

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

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

Biotechnology and pharmaceutical companies have successfully developed and commercialized only a limited number of genomics-derived pharmaceutical products to date. We have not proven our ability to develop or commercialize therapeutics or drug targets that we identify, 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 discover and develop potential therapeutics. These complications could materially delay or limit the use of our resources, substantially increase the anticipated cost of generating them or prevent us from implementing our processes at appropriate quality and throughput levels.

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

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

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

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

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

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

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

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

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

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

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

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

Our ability to develop and commercialize pharmaceutical products on our own will depend on our ability to internally develop preclinical, clinical, regulatory and sales and marketing capabilities, or enter into arrangements with third parties to provide these functions. It will be expensive and will require significant time for us to develop

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

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

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

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

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

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

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

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

We are highly dependent on the principal members of our management and scientific staff. We do not carry key man insurance on any key personnel and the loss of any of these personnel could negatively impact our business, financial condition or results of operations and could inhibit our product development and

commercialization efforts. Although we have entered into employment agreements with some of our key personnel, these employment agreements are all at will. In addition, not all key personnel have employment agreements.

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

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

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

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

Our OmniBank mouse clone library and its backup are stored in liquid nitrogen freezers located at our facility in The Woodlands, Texas, and our knockout mouse research operations are carried out entirely at the same facility. While we have developed redundant and emergency backup systems to protect these resources and the facilities in which they are stored, they may be insufficient in the event of a severe fire, flood, hurricane, tornado, mechanical failure or similar disaster. If such a disaster significantly damages or destroys the facility in which these resources are maintained, our business could be disrupted until we could regenerate the affected resources and, as a result, our stock price could decline. Our business interruption insurance may not be sufficient to compensate us in the event of a major interruption due to such a disaster.

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

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

RISKS RELATED TO OUR INDUSTRY

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

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

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

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

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

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

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

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

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

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

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

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

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

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

We have decided not to pursue patent protection with respect to some of our inventions outside the United States, both because we do not believe it is cost-effective and because of confidentiality concerns. Accordingly, our international competitors could develop, and receive foreign patent protection for, genes or gene sequences, uses of those genes or gene sequences, gene products and drug targets, assays for identifying potential therapeutic products, potential therapeutic products and methods of treatment for which we are seeking United States patent protection. In addition, most of our gene trapping patents and our licensed gene targeting patents cover only the United States and do not apply to discovery activities conducted outside of the United States or, in some circumstances, to importing into the United States products developed using this technology.

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

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

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

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

regulatory action, which could delay further marketing until the product is brought into compliance. The failure to comply with these requirements may also subject us or our collaborators to stringent penalties.

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

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

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

In certain foreign markets, pricing or profitability of healthcare products is subject to government control. In the United States, there have been, and we expect that there will continue to be, a number of federal and state proposals to implement similar governmental control. In addition, an increasing emphasis on managed care in the United States has increased and will continue to increase the pressure on pharmaceutical pricing. While we cannot predict the adoption of any such legislative or regulatory proposals or the effect such proposals or managed care efforts may have on our business, the announcement of such proposals or efforts could harm our ability to raise capital, and the adoption of such proposals or efforts could harm our results of operations. Further, to the extent that such proposals or efforts harm other pharmaceutical companies that are our prospective collaborators, our ability to establish corporate collaborations would be impaired. In addition, third-party payers are increasingly challenging the prices charged for medical products and services. We do not know whether consumers, third-party payers and others will consider any products that we or our collaborators develop to be cost-effective or that reimbursement to the consumer will be available or will be sufficient to allow us or our collaborators to sell such products on a profitable basis.

We may be sued for product liability.

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

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

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

ITEM 2. PROPERTIES

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

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

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

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

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

ITEM 3. LEGAL PROCEEDINGS

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, 2005.

PART II

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

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

	HIGH	LOW
2004		
First Quarter....	$8.19	$5.68
Second Quarter...	$8.24	$6.00
Third Quarter....	$7.90	$5.03
Fourth Quarter...	$7.95	$6.02
2005		
First Quarter....	$8.00	$4.90
Second Quarter...	$5.20	$4.15
Third Quarter....	$6.50	$3.82
Fourth Quarter...	$4.47	$3.19

As of February 28, 2006, there were approximately 228 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, 2005, 2004 and 2003 and the balance sheet data as of December 31, 2005 and 2004 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, 2002 and 2001, and the balance sheet data as of December 31, 2003, 2002 and 2001 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,				
	2005	2004	2003	2002	2001
	(in thousands, except per share data)				
STATEMENTS OF OPERATIONS DATA:					
Revenues	$ 75,680	$ 61,740	$ 42,838	$ 35,200	$ 30,577
Operating expenses:					
Research and development, including stock-based compensation of ($21) in 2005, $426 in 2004, $5,048 in 2003, $5,155 in 2002 and $5,539 in 2001	93,625	90,586	82,198	74,859	53,355
General and administrative, including stock-based compensation of $0 in 2005, $412 in 2004, $5,067 in 2003, $5,113 in 2002 and $5,231 in 2001	18,174	18,608	23,233	23,234	20,861
Total operating expenses	111,799	109,194	105,431	98,093	74,216
Loss from operations	(36,119)	(47,454)	(62,593)	(62,893)	(43,639)
Interest and other income, net	(77)	282	1,471	3,223	8,467
Loss before taxes and cumulative effect of a change in accounting principle	(36,196)	(47,172)	(61,122)	(59,670)	(35,172)
Income tax provision	119	--	--	--	--
Loss before cumulative effect of a change in accounting principle	(36,315)	(47,172)	(61,122)	(59,670)	(35,172)
Cumulative effect of a change in accounting principle (1)	--	--	(3,076)	--	--
Net loss	$(36,315)	$(47,172)	$(64,198)	$(59,670)	$(35,172)
Net loss per common share basic and diluted:					
Loss before cumulative effect of a change in accounting principle	$ (0.57)	(0.74)	$ (1.08)	(1.14)	(0.70)
Cumulative effect of a change in accounting principle	--	--	(0.05)	--	--
Net loss per common share, basic and diluted	$ (0.57)	(0.74)	$ (1.13)	(1.14)	(0.70)
Shares used in computing net loss per common share, basic and diluted	63,962	63,327	56,820	52,263	50,213

	AS OF DECEMBER 31,				
	2005	2004	2003	2002	2001
	(in thousands)				
BALANCE SHEET DATA:					
Cash, cash equivalents and investments, including restricted cash and investments of $430 in 2005, $430 in 2004, $57,514 in 2003, $57,710 in 2002 and $43,338 in 2001	$ 99,695	$ 87,558	$ 161,001	$ 123,096	$166,840
Working capital	48,584	60,038	139,739	111,833	147,663
Total assets	218,714	211,980	284,199	201,772	239,990
Long-term debt, net of current portion	32,189	32,940	56,344	4,000	--
Accumulated deficit	(297,430)	(261,115)	(213,943)	(149,745)	(90,075)
Stockholders' equity	85,802	121,594	166,216	169,902	218,372

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(1) Upon adoption of FASB Interpretation No. 46, or FIN 46, "Consolidation of Variable Interest Entities - An Interpretation of ARB No. 51," the Company consolidated the assets of the variable interest entity, which were comprised of property and improvements funded under a synthetic lease. These assets had a carrying value of $54.8 million, net of accumulated depreciation of $3.1 million on December 31, 2003. The Company also consolidated the variable interest entity's debt of $52.3 million and non-controlling interests of $2.5 million, which amounts are included in long-term debt and other long-term liabilities, respectively. Additionally, the Company recorded a cumulative effect of a change in accounting principle equal to the accumulated depreciation of $3.1 million for the period from the date the buildings were placed in service under the synthetic lease through December 31, 2003. In April 2004, Lexicon purchased the facilities subject to the synthetic lease, repaying the amounts funded under the synthetic lease with proceeds from a mortgage financing and cash.

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

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

OVERVIEW

We are a biopharmaceutical company focused on the discovery and development of breakthrough treatments for human disease. We 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, antibody and protein drugs 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; with Genentech, Inc. for the discovery of therapeutic proteins and antibody targets and the development of antibody and protein drugs based on those targets; with N.V. Organon for the discovery of another group of therapeutic proteins and antibody targets and the development and commercialization of antibody and protein drugs based on those targets; and with Takeda Pharmaceutical Company Limited to discover new drugs for the treatment of high blood pressure. In addition, we have established collaborations and license agreements with other leading pharmaceutical and biotechnology companies under which we receive fees and, in some 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, target validation collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice, government grants and contracts, and technology licenses. To date, we have generated a substantial portion of our revenues from a limited number of sources.

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

Since our inception, we have incurred significant losses and, as of December 31, 2005, we had an accumulated deficit of $297.4 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 programs, the development and analysis of knockout mice and our other target validation research efforts, and the development of compound libraries. General and administrative expenses consist primarily of salaries and related expenses for executive and administrative personnel, professional fees and other corporate expenses including information technology, facilities costs and general legal activities. In connection with 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, 2005 we had net operating loss carryforwards of approximately $184.7 million. We also had research and development tax credit carryforwards of approximately $12.4 million. The net operating loss and credit carryforwards will expire at various dates beginning in 2011, if not utilized. Utilization of the net operating losses and credits may be significantly limited due to a change in ownership as defined by provisions of the Internal Revenue Code of 1986 and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization. We recorded a $119,000 income tax provision representing current alternative minimum tax payable based on taxable income for the year ended December 31, 2005.

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.

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

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

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

RESEARCH AND DEVELOPMENT EXPENSES

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

We have advanced two of our drug discovery programs, LX-6171 and LX-1031, into preclinical development in preparation for regulatory filings for the commencement of clinical trials. The drug development process takes many years to complete. The cost and length of time varies due to many factors, including the type, complexity and intended use of the product candidate. We estimate that drug development activities are typically completed over the following periods:

PHASE	ESTIMATED COMPLETION PERIOD
Preclinical development	1-2 years
Phase 1 clinical trials	1-2 years
Phase 2 clinical trials	1-2 years
Phase 3 clinical trials	2-4 years

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

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

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 2005.

RECENT ACCOUNTING PRONOUNCEMENT

In December 2004, the Financial Accounting Standards Board, or FASB, issued Statement of Financial Accounting Standards No. 123 (Revised), "Share-Based Payment," or SFAS 123 (Revised). The statement eliminates the ability to account for stock-based compensation using Accounting Principles Board Opinion No. 25 and requires such transactions be recognized as compensation expense in the income statement based on their fair values on the date of the grant, with the compensation expense recognized over the period in which an employee is required to provide service in exchange for the stock award. We adopted this statement on January 1, 2006 using a modified prospective application. As such, the compensation expense recognition provisions will apply to new awards and to any awards modified, repurchased or canceled after the adoption date. Additionally, for any unvested awards outstanding at the adoption date, we will recognize compensation expense over the remaining vesting period. We are currently evaluating the impact of SFAS 123 (Revised) on our financial condition and results of operation. However, using a Black-Scholes option pricing model consistent with our current practice, the adoption of SFAS 123 (Revised) on January 1, 2006 is estimated to result in additional compensation expense of approximately $7.0 million to $9.0 million for the year ended December 31, 2006. This estimate is dependent upon market price, assumptions used in estimating the fair value of stock options, and the level of stock option grants and cancellations in 2006.

RESULTS OF OPERATIONS - COMPARISON OF YEARS ENDED DECEMBER 31, 2005, 2004 AND 2003

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,		
	2005	2004	2003
Total revenues	$75.7	$61.7	$42.8
Dollar increase	$14.0	$18.9	
Percentage increase ..	23%	44%	

Years Ended December 31, 2005 and 2004

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

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

Years Ended December 31, 2004 and 2003

- Collaborative research - Revenue from collaborative research increased 134% in 2004 to $49.7 million, primarily due to increased revenue under our alliance with Bristol-Myers Squibb, which commenced in December 2003, our completion of a performance milestone under our alliance with Genentech, and the commencement in July 2004 of our alliance with Takeda. This was offset in part by a decrease in revenues from target validation collaborations due to the scheduled conclusion of many of these arrangements and the expiration of the collaboration period under our alliance with Incyte in June 2004.

- Subscription and license fees - Revenue from subscriptions and license fees decreased 44% in 2004 to $12.0 million, due to decreased technology license fees and the expiration of Incyte's subscription to our LexVision database in June 2004.

In 2005, Bristol-Myers Squibb, Genentech and Organon represented 34%, 30% and 16% of revenues, respectively. In 2004, Bristol-Myers Squibb, Genentech and Incyte represented 43%, 26% and 8% of revenues, respectively. In 2003, Incyte, Amgen, Inc., Bristol-Myers Squibb and Genentech represented 23%, 15%, 14% and 14% 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,		
	2005	2004	2003
Total research and development expense ..	$93.6	$90.6	$82.2
Dollar increase	$ 3.0	$ 8.4	
Percentage increase	3%	10%	

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

Years Ended December 31, 2005 and 2004

- Personnel - Personnel costs increased 7% in 2005 to $46.3 million, primarily due to increased personnel to support the expansion of our drug discovery programs and merit-based pay increases for employees. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.

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

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

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

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

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

Years Ended December 31, 2004 and 2003

- Personnel - Personnel costs increased 24% in 2004 to $43.3 million, primarily due to increased personnel to support the expansion of our drug discovery programs, merit-based pay increases for employees and increasing employee benefit costs.

- Facilities and equipment - Facilities and equipment costs increased 2% in 2004 to $20.2 million, primarily due to an increase in depreciation expense on our facilities in The Woodlands, Texas. The increase was offset, in part, by the elimination of rent expense for those facilities as a result of our consolidation of the lessor under our synthetic lease on December 31, 2003 and subsequent refinancing of those facilities as well as the January 2004 expiration of the lease for our former facility in East Windsor, New Jersey.

- Laboratory supplies - Laboratory supplies expense increased 27% in 2004 to $14.1 million, primarily due to increased purchases of consumables and other supplies related to our drug discovery activities, as well as compound acquisitions.

- Third-party and other services - Third-party and other services increased 7% in 2004 to $7.5 million, primarily due to an increase in third-party research costs offset, in part, by the termination of our subscription to a third-party database.

- Stock-based compensation - Stock-based compensation expense, primarily relating to option grants made prior to our April 2000 initial public offering, decreased 92% in 2004 to $0.4 million. All deferred stock compensation relating to these options was fully amortized as of January 31, 2004, when these options became fully vested.

- Other - Other costs increased by 17% in 2004 to $5.0 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,		
	2005	2004	2003
Total general and administrative expense ..	$18.2	$18.6	$23.2
Dollar decrease	$ 0.4	$ 4.6	
Percentage decrease	2%	20%	

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

Years Ended December 31, 2005 and 2004

- Personnel - Personnel costs increased 2% in 2005 to $10.8 million. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.

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

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

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

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

Years Ended December 31, 2004 and 2003

- Personnel - Personnel costs were $10.6 million in 2004, consistent with the prior year.

- Facilities and equipment - Facilities and equipment costs decreased 15% in 2004 to $3.1 million, primarily due to the elimination of rent expense on our facilities in The Woodlands, Texas as a result of our consolidation of the lessor under our synthetic lease on December 31, 2003 and subsequent refinancing of those facilities, as well as the January 2004 expiration of the lease for our former facility in East Windsor, New Jersey.

- Professional fees - Professional fees increased 30% in 2004 to $2.1 million, primarily due to increased board of director, audit and consulting fees.

- Stock-based compensation - Stock-based compensation expense, primarily relating to option grants made prior to our April 2000 initial public offering, decreased 92% in 2004 to $0.4 million. All deferred stock compensation relating to these options was fully amortized as of January 31, 2004, when these options became fully vested.

- Other - Other costs increased 6% in 2004 to $2.4 million.

INTEREST INCOME, INTEREST EXPENSE AND OTHER INCOME, NET

Interest Income. Interest income increased 61% in 2005 to $2.6 million from $1.6 million in 2004 and 2003, primarily due to higher interest rates.

Interest Expense. Interest expense increased 23% in 2005 to $3.3 million from $2.7 million in 2004, and 718% in 2004 from $0.3 million in 2003. In April 2004, we purchased our facilities in The Woodlands, Texas from the lessor under our previous synthetic lease agreement, using the proceeds from a $34.0 million mortgage and cash. Interest expense increased in 2005 as compared to 2004 as a result of a full year of interest expense under the mortgage. Interest expense increased in 2004 as compared to 2003 as a result of the mortgage and the fact that, prior to our consolidation of the lessor under the synthetic lease on December 31, 2003, interest expense incurred under the synthetic lease was recorded as rent expense.

Other Income. Other income decreased 57% in 2005 to $0.6 million from $1.3 million in 2004, and increased 441% in 2004 from $0.2 million in 2003. Other income in 2004 included a settlement with our former insurance provider for a disputed claim under our insurance policy.

NET LOSS AND NET LOSS PER COMMON SHARE

Loss and Loss per Common Share before Cumulative Effect of a Change in Accounting Principle. Loss before a change in accounting principle decreased to $36.3 million in 2005 from $47.2 million in 2004 and $61.1 million in 2003. Loss per common share before a change in accounting principle decreased to $0.57 in 2005 from $0.74 in 2004 and $1.08 in 2003. Loss before a change in accounting principle includes stock-based compensation expense of $0.8 million and $10.1 million in 2004 and 2003, respectively.

Change in Accounting Principle. We adopted Financial Accounting Standards Board Interpretation No. 46, "Consolidation of Variable Interest Entities - An Interpretation of ARB No. 51," or FIN 46, on December 31, 2003. We 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 decreased to $36.3 million in 2005 from $47.2 million in 2004 and $64.2 million in 2003. Net loss per common share decreased to $0.57 in 2005 from $0.74 in 2004 and $1.13 in 2003.

LIQUIDITY AND CAPITAL RESOURCES

We have financed our operations from inception primarily through sales of common and preferred stock, contract and milestone payments to us under our drug discovery alliance, target validation, database subscription, and license agreements, government grants and contracts, and financing obtained under debt and lease arrangements. From our inception through December 31, 2005, we had received net proceeds of $295.4 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, 2005, we received $347.4 million in cash payments from drug discovery alliances, target validation collaborations, database subscription and technology license fees, sales of compound libraries and reagents and government grants and contracts, of which $268.7 million had been recognized as revenues through December 31, 2005.

As of December 31, 2005, we had $99.7 million in cash, cash equivalents and short-term investments (including $0.4 million of restricted investments), as compared to $87.6 million (including $0.4 million of restricted cash and investments) as of December 31, 2004. Cash of $23.4 million was provided by operations in 2005. This consisted primarily of the net loss for the year of $36.3 million offset by non-cash charges of $10.4 million related to depreciation expense and $1.2 million related to amortization of intangible assets other than goodwill; a $44.0 million increase in deferred revenue; and changes in other operating assets and liabilities of $4.1 million. Investing activities used cash of $16.0 million, primarily due to purchases of property and equipment of $11.3 million and net purchases of short-term investments of $4.8 million. We used cash of $95,000 in financing activities. This consisted of principal repayments of $0.7 million on the mortgage loan, offset by cash proceeds of $0.6 million from stock option exercises.

In April 2004, we purchased our facilities in The Woodlands, Texas from the lessor under our previous synthetic lease agreement. In connection with such purchase, we repaid the $54.8 million funded under the synthetic lease with proceeds from a $34.0 million third-party mortgage financing and $20.8 million in cash. The mortgage loan has a ten-year term with a 20 year amortization and bears interest at a fixed rate of 8.23%. As a result of the refinancing, all restrictions on the cash and investments that had secured our obligations under the synthetic lease were eliminated, leaving a total of $0.4 million in restricted investments related to our New Jersey facility.

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. On November 30, 2005, the note agreement was amended to extend the maturity date of the loan by one year to December 31, 2006. No other terms of the note agreement were changed. We may repay

the note, at any time, at our option, in cash, in shares of our common stock valued at the then-current market value, or in a combination of cash and shares, subject to certain limitations. 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, 2005:

	PAYMENTS DUE BY PERIOD (IN MILLIONS)				
CONTRACTUAL OBLIGATIONS	TOTAL	LESS THAN 1 YEAR	1-3 YEARS	3-5 YEARS	MORE THAN 5 YEARS
Debt	$37.0	$ 4.8	$ 1.7	$ 2.0	$28.5
Interest payment obligations	21.7	4.2	5.2	4.9	7.4
Operating leases	18.5	2.3	4.8	5.0	6.4
Total	$77.2	$11.3	$11.7	$11.9	$42.3

Our future capital requirements will be substantial and will depend on many factors, including our ability to obtain alliance, collaboration and technology license agreements, the amount and timing of payments under such agreements, the level and timing of our research and development expenditures, market acceptance of our products, the resources we devote to developing and supporting our products and other factors. Our capital requirements will also be affected by any expenditures we make in connection with license agreements and acquisitions of and investments in complementary technologies and businesses. We expect to devote substantial capital resources to continue our research and development efforts, to expand our support and product development activities, and for other general corporate activities. We believe that our current unrestricted cash and investment balances and cash and revenues we expect to derive from drug discovery alliances, target validation collaborations, government grants and contracts, and technology licenses will be sufficient to fund our operations for approximately 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 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 and auction rate securities that mature greater than twelve months from the time of purchase, which we believe are subject to limited market and credit risk. We currently do not hedge interest rate exposure or hold any derivative financial instruments in our investment portfolio.

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

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

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

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Our chief executive officer and chief financial officer have concluded that our disclosure controls and procedures (as defined in rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) are sufficiently effective to ensure that the information required to be disclosed by us in the reports we file under the Securities

Exchange Act is gathered, analyzed and disclosed with adequate timeliness, accuracy and completeness, based on an evaluation of such controls and procedures as of the end of the period covered by this report.

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

MANAGEMENT REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934).

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

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2005. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework.

Based on such assessment using those criteria, management believes that, as of December 31, 2005, our internal control over financial reporting is effective.

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

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 "Stock Ownership of Certain Beneficial Owners and Management - - Section 16(a) Beneficial Ownership Reporting Compliance," "Election of Directors" and "Executive Compensation - Executive Officers" 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, 2005.

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 Directors - 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, 2005. 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 captions "Stock Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" 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, 2005.

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 from the information appearing under the captions "Election of Directors - Certain Transactions with Directors" and "Election of Directors - 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, 2005.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item as to the fees we pay our principal accountant is hereby incorporated by reference from the information appearing under the caption "Ratification and Approval of Independent Auditors - 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, 2005.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(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	-- Restated Employment Agreement with Arthur T. Sands, M.D., Ph.D.
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	-- Consulting Agreement with Alan S. Nies, M.D. dated February 19, 2003, as amended (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2004 and incorporated by reference herein).
10.8	-- Consulting Agreement with Robert J. Lefkowitz, M.D. dated March 31, 2003 (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2003 and incorporated by reference herein).

EXHIBIT NO.	DESCRIPTION
10.9	-- Consulting Agreement with C. Thomas Caskey, M.D. dated March 28, 2005 (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2005 and incorporated by reference herein).
10.10	-- 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).
*10.11	-- Summary of Non-Employee Director Compensation.
*10.12	-- Summary of 2006 Named Executive Officer Cash Compensation.
10.13	-- 2000 Equity Incentive Plan (filed as Exhibit 10.10 to the Company's Annual Report on Form 10-K for the period ended December 31, 2004 and incorporated by reference herein).
*10.14	-- 2000 Non-Employee Directors' Stock Option Plan.
10.15	-- 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).
10.16	-- Form of Stock Option Agreement with Officers under the 2000 Equity Incentive Plan (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2004 and incorporated by reference herein).
*10.17	-- Form of Stock Option Agreement with Chairman of Board of Directors under the 2000 Equity Incentive Plan.
10.18	-- Form of Stock Option Agreement with Directors under the 2000 Non-Employee Directors' Stock Option Plan (filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2004 and incorporated by reference herein).
+10.19	-- Collaboration and License Agreement, dated December 17, 2003, with Bristol-Myers Squibb Company (filed as Exhibit 10.15 to the amendment to the Company's Annual Report on Form 10-K/A for the period ended December 31, 2003, as filed on July 16, 2004, and incorporated by reference herein).
+10.20	-- Collaboration Agreement, dated July 27, 2004, with Takeda Pharmaceutical Company Limited (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2004 and incorporated by reference herein).
+10.21	-- Collaboration and License Agreement, dated May 16, 2005, with N.V. Organon and (only with respect to Section 9.4 thereof) Intervet Inc. (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2005 and incorporated by reference herein).
*+10.22	-- Second Amended and Restated Collaboration and License Agreement, dated November 30, 2005, with Genentech, Inc.
10.23	-- Economic Development Agreement dated July 15, 2005, with the State of Texas and the Texas A&M University System (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2005 and incorporated by reference herein).
+10.24	-- Collaboration and License Agreement, dated July 15, 2005, with the Texas A&M University System and the Texas Institute for Genomic Medicine (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2005 and incorporated by reference herein).
10.25	-- Loan and Security Agreement, dated April 21, 2004, between Lex-Gen Woodlands, L.P. and iStar Financial Inc. (filed as Exhibit 10.18 to the Company's Annual Report

EXHIBIT NO.		DESCRIPTION
		on Form 10-K for the period ended December 31, 2004 and incorporated by reference herein).
10.26	--	Lease Agreement, dated May 23, 2002, between Lexicon Pharmaceuticals (New Jersey), Inc. and Townsend Property Trust Limited Partnership (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2002 and incorporated by reference herein).
21.1	--	Subsidiaries (filed as Exhibit 21.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2004 and incorporated by reference herein).
*23.1	--	Consent of Independent Registered Public Accounting Firm
*24.1	--	Power of Attorney (contained in signature page)
*31.1	--	Certification of CEO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*31.2	--	Certification of CFO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*32.1	--	Certification of CEO and CFO Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

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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.

SIGNATURES

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

LEXICON GENETICS INCORPORATED

Date: March 3, 2006 By: /s/ ARTHUR T. SANDS
Arthur T. Sands, M.D., Ph.D.
President and
Chief Executive Officer

Date: March 3, 2006 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 3, 2006
/S/ JULIA P. GREGORY Julia P. Gregory	Executive Vice President, Corporate Development and Chief Financial Officer (Principal Financial and Accounting Officer)	March 3, 2006
/S/ SAM L. BARKER Sam L. Barker, Ph.D.	Chairman of the Board of Directors	March 3, 2006
/S/ C. THOMAS CASKEY C. Thomas Caskey, M.D.	Director	March 3, 2006
/S/ PATRICIA M. CLOHERTY Patricia M. Cloherty	Director	March 3, 2006
/S/ ROBERT J. LEFKOWITZ Robert J. Lefkowitz, M.D.	Director	March 3, 2006
/S/ ALAN S. NIES Alan S. Nies, M.D.	Director	March 3, 2006
/S/ FRANK PALANTONI Frank Palantoni	Director	March 3, 2006
/S/ CLAYTON S. ROSE Clayton S. Rose	Director	March 3, 2006

REPORT OF INDEPENDENT
REGISTERED PUBLIC ACCOUNTING FIRM

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

We have audited the accompanying consolidated balance sheets of Lexicon Genetics Incorporated and subsidiaries (the Company) as of December 31, 2005 and 2004, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2005. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Lexicon Genetics Incorporated and subsidiaries as of December 31, 2005 and 2004, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2005, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Lexicon Genetics Incorporated's internal control over financial reporting as of December 31, 2005, based on criteria established in Internal Control--Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 27, 2006 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Houston, Texas
February 27, 2006

REPORT OF INDEPENDENT
REGISTERED PUBLIC ACCOUNTING FIRM

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

We have audited management's assessment, included in the accompanying Management Report on Internal Control over Financial Reporting, that Lexicon Genetics Incorporated (Lexicon) maintained effective internal control over financial reporting as of December 31, 2005, based on criteria established in Internal Control--Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Lexicon's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

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

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

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

In our opinion, management's assessment that Lexicon Genetics Incorporated maintained effective internal control over financial reporting as of December 31, 2005, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, Lexicon Genetics Incorporated maintained, in all material respects, effective internal control over financial reporting as of December 31, 2005, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Lexicon Genetics Incorporated and subsidiaries as of December 31, 2005 and 2004, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2005 of Lexicon Genetics Incorporated and our report dated February 27, 2006 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Houston, Texas
February 27, 2006

LEXICON GENETICS INCORPORATED

CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS, EXCEPT PAR VALUE)

	AS OF DECEMBER 31,	
	2005	2004
ASSETS		
Current assets:		
Cash and cash equivalents	$ 21,970	$ 14,612
Short-term investments, including restricted investments of $430	77,725	72,946
Accounts receivable, net of allowances of $45 and $75, respectively	2,586	5,345
Other receivables	22	1,052
Prepaid expenses and other current assets	3,744	4,793
Total current assets	106,047	98,748
Property and equipment, net of accumulated depreciation and amortization of $47,926 and $41,892, respectively	85,265	84,573
Goodwill	25,798	25,798
Intangible assets, net of amortization of $5,360 and $4,160, respectively	640	1,840
Other assets	964	1,021
Total assets	$ 218,714	$ 211,980
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 6,883	$ 7,574
Accrued liabilities	6,787	6,945
Current portion of deferred revenue	39,042	19,500
Current portion of long-term debt	4,751	4,691
Total current liabilities	57,463	38,710
Deferred revenue, net of current portion	42,540	18,092
Long-term debt	32,189	32,940
Other long-term liabilities	720	644
Total liabilities	132,912	90,386
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; 64,554 and 63,491 shares issued and outstanding, respectively	64	63
Additional paid-in capital	383,222	382,666
Deferred stock compensation	(2)	(20)
Accumulated deficit	(297,430)	(261,115)
Accumulated other comprehensive loss	(52)	--
Total stockholders' equity	85,802	121,594
Total liabilities and stockholders' equity	$ 218,714	$ 211,980

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,		
	2005	2004	2003
Revenues:			
Collaborative research	$ 69,567	$ 49,736	$ 21,242
Subscription and license fees	6,113	12,004	21,550
Other	--	--	46
Total revenues	75,680	61,740	42,838
Operating expenses:			
Research and development, including stock-based compensation of $(21), $426, and $5,048, respectively	93,625	90,586	82,198
General and administrative, including stock-based compensation of $0, $412, and $5,067 respectively	18,174	18,608	23,233
Total operating expenses	111,799	109,194	105,431
Loss from operations	(36,119)	(47,454)	(62,593)
Interest income	2,645	1,638	1,555
Interest expense	(3,280)	(2,660)	(325)
Other income, net	558	1,304	241
Loss before taxes and cumulative effect of a change in accounting principle	(36,196)	(47,172)	(61,122)
Income tax provision	119	--	--
Loss before cumulative effect of a change in accounting principle	(36,315)	(47,172)	(61,122)
Cumulative effect of a change in accounting principle	--	--	(3,076)
Net loss	$(36,315)	$(47,172)	$(64,198)
Net loss per common share basic and diluted:			
Loss before cumulative effect of a change in accounting principle	$ (0.57)	$ (0.74)	$ (1.08)
Cumulative effect of a change in accounting principle	--	--	(0.05)
Net loss per common share, basic and diluted	$ (0.57)	$ (0.74)	$ (1.13)
Shares used in computing net loss per common share, basic and diluted	63,962	63,327	56,820

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 DEFICIT	ACCUMULATED OTHER COMPREHENSIVE LOSS	TOTAL STOCKHOLDERS' EQUITY
	SHARES	PAR VALUE					
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
Deferred stock compensation, net of reversals	--	--	(41)	41	--	--	--
Amortization of deferred stock compensation	--	--	--	838	--	--	838
Exercise of common stock options	664	--	1,712	--	--	--	1,712
Net and comprehensive loss	--	--	--	--	(47,172)	--	(47,172)
Balance at December 31, 2004	63,491	63	382,666	(20)	(261,115)	--	121,594
Deferred stock compensation, net of reversals	--	--	(39)	39	--	--	--
Amortization of deferred stock compensation	--	--	--	(21)	--	--	(21)
Exercise of common stock options	1,063	1	595	--	--	--	596
Net loss	--	--	--	--	(36,315)	--	(36,315)
Unrealized loss on investments	--	--	--	--	--	(52)	(52)
Comprehensive loss							(36,367)
Balance at December 31, 2005	64,554	$64	$383,222	$ (2)	$(297,430)	$(52)	$ 85,802

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,		
	2005	2004	2003
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$ (36,315)	$ (47,172)	$ (64,198)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	10,456	10,834	10,215
Amortization of intangible assets, other than goodwill	1,200	1,200	1,200
Amortization of deferred stock compensation	(21)	838	10,115
(Gain) loss on disposal of property and equipment	10	(11)	(18)
Cumulative effect of a change in accounting principle	--	--	3,076
Changes in operating assets and liabilities:			
(Increase) decrease in receivables	3,789	174	(1,428)
(Increase) decrease in prepaid expenses and other current assets	1,049	(860)	960
(Increase) decrease in other assets	57	(841)	1,060
Increase (decrease) in accounts payable and other liabilities	(773)	3,682	2,257
Increase (decrease) in deferred revenue	43,990	(10,100)	29,045
Net cash provided by (used in) operating activities	23,442	(42,256)	(7,716)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of property and equipment	(11,281)	(11,811)	(4,824)
Proceeds from disposal of property and equipment	123	91	48
Decrease in restricted cash	--	14,372	15,115
Purchase of short-term investments	(175,235)	(178,355)	(212,869)
Sale of short-term investments	170,404	216,182	170,939
Net cash provided by (used in) investing activities	(15,989)	40,479	(31,591)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from issuance of common stock	596	1,712	50,397
Proceeds from debt borrowings	--	34,000	--
Repayment of debt borrowings	(691)	(52,713)	--
Repayment of other long-term liabilities	--	(2,466)	--
Net cash provided by (used in) financing activities	(95)	(19,467)	50,397
Net increase (decrease) in cash and cash equivalents	7,358	(21,244)	11,090
Cash and cash equivalents at beginning of year	14,612	35,856	24,766
Cash and cash equivalents at end of year	$ 21,970	$ 14,612	$ 35,856
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid for interest	$ 2,783	$ 1,985	$ 4
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES:			
Unrealized loss on investments	$ (52)	$ --	$ --
Deferred stock compensation, net of reversals	$ 39	$ 41	$ 92
Retirement of property and equipment	$ 4,554	$ 963	$ 1,148
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.

1. ORGANIZATION AND OPERATIONS

Lexicon Genetics Incorporated (Lexicon or the Company) is a Delaware corporation incorporated on July 7, 1995. Lexicon was organized to discover the functions and pharmaceutical utility of genes and use those gene function discoveries in the discovery and development of pharmaceutical products for the treatment of human disease.

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

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

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

Restricted Cash and Investments: Lexicon is required to maintain restricted cash or investments to collateralize standby letters of credit for the lease on its office and laboratory facilities in Hopewell, New Jersey (see Note 10). As of December 31, 2005 and 2004, restricted cash and investments were $0.4 million.

Concentration of Credit Risk: Lexicon's cash equivalents, short-term investments and accounts receivable represent potential concentrations of credit risk. The Company minimizes potential concentrations of risk in cash equivalents and short-term investments by placing investments in high-quality financial instruments. The Company's accounts receivable are unsecured and are concentrated in pharmaceutical and biotechnology companies located in the United States, Europe and Japan. The Company has not experienced any significant credit losses to date. In 2005, customers in the United States, Europe and Japan represented 78%, 16% and 6% of revenue, respectively. In 2004, customers in the United States, Japan and Europe represented 93%, 6% and 1% of revenue, respectively. In 2003, customers in the United States, Europe and Japan represented 89%, 10% and 1% of revenue, respectively. At December 31, 2005, management believes that the Company has no significant concentrations of credit risk.

Segment Information and Significant Customers: Lexicon operates in one business segment, which primarily focuses on the discovery of the functions and pharmaceutical utility of genes and the use of those gene function discoveries in the discovery and development of pharmaceutical products for the treatment of human disease. Substantially all of the Company's revenues have been derived from drug discovery alliances, target validation

collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice, technology licenses, subscriptions to its databases, government grants and contracts and compound library sales. In 2005, Bristol-Myers Squibb Company, Genentech, Inc. and N.V. Organon represented 34%, 30% and 16% of revenues, respectively. In 2004, Bristol-Myers Squibb, Genentech and Incyte Corporation represented 43%, 26% and 8% of revenues, respectively. In 2003, Incyte, Amgen Inc., Bristol-Myers Squibb and Genentech represented 23%, 15%, 14% and 14% of revenues, respectively.

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

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

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

Revenue Recognition: Revenues are recognized under Staff Accounting Bulletin (SAB) No. 104, "Revenue Recognition," when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed 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 drug discovery alliances, target validation collaborations, database subscriptions, technology licenses, and government grants and contracts.

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

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

Research and Development Expenses: Research and development expenses consist of costs incurred for company-sponsored as well as collaborative research and development activities. These costs include direct and research-related overhead expenses and are expensed as incurred. Patent costs and technology license fees for 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 reversed $21,000 of stock-based compensation expense during the year ended December 31, 2005 and recognized $0.8 million and $10.1 million during 2004 and 2003, 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,		
	2005	2004	2003
	(IN THOUSANDS)		
Net loss, as reported	$(36,315)	$(47,172)	$(64,198)
Add: Stock-based compensation expense included in reported net loss	(21)	838	10,115
Deduct: Total stock-based compensation expense determined under fair value based method for all awards	(11,496)	(16,189)	(26,344)
Pro forma net loss	$(47,832)	$(62,523)	$(80,427)
Net loss per common share, basic and diluted			
As reported	$ (0.57)	$ (0.74)	$ (1.13)
Pro forma	$ (0.75)	$ (0.99)	$ (1.42)

Change in Accounting Principle: Lexicon adopted Financial Accounting Standards Board Interpretation No. 46, "Consolidation of Variable Interest Entities - An Interpretation of ARB No. 51," or FIN 46 on December 31, 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. The Company determined that the lessor under the synthetic lease, as described in Note 9, was a variable interest entity as defined by FIN 46, and that Lexicon absorbed 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. The Company also consolidated the variable interest entity's debt of $52.3 million and non-controlling interests of $2.5 million, which amounts were included in long-term debt and other long-term liabilities, respectively. Additionally, the Company recorded a cumulative effect of a change in accounting principle equal to the accumulated depreciation of $3.1 million for the period from the date the buildings were placed in service under the synthetic lease through December 31, 2003. As discussed in Note 9, in April 2004, Lexicon purchased the facilities subject to the synthetic lease, repaying the amounts funded under the synthetic lease with proceeds from a mortgage financing and cash.

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

Comprehensive Loss: Comprehensive loss is comprised of net loss and unrealized gains and losses on available-for-sale securities. Comprehensive loss is reflected in the consolidated statements of stockholders' equity. There were $52,000 of unrealized losses as of December 31, 2005 and no unrealized gains or losses as of December 31, 2004 and 2003.

3. RECENT ACCOUNTING PRONOUNCEMENT

In December 2004, the Financial Accounting Standards Board ("FASB") issued SFAS 123 (Revised), "Share-Based Payment." The statement eliminates the ability to account for stock-based compensation using APB 25 and requires such transactions be recognized as compensation expense in the income statement based on their fair values on the date of the grant, with the compensation expense recognized over the period in which an employee is required to provide service in exchange for the stock award. The Company will adopt this statement on January 1, 2006 using a modified prospective application. As such, the compensation expense recognition provisions will apply to new awards and to any awards modified, repurchased or canceled after the adoption date. Additionally, for any unvested

awards outstanding at the adoption date, the Company will recognize compensation expense over the remaining vesting period. The Company is currently evaluating the impact of SFAS 123 (Revised) on its financial condition and results of operations. However, using a Black-Scholes option pricing model consistent with its current practice, the adoption of SFAS 123 (Revised) on January 1, 2006 is estimated to result in additional compensation expense of approximately $7.0 million to $9.0 million for the year ended December 31, 2006. This estimate is dependent upon market price, assumptions used in estimating the fair value of stock options, and the level of stock option grants and cancellations in 2006.

4. RECLASSIFICATION

In the consolidated balance sheet as of December 31, 2003, Lexicon has reclassified $46.1 million of auction rate securities from cash equivalents to short-term investments and $42.6 million from restricted cash to short-term investments. The accompanying consolidated statements of cash flow for the year ended December 31, 2003 has been adjusted to reflect this reclassification.

5. CASH AND CASH EQUIVALENTS AND INVESTMENTS

The fair value of cash and cash equivalents and investments held at December 31, 2005 and 2004 are as follows:

	AS OF DECEMBER 31, 2005			
	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	ESTIMATED FAIR VALUE
	(IN THOUSANDS)			
Cash and cash equivalents	$21,982	$--	$(12)	$21,970
Securities maturing within one year:				
Certificates of deposit	574	--	--	574
Corporate debt securities	18,941	--	(45)	18,896
Total securities maturing within one year	19,515	--	(45)	19,470
Securities maturing after ten years:				
Auction rate securities	58,250	5	--	58,255
Total available-for-sale investments	$77,765	$ 5	$(45)	$77,725
Total cash and cash equivalents and investments	$99,747	$ 5	$(57)	$99,695

	AS OF DECEMBER 31, 2004			
	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	ESTIMATED FAIR VALUE
	(IN THOUSANDS)			
Cash and cash equivalents	$14,612	$--	$--	$14,612
Securities maturing within one year:				
Certificates of deposit	565	--	--	565
U.S. government agencies	2,499	--	--	2,499
Corporate debt securities	25,832	--	--	25,832
Auction rate securities	1,000	--	--	1,000
Total securities maturing within one year	29,896			29,896
Securities maturing after one year through five years:				
Auction rate securities	7,450	--	--	7,450
Securities maturing after ten years:				
Auction rate securities	35,600	--	--	35,600
Total available-for-sale investments	$72,946	$--	$--	$72,946
Total cash and cash equivalents and investments	$87,558	$--	$--	$87,558

There were no realized gains or losses for the years ended December 31, 2005, 2004 and 2003.

6. PROPERTY AND EQUIPMENT

Property and equipment at December 31, 2005 and 2004 are as follows:

	ESTIMATED USEFUL LIVES IN YEARS	AS OF DECEMBER 31, 2005	AS OF DECEMBER 31, 2004
		(IN THOUSANDS)	
Computers and software	3-5	$ 12,768	$ 12,522
Furniture and fixtures	5-7	7,596	7,538
Laboratory equipment	3-7	36,306	33,764
Leasehold improvements	7-10	9,740	7,764
Buildings	15-40	63,217	61,313
Land	--	3,564	3,564
Total property and equipment		133,191	126,465
Less: Accumulated depreciation and amortization		(47,926)	(41,892)
Net property and equipment		$ 85,265	$ 84,573

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, 2005 and 2004 are as follows:

	AS OF DECEMBER 31, 2005	AS OF DECEMBER 31, 2004
	(IN THOUSANDS)	
Deferred tax assets:		
Net operating loss carryforwards	$ 64,645	$ 66,767
Research and development tax credits	12,391	8,597
Stock-based compensation	6,001	7,206
Deferred revenue	28,546	13,149
Other	724	2,121
Total deferred tax assets	112,307	97,840
Deferred tax liabilities:		
Property and equipment	(1,262)	(1,502)
Other	(346)	(139)
Total deferred tax liabilities	(1,608)	(1,641)
Less: Valuation allowance	(110,699)	(96,199)
Net deferred tax assets	$ --	$ --

At December 31, 2005, Lexicon had net operating loss carryforwards of approximately $184.7 million and research and development tax credit carryforwards of approximately $12.4 million available to reduce future income taxes. These carryforwards will begin to expire in 2011. A change in ownership, as defined by federal income tax regulations, could significantly limit the Company's ability to utilize its carryforwards. Based on the federal tax law limits and the Company's cumulative loss position, Lexicon concluded it was appropriate to establish a full valuation allowance for its net deferred tax assets until an appropriate level of profitability is sustained. During 2005, the valuation allowance increased $14.5 million primarily due to the Company's current year net loss. Lexicon recorded a $119,000 income tax provision representing current alternative minimum tax payable based on taxable income for the year ended December 31, 2005.

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, 2005. 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 amortizes other intangible assets on a straight-line basis over an estimated life of five years.

The amortization expense for the year ended December 31, 2005 was $1.2 million. The estimated remaining amortization expense is $0.6 million for the year ending December 31, 2006.

9. DEBT OBLIGATIONS

Genentech Loan: On December 31, 2002, Lexicon borrowed $4.0 million under an unsecured note agreement with Genentech, Inc. The proceeds of the loan were to be used to fund research efforts under the alliance agreement with Genentech discussed in Note 14. On November 30, 2005, the note agreement was amended to extend the maturity date of the loan by one year to December 31, 2006. No other terms of the note agreement were changed. The Company may repay the note, at any time, 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 $4.0 million note has been classified as a current liability on the accompanying consolidated balance sheet as of December 31, 2005.

Mortgage Loan: In October 2000, Lexicon entered into a synthetic lease agreement under which the lessor purchased the Company's existing laboratory and office buildings and animal facility in The Woodlands, Texas and agreed to fund the construction of additional facilities. Including the purchase price for the Company's existing facilities, the synthetic lease, as amended, provided funding of $54.8 million in property and improvements and required that the Company maintain restricted cash or investments to collateralize these borrowings. In April 2004, Lexicon purchased the facilities subject to the synthetic lease, repaying the $54.8 million funded under the synthetic lease with proceeds from a $34.0 million third-party mortgage financing and $20.8 million in cash. The mortgage loan has a ten-year term with a 20-year amortization and bears interest at a fixed rate of 8.23%. As a result of the refinancing, all restrictions on the cash and investments that had secured the obligations under the synthetic lease were eliminated. The buildings and land that serve as collateral for the mortgage loan are included in property and equipment at $63.2 million and $3.6 million, respectively, before accumulated depreciation.

The following table includes the aggregate future principal payments of the Company's long-term debt as of December 31, 2005:

	FOR THE YEAR ENDING DECEMBER 31 (IN THOUSANDS)
2006	$ 4,751
2007	816
2008	880
2009	964
2010	1,047
Thereafter	28,482
	36,940
Less current portion	(4,751)
Total long-term debt	$32,189

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

10. COMMITMENTS AND CONTINGENCIES

Operating Lease Obligations: A Lexicon subsidiary leases laboratory and office space in Hopewell, New Jersey under an agreement that expires in June 2013. The lease provides for two five-year renewal options at 95% of the fair market rent and includes escalating lease payments. Rent expense is recognized on a straight-line basis over the original lease term. Lexicon is the guarantor of the obligation of its subsidiary under this lease. The Company is required to maintain restricted investments to collateralize a standby letter of credit for this lease. The Company had $0.4 million in restricted investments as collateral as of December 31, 2005 and 2004. Additionally, Lexicon leases certain equipment under operating leases.

Rent expense for all operating leases was approximately $2.4 million, $2.3 million and $3.7 million, for the years ended December 31, 2005, 2004 and 2003, respectively. These amounts included rent expense related to the synthetic lease in 2003. Payments under the synthetic lease made subsequent to the consolidation of the lessor under the lease on December 31, 2003 are reflected in interest expense rather than rent expense, as are the interest payments made under the mortgage loan used to purchase the facilities funded under the synthetic lease in April 2004. The following table includes non-cancelable, escalating future lease payments for the facility in New Jersey:

	FOR THE YEAR ENDING DECEMBER 31 (IN THOUSANDS)
2006.....	$ 2,355
2007.....	2,355
2008.....	2,416
2009.....	2,476
2010.....	2,476
Thereafter..	6,449
Total ...	$18,527

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 30,000,000 shares over the ten-year period.

As of December 31, 2005, an aggregate of 18,000,000 shares of common stock had been reserved for issuance, options to purchase 13,470,330 shares were outstanding, and 3,517,804 shares had been issued upon the exercise of stock options issued under the Equity Incentive Plan.

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

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

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

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

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

As of December 31, 2005, an aggregate of 600,000 shares of common stock had been reserved for issuance, options to purchase 258,000 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, 2005, an aggregate of 122,649 shares of common stock had been reserved for issuance, options to purchase 74,051 shares of common stock were outstanding, options to purchase 21,756 shares of common stock had been canceled, and 26,842 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. The Company recorded no stock-based compensation expense during the year ended December 31, 2005 and recognized $0.8 million and $10.1 million during the years ended December 31, 2004 and 2003, respectively, which was primarily related to option grants made prior to the Company's initial public offering.

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. The Black-Scholes option-pricing model requires the input of subjective assumptions. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options. The following weighted-average assumptions were used for 2005, 2004 and 2003:

- volatility factors of 72%, 92%, and 92%, respectively;
- risk-free interest rates of 4.19%, 3.69%, and 3.40%, 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 and re-measures the fair value at each reporting date. 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. Lexicon reversed stock-based compensation expense of $21,000, recorded no expense and reversed $6,000 of expense during the years ended December 31, 2005, 2004 and 2003, respectively.

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

	2005		2004		2003	
(IN THOUSANDS, EXCEPT EXERCISE PRICE DATA)	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE
Outstanding at beginning of year	13,299	$ 6.20	12,889	$ 6.12	11,372	$6.47
Granted	2,104	5.55	1,935	7.40	1,897	4.24
Exercised	(1,063)	0.56	(664)	2.65	(102)	2.34
Canceled	(538)	10.79	(861)	10.44	(278)	8.92
Outstanding at end of year	13,802	6.36	13,299	6.20	12,889	6.12
Exercisable at end of year	10,312	$ 6.50	9,908	$ 5.96	9,345	$5.73

The weighted average fair values of options granted during the years ended December 31, 2005, 2004 and 2003 were $3.93, $5.95, and $3.52, respectively. As of December 31, 2005, 1,353,866 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, 2005:

	OPTIONS OUTSTANDING			OPTIONS EXERCISABLE	
RANGE OF EXERCISE PRICE	OUTSTANDING AS OF DECEMBER 31, 2005	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE (IN YEARS)	WEIGHTED AVERAGE EXERCISE PRICE	EXERCISABLE AS OF DECEMBER 31, 2005	WEIGHTED AVERAGE EXERCISE PRICE
	(IN THOUSANDS)			(IN THOUSANDS)	
$ 1.67 - 2.50	4,777	3.3	$ 2.40	4,777	$ 2.40
3.16 - 4.72	1,548	7.5	4.00	962	3.95
4.76 - 7.12	2,567	8.7	5.81	477	5.91
7.15 - 10.55	3,043	6.9	8.55	2,230	8.85
10.87 - 16.00	1,373	5.3	12.62	1,372	12.62
16.63 - 22.06	364	4.3	19.71	364	19.71
25.25 - 31.63	28	4.8	26.23	28	26.23
38.00 - 38.50	102	4.7	38.49	102	38.49
	13,802		$ 6.36	10,312	$ 6.50

Warrants

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. 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, 2005, 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, 2005 an aggregate of 13,818,864 shares of common stock were reserved for issuance upon exercise of outstanding stock options and warrants and 1,353,866 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 $821,000, $776,000, and $637,000, in 2005, 2004 and 2003, 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 has derived substantially all of its revenues from drug discovery alliances, target validation collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice, government grants and contracts, technology licenses, subscriptions to its databases and compound library sales.

Drug Discovery Alliances

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

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

Lexicon received an upfront payment of $36.0 million and 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 $21.8 million, $21.5 million and $0.8 million for the years ended December 31, 2005, 2004 and 2003, respectively.

Genentech, Inc. Lexicon established an alliance with Genentech in December 2002 to discover novel therapeutic proteins and antibody targets. Under the original alliance agreement, Lexicon used its target validation technologies to discover the functions of secreted proteins and potential antibody targets identified through Genentech's internal drug discovery research. Lexicon received an upfront payment of $9.0 million and funding under a $4.0 million loan in 2002. The terms of the loan are discussed in Note 9. In addition, Lexicon received $24.0 million in performance payments for its work in the collaboration as it was completed.

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

Lexicon may develop and commercialize drugs for up to six of the targets included in the alliance. Genentech retains an option on the potential development and commercialization of these drugs under a cost and profit sharing arrangement, with Lexicon having certain conditional rights to co-promote drugs on a worldwide basis. Genentech is entitled to receive milestone payments in the event of regulatory approval and royalties on net sales of products commercialized by Lexicon outside of a cost and profit sharing arrangement. Lexicon will receive payments from Genentech upon achievement of milestones related to the development and regulatory approval of certain drugs resulting from the alliance that are developed and commercialized by Genentech. Lexicon is also entitled to receive royalties on net sales of these products, provided they are not included in a cost and profit sharing arrangement. Lexicon retains non-exclusive rights for the development and commercialization of small molecule drugs addressing the targets included in the alliance.

Revenue recognized under this agreement was $22.6 million, $16.0 million and $6.0 million for the years ended December 31, 2005, 2004 and 2003, respectively

Incyte Corporation. Lexicon established an alliance with Incyte in June 2001 to discover novel therapeutic proteins using the Company's target validation technologies in the discovery of the functions of secreted proteins from Incyte's LifeSeq(R) Gold database. Under the alliance agreement, the Company and Incyte each had the right to obtain exclusive commercialization rights, including sublicensing rights, for an equal number of qualifying therapeutic proteins, and will each receive milestone payments and royalties on sales of therapeutic proteins from the alliance that are commercialized by the other party or a third party sublicensee. Lexicon received research funding of $15.0 million under the agreement and recognized revenue of $2.5 million and $5.0 million for the years

ended December 31, 2004 and 2003, respectively. The collaboration period under the agreement ended in June 2004.

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

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

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

Other Collaborations and Arrangements

Lexicon has entered into the following other collaborations and arrangements:

Bristol-Myers Squibb Company. Lexicon established a LexVision collaboration with Bristol-Myers Squibb in September 2000, under which Bristol-Myers Squibb was granted non-exclusive access to the Company's LexVision database and OmniBank library for the discovery of small molecule drugs. The Company received annual access fees under this agreement, and is entitled to receive milestone payments and royalties on products Bristol-Myers Squibb develops using the Company's technology. The collaboration period under the agreement, as amended, expired in December 2004. Revenue recognized under this agreement was $5.0 million in each of the years ended December 31, 2004 and 2003.

Lexicon entered into a drug target validation agreement with Bristol-Myers Squibb in December 2004. Under this agreement, Lexicon will develop mice and phenotypic data for certain genes previously requested by Bristol-Myers Squibb under its LexVision agreement, but that Lexicon was not required to deliver thereunder, and certain additional genes requested by Bristol-Myers Squibb. The agreement terminates in March 2007. The Company received payments totaling $5.0 million under the agreement. Revenue recognized under this agreement was $3.5 million for the year ended December 31, 2005.

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

period under the agreement terminated in June 2004. Revenue recognized under this agreement was $2.5 million and $5.0 million for the years ended December 31, 2004 and 2003, respectively.

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

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

15. SELECTED QUARTERLY FINANCIAL DATA

The table below sets forth certain unaudited statements of operations data, and net income (loss) per common share data, for each quarter of 2005 and 2004.

	QUARTER ENDED			
	MARCH 31	JUNE 30	SEPTEMBER 30	DECEMBER 31
	(UNAUDITED)			
(IN THOUSANDS, EXCEPT PER SHARE DATA)				
2005				
Revenues	$ 13,925	$ 13,898	$ 13,963	$33,894
Income (loss) from operations	$(13,267)	$(14,519)	$(14,055)	$ 5,722
Net income (loss)	$(13,266)	$(14,842)	$(14,121)	$ 5,914
Net income (loss) per common share, basic and diluted	$ (0.21)	$ (0.23)	$ (0.22)	$ 0.09
Shares used in computing net income (loss) per common share, basic	63,525	63,636	64,134	64,539
Shares used in computing net income (loss) per common share, diluted	63,525	63,636	64,134	67,317
2004				
Revenues	$ 11,842	$ 10,778	$ 13,109	$26,011
Loss from operations	$(15,603)	$(16,444)	$(13,949)	$(1,458)
Net loss	$(15,466)	$(16,788)	$(14,377)	$ (541)
Net income (loss) per common share, basic and diluted	$ (0.25)	$ (0.26)	$ (0.23)	$ (0.01)
Shares used in computing net loss per common share	63,065	63,369	63,422	63,449

Index to Exhibits

EXHIBIT NO.		DESCRIPTION
3.1	--	Restated Certificate of Incorporation (filed as Exhibit 3.1 to the Company's Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
3.2	--	Restated Bylaws (filed as Exhibit 3.2 to the Company's Registration Statement on Form S-1 (Registration No. 333-96469) and incorporated by reference herein).
*10.1	--	Restated Employment Agreement with Arthur T. Sands, M.D., Ph.D.
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	--	Consulting Agreement with Alan S. Nies, M.D. dated February 19, 2003, as amended (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2004 and incorporated by reference herein).
10.8	--	Consulting Agreement with Robert J. Lefkowitz, M.D. dated March 31, 2003 (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2003 and incorporated by reference herein).

EXHIBIT NO.		DESCRIPTION
10.9	--	Consulting Agreement with C. Thomas Caskey, M.D. dated March 28, 2005 (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2005 and incorporated by reference herein).
10.10	--	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).
*10.11	--	Summary of Non-Employee Director Compensation.
*10.12	--	Summary of 2006 Named Executive Officer Cash Compensation.
10.13	--	2000 Equity Incentive Plan (filed as Exhibit 10.10 to the Company's Annual Report on Form 10-K for the period ended December 31, 2004 and incorporated by reference herein).
*10.14	--	2000 Non-Employee Directors' Stock Option Plan.
10.15	--	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).
10.16	--	Form of Stock Option Agreement with Officers under the 2000 Equity Incentive Plan (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2004 and incorporated by reference herein).
*10.17	--	Form of Stock Option Agreement with Chairman of Board of Directors under the 2000 Equity Incentive Plan.
10.18	--	Form of Stock Option Agreement with Directors under the 2000 Non-Employee Directors' Stock Option Plan (filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2004 and incorporated by reference herein).
+10.19	--	Collaboration and License Agreement, dated December 17, 2003, with Bristol-Myers Squibb Company (filed as Exhibit 10.15 to the amendment to the Company's Annual Report on Form 10-K/A for the period ended December 31, 2003, as filed on July 16, 2004, and incorporated by reference herein).
+10.20	--	Collaboration Agreement, dated July 27, 2004, with Takeda Pharmaceutical Company Limited (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2004 and incorporated by reference herein).
+10.21	--	Collaboration and License Agreement, dated May 16, 2005, with N.V. Organon and (only with respect to Section 9.4 thereof) Intervet Inc. (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2005 and incorporated by reference herein).
*+10.22	--	Second Amended and Restated Collaboration and License Agreement, dated November 30, 2005, with Genentech, Inc.
10.23	--	Economic Development Agreement dated July 15, 2005, with the State of Texas and the Texas A&M University System (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2005 and incorporated by reference herein).
+10.24	--	Collaboration and License Agreement, dated July 15, 2005, with the Texas A&M University System and the Texas Institute for Genomic Medicine (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2005 and incorporated by reference herein).
10.25	--	Loan and Security Agreement, dated April 21, 2004, between Lex-Gen Woodlands, L.P. and iStar Financial Inc. (filed as Exhibit 10.18 to the Company's Annual Report

EXHIBIT NO.		DESCRIPTION
		on Form 10-K for the period ended December 31, 2004 and incorporated by reference herein).
10.26	--	Lease Agreement, dated May 23, 2002, between Lexicon Pharmaceuticals (New Jersey), Inc. and Townsend Property Trust Limited Partnership (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2002 and incorporated by reference herein).
21.1	--	Subsidiaries (filed as Exhibit 21.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2004 and incorporated by reference herein).
*23.1	--	Consent of Independent Registered Public Accounting Firm
*24.1	--	Power of Attorney (contained in signature page)
*31.1	--	Certification of CEO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*31.2	--	Certification of CFO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*32.1	--	Certification of CEO and CFO Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

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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.

EXHIBIT 10.1

RESTATED EMPLOYMENT AGREEMENT

THIS RESTATED EMPLOYMENT AGREEMENT, made and entered into as of October 15, 1999 (the "EFFECTIVE DATE"), by and between Lexicon Genetics Incorporated, a Delaware corporation (hereafter "COMPANY"), and Arthur T. Sands, M.D., Ph.D. (hereafter "Executive"), an individual and resident of Montgomery County, Texas.

WITNESSETH:

WHEREAS, Company wishes to secure the services of the Executive subject to the terms and conditions hereafter set forth; and

WHEREAS, the Executive is willing to enter into this Agreement upon the terms and conditions hereafter set forth,

NOW, THEREFORE, in consideration of the mutual promises and agreements set forth herein, the parties hereto agree as follows:

1. EMPLOYMENT. During the Employment Period (as defined in Section 4 hereof), the Company shall employ Executive, and Executive shall serve, as President and Chief Executive Officer and as a member of the Company's Board of Directors ("BOARD"). Executive's principal place of employment shall be at the Company's principal corporate offices in The Woodlands, Texas, or at such other location for the Company's principal corporate offices during the Employment Period.

2. DUTIES AND RESPONSIBILITIES OF EXECUTIVE.

(a) During the Employment Period, Executive shall devote his services full time to the business of the Company and its Affiliates (as defined below), and perform the duties and responsibilities assigned to him by the Board to the best of his ability and with reasonable diligence. Executive agrees to cooperate fully with the Board, and other executive officers of the Company, and not to engage in any activity which conflicts with or interferes with the performance of his duties hereunder. During the Employment Period, Executive shall devote his best efforts and skills to the business and interests of Company, do his utmost to further enhance and develop Company's best interests and welfare, and endeavor to improve his ability and knowledge of Company's business, in an effort to increase the value of his services for the mutual benefit of the parties hereto. During the Employment Period, it shall not be a violation of this Agreement for Executive to (1) serve

Initials: _____

Initials: _____

on any corporate board or committee thereof with the approval of the Board, (2) to serve on any civic, or charitable boards or committees (except for boards or committees of a Competing Business (as defined in Section 11) unless approved by the Board), (3) deliver lectures, fulfill teaching or speaking engagements, or (4) manage personal investments; provided, however, any such activities must not materially interfere with performance of Executive's responsibilities under this Agreement.

For purposes of this Agreement, "AFFILIATE" means any entity which owns or controls, is owned or controlled by, or is under common ownership or control with, the Company.

(b) Executive represents and covenants to Company that he is not subject or a party to any employment agreement, noncompetition covenant, nondisclosure agreement, or any similar agreement, covenant, understanding, or restriction that would prohibit Executive from executing this Agreement and fully performing his duties and responsibilities hereunder, or would in any manner, directly or indirectly, limit or affect the duties and responsibilities that may now or in the future be assigned to Executive hereunder.

3. COMPENSATION.

(a) During the Employment Period, the Company shall pay to Executive an annual base salary of $200,000, in consideration for his services under this Agreement, payable on a pro rata basis in not less than monthly installments, in conformity with the Company's customary payroll practices for executive salaries. Executive's base salary shall be subject to review at least annually, and such salary may be adjusted, depending upon the performance of the Company and Executive, upon the recommendation of the Compensation Committee of the Board (the "COMPENSATION COMMITTEE"). All salary, bonus and other compensation payments hereunder shall be subject to all applicable payroll and other taxes.

(b) As promptly as practicable after the end of each Bonus Year during the Employment Period, the Compensation Committee shall determine whether Executive is entitled to a bonus based on the attainment of performance goals during the Bonus Year then ended. The term "Bonus Year" refers to the 12-month period beginning on October 1 and ending on September 30, with the first Bonus Year beginning on October 1, 1998 and ending on September 30, 1999. Effective for the Bonus Year beginning October 1, 1998, and for each Bonus Year thereafter during the Employment Period, the Compensation Committee shall establish certain performance goals for the Company and the Executive and a targeted annual bonus amount (which annual target bonus shall not exceed $50,000 unless otherwise determined by the Compensation Committee in its discretion). The target bonus shall be paid to Executive within 30 days after completion of the Company's financial statements for the applicable Bonus Year (but in no event later than 120 days after the end of such Bonus Year unless otherwise agreed by Executive) based on the extent to which the performance

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goals and objectives, in the judgment of the Compensation Committee, for the Bonus Year have been achieved. The full amount of the target bonus shall be paid if substantially all of the designated performance goals and objectives have been achieved for the Bonus Year; if not, the Compensation Committee, in its discretion exercised in good faith, may award a target bonus to Executive in an amount less than the full target bonus for that Bonus Year. The Compensation Committee may also award additional bonuses or other compensation to Executive at any time in its complete discretion.

4. TERM OF EMPLOYMENT. Executive's initial term of employment with the Company under this Agreement shall be for the four-year period beginning on the Effective Date and ending at midnight (CST) on December 31, 2002, unless Notice of Termination pursuant to Section 7 is given by either the Company or Executive to the other party. The Company and Executive shall each have the right to give Notice of Termination at will, with or without cause, at any time, subject to the terms and conditions of this Agreement regarding the rights and duties of the parties upon termination of employment. The term of employment hereunder ending on December 31, 2002, shall be referred to herein as the "INITIAL TERM OF EMPLOYMENT." On December 31, 2002 and on December 31st of each succeeding year (each such date being referred to as a "RENEWAL DATE"), this Agreement shall automatically renew and extend for a period of one (1) additional year (the "RENEWAL TERM") unless written notice of nonrenewal is delivered from one party to the other at least ninety (90) days prior to the relevant Renewal Date or, alternatively, the parties may mutually agree to voluntarily enter into a new employment agreement at any time. The period from the Effective Date through the date of Executive's termination of employment at any time for whatever reason shall be referred to herein as the "EMPLOYMENT PERIOD."

5. BENEFITS. Subject to the terms and conditions of this Agreement, during the Employment Period, Executive shall be entitled to the following:

(a) REIMBURSEMENT OF BUSINESS EXPENSES. The Company shall pay or reimburse Executive for all reasonable travel, entertainment and other expenses paid or incurred by Executive in performing his business obligations hereunder. Executive shall provide substantiating documentation for expense reimbursement requests as reasonably required by the Company.

(b) BENEFITS. Executive shall be entitled to and shall receive all other benefits and conditions of employment available generally to executives of the Company pursuant to Company plans and programs, including, but not limited to, group health insurance benefits, dental benefits, life insurance benefits, disability benefits, and pension and retirement benefits. The Company shall not be obligated to institute, maintain, or refrain from changing, amending, or discontinuing, any such employee benefit program or plan, so long as such actions are similarly applicable to covered executives generally.

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Notwithstanding the previous paragraph, Company shall provide Executive with long-term disability ("LTD") insurance coverage, at no cost to Executive, that provides income replacement benefits to Executive, if he should incur a long-term disability covered under such policy, in an amount at least equal to 60% of his base salary at the time of such disability, which benefits shall begin after a waiting period that does not exceed six months. The income replacement benefits described in the previous sentence shall remain payable at least until Executive attains the age of 65 provided that he remains unable to perform the essential functions of his occupation for the Company during such period. To the extent that the Company's LTD policy which covers employees generally does not provide sufficient coverage to Executive, as described in the previous sentence, Company agrees to purchase a supplemental LTD policy for Executive from a reputable insurer and to pay the premiums on Executive's behalf during the Employment Period.

Notwithstanding the first paragraph of this Section 5(b), the Company shall pay for term life insurance coverage on Executive's life, with the beneficiary(ies) thereof designated by Executive, with a death benefit in an amount not less than twice Executive's base salary (pursuant to Section 3(a)) as such base salary is set on each January 1 during the Employment Period. Upon request, Executive agrees to take any physical exams, and to provide such information, which are reasonably necessary or appropriate to secure or maintain such term life insurance coverage.

(c) [INTENTIONALLY OMITTED]

(d) PAID VACATION. Executive shall be entitled to a paid annual vacation of four (4) weeks. Vacation time may be accumulated and carried over by Executive into any subsequent year(s); provided, however, Executive shall not be permitted to accumulate more than eight weeks of accrued and unused vacation. In addition, the Executive shall be allowed up to ten (10) days each year to attend professional continuing education meetings or seminars; provided, that attendance at such meetings or seminars shall be planned for minimum interference with the Company's business.

6. RIGHTS AND PAYMENTS UPON TERMINATION. Executive's right to compensation and benefits for periods after the date on which his employment with the Company and its Affiliates (as defined in Section 2) terminates for whatever reason (the "TERMINATION DATE") shall be determined in accordance with this Section 6.

(a) ACCRUED SALARY AND VACATION PAYMENTS. Executive shall be entitled to the following payments under this Section 6(a) regardless of the reason for termination, in addition to any payments or benefits to which the Executive is entitled under the terms of any employee benefit plan or the provisions of Section 6(b):

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(1) his accrued but unpaid salary through his Termination Date; and

(2) his accrued but unpaid vacation pay for the period ending on his Termination Date in accordance with Section 5(d) above.

(b) SEVERANCE PAYMENT.

(1) At any time prior to a Change in Control (as defined below), in the event that:

(A) Executive's employment hereunder is terminated by the Company at any time for any reason except (i) for Cause (as defined below) or (ii) due to Executive's death or Disability (as defined below);

(B) Executive terminates his own employment hereunder for Good Reason (as defined below); or

(C) Company terminates Executive's employment through notice of nonrenewal as of the end of the Initial Term of Employment (pursuant to Section 4) or any one-year Renewal Term,

then, in any such event, Executive shall be entitled to receive, and the Company shall be obligated to pay, Executive's base salary under Section 3(a) (without regard to any bonuses or extraordinary compensation) then being paid to him on the Termination Date as salary continuation (pursuant to the Company's normal payroll procedures) for a period of twelve (12) consecutive months following the Termination Date. In the event of Executive's death during such salary continuation period, the Company shall pay, within 60 days of Executive's death, a lump sum equal to the present value of all remaining payments (using a 5% interest discount rate) to the Executive's surviving spouse, if any, or if there is no surviving spouse, to Executive's estate.

(2) At any time after a Change in Control (as defined below), in the event that:

(A) Executive's employment hereunder is terminated by the Company at any time for any reason except (i) for Cause (as defined below) or (ii) due to Executive's death or Disability (as defined below);

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(B) Executive terminates his own employment hereunder for Good Reason (as defined below in this Section 6(c); or

(C) the Company terminates Executive's employment through notice of nonrenewal as of the end of the Initial Term of Employment (pursuant to Section 4) or any one-year Renewal Term,

then, in any such event, Executive shall be entitled to receive, and the Company shall be obligated to pay, Executive's base salary under Section 3(a) (without regard to any bonuses or extraordinary compensation except as provided below in this paragraph) then being paid to him on the Termination Date as salary continuation (pursuant to the Company's normal payroll procedures) for a period of twelve (12) consecutive months following the Termination Date, plus an additional single sum payment equal to Executive's full target bonus (pursuant to Section 3(b)) for the Bonus Year in which the termination occurred which shall be payable within 30 days from the Termination Date. In the event of Executive's death during such salary continuation period, the Company, within 60 days of Executive's death, shall pay a lump sum equal to the present value of all remaining payments (using a 5% interest discount rate) to the Executive's surviving spouse, if any, or if there is no surviving spouse, to Executive' estate.

(3) Except as otherwise specifically provided in this Section 6(b), severance payments shall be in addition to, and shall not reduce or offset, any other payments that are due to Executive from the Company (or any other source) or under any other agreements, except that severance payments hereunder shall offset any severance benefits otherwise due to Executive under any severance pay plan or program maintained by the Company that covers its employees generally. The provisions of this Section 6(b) shall supersede any conflicting provisions of this Agreement but shall not be construed to curtail, offset or limit Executive's rights to any other payments, whether contingent upon a Change in Control (as defined below) or otherwise, under this Agreement or any other agreement, contract, plan or other source of payment.

(4) A "CHANGE IN CONTROL" of the Company shall be deemed to have occurred if any of the following shall have taken place: (A) any "person" (as such term is used in Sections 13(d) and 14(d)(2) of the Securities Exchange Act of 1934 (the "Exchange Act")) other than Gordon Cain and his Affiliates (defined below), taken together, is or becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), or any successor provisions thereto, directly or indirectly, of securities of the Company representing thirty-five percent (35%) or more of the combined voting power of the Company's then-outstanding voting securities; (B) the

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approval by the stockholders of the Company of a reorganization, merger, or consolidation, in each case with respect to which persons who were stockholders of the Company immediately prior to such reorganization, merger, or consolidation do not, immediately thereafter, own or control more than fifty percent (50%) of the combined voting power entitled to vote generally in the election of directors of the reorganized, merged or consolidated Company's then outstanding securities in substantially the same proportion as their ownership of the Company's outstanding voting securities prior to such reorganization, merger or consolidation; (C) a liquidation or dissolution of the Company or the sale of all or substantially all of the Company's assets; (D) in the event any person is elected by the stockholders of the Company to the Board who has not been nominated for election by a majority of the Board or any duly appointed committee thereof; or (E) following the election or removal of directors, a majority of the Board consists of individuals who were not members of the Board two (2) years before such election or removal, unless the election of each director who is not a director at the beginning of such two-year period has been approved in advance by directors representing at least a majority of the directors then in office who were directors at the beginning of the two-year period. The Board, in its discretion, may deem any other corporate event affecting the Company to be a "Change in Control" hereunder.

An "AFFILIATE" of Gordon Cain shall include (1) any person or entity directly or indirectly controlling or controlled by or under direct or indirect common control with Gordon Cain, (2) any spouse, immediate family member or relative of Gordon Cain, (3) any trust in which Gordon Cain or any person described in clause (2) above has a beneficial interest, and (4) any trust established by Gordon Cain or any person described in clause (2) above, whether or not such person has a beneficial interest in such trust. For purposes of this definition of "Affiliate," the term "control" means the power to direct the management and policies of a person, directly or through one or more intermediaries, whether through the ownership of voting securities by contract, or otherwise.

(5) "DISABILITY" means a permanent and total disability which entitles Executive to disability income payments under the Company's long-term disability plan or policy as then in effect which covers Executive pursuant to Section 5(b). If Executive is not covered under the Company's long-term disability plan or policy at such time for whatever reason or under a supplemental LTD policy provided by the Company, then the term "Disability" hereunder shall mean a "permanent and total disability" as defined in Section 22(e)(3) of the Code and, in this case, the existence of any such Disability shall be certified by a physician acceptable to both the Company and Executive. In the event that the parties are not able to agree on the choice of a physician, each shall select a physician who, in turn, shall select a third

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physician to render such certification. All costs relating to the determination of whether Executive has incurred a Disability shall be paid by the Company.

(6) "CODE" means the Internal Revenue Code of 1986, as amended. References in this Agreement to any Section of the Code shall include any successor provisions of the Code or its successor.

(7) "CAUSE" means a termination of employment directly resulting from (1) the Executive having engaged in intentional misconduct causing a material violation by the Company of any state or federal laws, (2) the Executive having engaged in a theft of corporate funds or corporate assets or in a material act of fraud upon the Company, (3) an act of personal dishonesty taken by the Executive that was intended to result in personal enrichment of the Executive at the expense of the Company, (4) Executive's final conviction (or the entry of a plea of nolo contendere or equivalent plea) in a court of competent jurisdiction of a felony, or (5) a breach by the Executive during the Employment Period of the provisions of Sections 9, 10, and 11 hereof, if such breach results in a material injury to the Company. For purposes of this definition of "Cause", the term "Company" shall mean the Company or any of its Affiliates (as defined in Section 2).

(8) "GOOD REASON" means the occurrence of any of the following events without Executive's express written consent:

(A) Before a Change in Control (as defined in Section 6(b)(4)), a five percent (5%) or greater reduction in Executive's annual base salary unless any such greater reduction is (i) applied across the board to the other senior officers of the Company or (ii) specifically agreed to in writing by Executive or, after a Change in Control, any reduction in Executive's base salary unless agreed to in writing by Executive, provided that in either event Executive specifically terminates his employment for Good Reason hereunder within 120 days from the date that he has actual notice of such reduction; or

(B) Before or after a Change in Control, any breach by the Company of any material provision of this Agreement, provided that Executive specifically terminates his employment for Good Reason hereunder within 120 days from the date that he has actual notice of such material breach; or

(C) Before or after a Change in Control, for any reason except on account of Executive's Disability (as defined above), a substantial and adverse change in the Executive's duties, control, authority, status or

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position, or the assignment to the Executive of any duties or responsibilities which are materially inconsistent with such status or position, or a material reduction in the duties and responsibilities exercised by Executive, or a loss of title, loss of office, loss of significant authority, power or control, or any removal of Executive from, or any failure to reappoint or reelect him to, his CEO or Board membership positions stated in Section 1; provided that Executive specifically terminates his employment for Good Reason hereunder within 120 days from the date that he has actual notice of such action; or

(D) Only after a Change in Control (as defined in Section 6(b)), any of the following events will constitute Good Reason, provided that Executive specifically terminates his employment for Good Reason hereunder within six (6) months following his receipt of actual notice of an event listed below:

(i) the failure by the Company or its successor to expressly assume and agree to continue and perform this Agreement in the same manner and to the same extent that the Company would be required to perform if such Change in Control had not occurred;

(ii) the Company or its successor fails to continue in effect any pension, medical, health-and-accident, life insurance, or disability income plan or program in which Executive was participating at the time of the Change in Control (or replacement plans or programs providing Executive with substantially similar benefits), or the taking of any action by the Company or its successor that would adversely affect Executive's participation in or materially reduce his benefits under any such plan or program that was enjoyed by him immediately prior to the Change in Control unless the Company or its successor provides a replacement plan or program with substantially similar benefits.

Notwithstanding the preceding provisions of this Section 6(b)(8), if Executive desires to terminate his employment for Good Reason, he shall first give written notice of the facts and circumstances providing the basis for Good Reason to the Board or the Compensation Committee, and allow the Company thirty (30) days from the date of such notice to remedy, cure or rectify the situation giving rise to Good Reason to the reasonable satisfaction of Executive.

7. NOTICE OF TERMINATION. Any termination by the Company or the Executive shall be communicated by Notice of Termination to the other party hereto. For purposes of this Agreement, the term "NOTICE OF TERMINATION" means a written notice that indicates the specific termination

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provision of this Agreement relied upon and sets forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated.

8. NO MITIGATION REQUIRED. Executive shall not be required to mitigate the amount of any payment provided for under this Agreement by seeking other employment or in any other manner.

9. CONFLICTS OF INTEREST.

(a) In keeping with his fiduciary duties to Company, Executive hereby agrees that he shall not become involved in a conflict of interest, or upon discovery thereof, allow such a conflict to continue at any time during the Employment Period. Moreover, Executive agrees that he shall immediately disclose to the Board any facts which might involve a conflict of interest that has not been approved by the Board.

(b) Executive and Company recognize and acknowledge that it is not possible to provide an exhaustive list of actions or interests which may constitute a "conflict of interest." Moreover, Company and Executive recognize there are many borderline situations. In some instances, full disclosure of facts by the Executive to the Board may be all that is necessary to enable Company to protect its interests. In others, if no improper motivation appears to exist and Company's interests have not demonstrably suffered, prompt elimination of the outside interest may suffice. In other serious instances, it may be necessary for the Company to terminate Executive's employment for Cause (as defined in Section 6(b)). The Board reserves the right to take such action as, in its good faith judgment, will resolve the conflict of interest.

(c) Executive hereby agrees that any direct or indirect interest in, connection with, or benefit from any outside activities, particularly commercial activities, which interest might adversely affect the Company or any of its Affiliates (as defined in Section 2), involves a possible conflict of interest. Circumstances in which a conflict of interest on the part of Executive would or might arise, and which must be reported immediately to the Board, include, but are not limited to, any of the following:

(1) Ownership by the Executive and his immediate family members of more than a two percent (2%) interest, on an aggregated basis, in any lender, supplier, contractor, customer or other entity with which Company or any of its Affiliates does business;

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(2) Misuse of information, property or facilities to which Executive has access in a manner which is demonstrably and materially injurious to the interests of Company or any of its Affiliates, including its business, reputation or goodwill; or

(3) Materially trading in products or services connected with products or services designed or marketed by or for the Company or any of its Affiliates.

10. CONFIDENTIAL INFORMATION.

(a) NON-DISCLOSURE OBLIGATION OF EXECUTIVE. For purposes of this Section 10, all references to Company shall mean and include its Affiliates (as defined in Section 2). Executive hereby acknowledges, understands and agrees that all Confidential Information, as defined in Section 10(b), whether developed by Executive or others employed by or in any way associated with Executive or Company, is the exclusive and confidential property of Company and shall be regarded, treated and protected as such in accordance with this Agreement. Executive acknowledges that all such Confidential Information is in the nature of a trade secret. Failure to mark any writing confidential shall not affect the confidential nature of such writing or the information contained therein.

(b) DEFINITION OF CONFIDENTIAL INFORMATION. The term "CONFIDENTIAL INFORMATION" shall mean information, whether or not originated by Executive, which is used in Company's business and (1) is proprietary to, about or created by Company; (2) gives Company some competitive business advantage or the opportunity of obtaining such advantage, or the disclosure of which could be detrimental to the interests of Company; (3) is designated as Confidential Information by Company, known by the Executive to be considered confidential by Company, or from all the relevant circumstances considered confidential by Company, or from all the relevant circumstances should reasonably be assumed by Executive to be confidential and proprietary to Company; or (4) is not generally known by non-Company personnel. Such Confidential Information includes, but is not limited to, the following types of information and other information of a similar nature (whether or not reduced to writing or designated as confidential):

(1) Work product resulting from or related to the research, development or production of the programs of the Company including, without limitation, OmniBank(TM), homologous recombination, DNA sequencing, phenotypic analysis, drug target validation and drug discovery;

(2) Internal Company personnel and financial information, vendor names and other vendor information (including vendor characteristics, services and agreements), purchasing and internal cost information, internal service and

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operational manuals, and the manner and methods of conducting Company's business;

(3) Marketing, partnering and business and development plans, price and cost data, price and fee amounts, pricing and billing policies, quoting procedures, marketing techniques and methods of obtaining business, forecasts and forecast assumptions and volumes, and future plans and potential strategies of the Company which have been or are being discussed; and

(4) Business acquisition and other business opportunities.

(c) EXCLUSIONS FROM CONFIDENTIAL INFORMATION. The term "CONFIDENTIAL INFORMATION" shall not include information publicly known other than as a result of a disclosure by Executive in breach of Section 10(a), and the general skills and experience gained during Executive's work with the Company which Executive could reasonably have been expected to acquire in similar work with another company.

(d) COVENANTS OF EXECUTIVE. As a consequence of Executive's acquisition or anticipated acquisition of Confidential Information, Executive shall occupy a position of trust and confidence with respect to Company's affairs and business. In view of the foregoing and of the consideration to be provided to Executive, Executive agrees that it is reasonable and necessary that Executive make the following covenants:

(1) At any time during the Employment Period and within ten (10) years after the Employment Period, Executive shall not disclose Confidential Information to any person or entity, either inside or outside of Company, other than as necessary in carrying out duties on behalf of Company, without obtaining Company's prior written consent (unless such disclosure is compelled pursuant to court order or subpoena, and at which time Executive gives notice of such proceedings to Company), and Executive will take all reasonable precautions to prevent inadvertent disclosure of such Confidential Information. This prohibition against Executive's disclosure of Confidential Information includes, but is not limited to, disclosing the fact that any similarity exists between the Confidential Information and information independently developed by another person or entity, and Executive understands that such similarity does not excuse Executive from abiding by his covenants or other obligations under this Agreement.

(2) At any time during or after the Employment Period, Executive shall not use, copy or transfer Confidential Information other than as necessary in carrying out his duties on behalf of Company, without first obtaining Company's prior written consent, and will take all reasonable precautions to prevent inadvertent use, copying

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or transfer of such Confidential Information. This prohibition against Executive's use, copying, or transfer of Confidential Information includes, but is not limited to, selling, licensing or otherwise exploiting, directly or indirectly, any products or services (including databases, written documents and software in any form) which embody or are derived from Confidential Information, or exercising judgment in performing analyses based upon knowledge of Confidential Information.

(e) RETURN OF CONFIDENTIAL MATERIAL. Executive shall promptly turn over to the person designated by the Board all originals and copies of materials containing Confidential Information in the Executive's possession, custody, or control upon request or upon termination of Executive's employment with Company. Executive agrees to attend a termination interview with the person or persons designated by the Board in the Company's offices for a reasonable time period. The purposes of the termination interview shall be (1) to confirm turnover of all Confidential Information, (2) discuss any questions Executive may have about his continuing obligations under this Agreement, (3) answer questions related to his duties and on-going projects to allow a temporary or permanent successor to obtain a better understanding of the employment position, (4) confirm the number of any outstanding stock options, or other long-term incentive awards, and their vested percentages and other terms and conditions, and (5) any other topics relating to the business affairs of Company or its Affiliates as determined by the Company.

(f) INVENTIONS. Any and all inventions, products, discoveries, improvements, copyrightable or patentable works or products, trademarks, service marks, ideas, processes, formulae, methods, designs, techniques and trade secrets (collectively hereinafter referred to as "INVENTIONS") made, developed, conceived or resulting from work performed by Executive (alone or in conjunction with others, during regular hours of work or otherwise) while he is employed by Company and which may be directly or indirectly useful in, or related to, the business of Company (including, without limitation, research and development activities of Company), or which are made using any equipment, facilities, Confidential Information, materials, labor, money, time or other resources of Company, shall be promptly disclosed by Executive to the person or persons designated by the Board, shall be deemed Confidential Information for purposes of this Agreement, and shall be Company's exclusive property. Executive shall, upon Company's reasonable request during or after the Employment Period, execute any documents and perform all such acts and things which are necessary or advisable in the opinion of Company to cause issuance of patents to, or otherwise obtain recorded protection of right to intellectual property for, Company with respect to Inventions that are to be Company's exclusive property under this Section 10, or to transfer to and vest in Company full and exclusive right, title and interest in and to such Inventions; provided, however, that the expense of securing any such protection of right to Inventions shall be borne by Company. In addition, during or after the Employment Period, Executive shall, at Company's expense, reasonably assist the Company in any reasonable and

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proper manner in enforcing any Inventions which are to be or become Company's exclusive property hereunder against infringement by others. Executive shall keep confidential and will hold for Company's sole use and benefit any Invention that is to be Company's exclusive property under this Section 10 for which full recorded protection of right has not been or cannot be obtained.

(g) PROPERTY RIGHTS. In keeping with his fiduciary duties to Company, Executive hereby covenants and agrees that during his Employment Period, and for a period of three (3) months following his Termination Date, Executive shall promptly disclose in writing to Company any and all Inventions, which are conceived, developed, made or acquired by Executive, either individually or jointly with others, and which relate to, or are useful in, the business, products or services of Company including, without limitation, research and development activities of the Company, or which are made using any equipment, facilities, Confidential Information, material, labor, money, time or other resources of the Company. In consideration for his employment hereunder, Executive hereby specifically sells, assigns and transfers to Company all of his worldwide right, title and interest in and to all such Inventions.

If during the Employment Period, Executive creates any original work of authorship or other property fixed in any tangible medium of expression which (1) is the subject matter of copyright (including computer programs) and (2) relates to, or is useful in, Company's present or planned business, products, or services, whether such property is created solely by Executive or jointly with others, such property shall be deemed a work for hire, with the copyright vesting in the Company unless the Company otherwise consents to the copyright vesting in another person or entity; provided, however, the parties agree that, notwithstanding anything herein to the contrary, (A) Executive shall retain all copyright and other property rights in Executive's personal memoirs (or any fictional or non-fictional derivative thereof) which address topics including the founding of the Company and the development of the functional genomics field and (B) such memoirs (or any fictional or non-fictional derivative thereof) may be published and released in any medium of expression at any time subject to the foregoing provisions of this Section 10 regarding Confidential Information and Inventions.

Executive hereby agrees to (1) assist Company or its nominee at all times in the protection of any property that is subject to this Section 10, (2) not to disclose any such property to others without the written consent of Company or its nominee, except as required by his employment hereunder, and (3) at the request of Company, to execute such assignments, certificates or other interests as Company or its nominee may from time to time deem desirable to evidence, establish, maintain, perfect, protect or enforce its rights, title or interests in or to any such property.

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(h) EMPLOYEE PROPRIETARY INFORMATION AGREEMENT. The provisions of this Section 10 shall not supersede the Employee Proprietary Information Agreement (the "Proprietary Agreement") between Employee and the Company (or any other agreement of similar intent) which shall remain in full force and effect and, moreover, this Agreement, the Proprietary Agreement and any such other similar agreement between the parties shall be construed and applied as being mutually consistent to the full extent possible. Notwithstanding the immediately preceding sentence, the second paragraph of Section 10(g) hereof, but only such provisions which address Executive's personal memoirs (or any fictional or non-fictional derivative thereof), shall control in the event of any conflict or inconsistency between such provisions in Section 10(g) and the Proprietary Agreement or any other agreement of similar intent.

(i) REMEDIES. In the event of a breach or threatened breach of any of the provisions of this Section 10, Company shall be entitled to an injunction ordering the return of all such Confidential Information and Inventions, and restraining Executive from using or disclosing, for his benefit or the benefit of others, in whole or in part, any Confidential Information or Inventions. Executive further agrees that any breach or threatened breach of any of the provisions of this Section 10 would cause irreparable injury to Company, for which it would have no adequate remedy at law. Nothing herein shall be construed as prohibiting Company from pursuing any other remedies available to it for any such breach or threatened breach, including the recovery of damages.

11. AGREEMENT NOT TO COMPETE. All references in this Section 11 to "COMPANY" shall mean and include its Affiliates (as defined in Section 2).

(a) PROHIBITED EXECUTIVE ACTIVITIES. Executive agrees that except in the ordinary course and scope of his employment hereunder during the Employment Period, Executive shall not while employed by Company and for a period of (i) six (6) months following his Termination Date within the continental United States and (ii) twelve (12) months following his Termination Date only within the State of Texas:

(1) Directly or indirectly, engage or invest in, own, manage, operate, control or participate in the ownership, management, operation or control of, be employed by, associated or in any manner connected with, or render services or advice to, any Competing Business (as defined below); provided, however, Executive may invest in the securities of any enterprise with the power to vote up to two percent (2%) of the capital stock of such enterprise (but without otherwise participating in the activities of such enterprise) if such securities are listed on any national or regional securities exchange or have been registered under Section 12(g) of the Securities Exchange Act of 1934;

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(2) Directly or indirectly, either as principal, agent, independent contractor, consultant, director, officer, employee, employer, advisor (whether paid or unpaid), stockholder, partner or in any other individual or representative capacity whatsoever, either for his own benefit or for the benefit of any other person or entity, solicit, divert or take away, any customers, clients, or business acquisition or other business opportunities of Company; or

(3) Directly or indirectly, either as principal, agent, independent contractor, consultant, director, officer, employee, advisor (whether paid or unpaid), stockholder, partner or in any other individual or representative capacity whatsoever, either for his own benefit or for the benefit of any other person or entity, either (A) hire, attempt to hire, contact or solicit with respect to hiring any employee of Company, (B) induce or otherwise counsel, advise or encourage any employee of Company to leave the employment of Company, or (C) induce any distributor, representative or agent of Company to terminate or modify its relationship with Company.

"COMPETING BUSINESS" means any individual, business, firm, company, partnership joint venture, organization, or other entity whose products or services compete, in whole or in part, at any time during the Employment Period with the products or services (or planned products and services) of Company including, without limitation, genomics research, development and products including, without limitation, OmniBank(TM), homologous recombination, DNA sequencing, phenotypic analysis, drug validation and drug discovery.

(b) ESSENTIAL NATURE OF NON-COMPETE OBLIGATION. It is acknowledged, understood and agreed by and between the parties hereto that the covenants made by Executive in this Section 11 are essential elements of this Agreement and that, but for the agreement of the Executive to comply with such covenants, Company would not have entered into this Agreement.

(c) NECESSITY AND REASONABLENESS OF NON-COMPETE OBLIGATION. Executive hereby specifically acknowledges and agrees that:

(1) Company has expended and will continue to expend substantial time, money and effort in developing its business;

(2) Executive will, in the course of his employment, be personally entrusted with and exposed to Confidential Information (as defined in Section 10);

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(3) Company, during the Employment Period and thereafter, will be engaged in its highly competitive business in which many firms, including Company, compete;

(4) Executive could, after having access to Company's financial records, contracts, and other Confidential Information and know-how and, after receiving training by and experience with the Company, become a competitor;

(5) Company will suffer great loss and irreparable harm if Executive terminates his employment and enters, directly or indirectly, into competition with Company;

(6) The temporal and other restrictions contained in this Section 11 are in all respects reasonable and necessary to protect the business goodwill, trade secrets, prospects and other reasonable business interests of Company;

(7) The enforcement of this Agreement in general, and of this Section 11 in particular, will not work an undue or unfair hardship on Executive or otherwise be oppressive to him; it being specifically acknowledged and agreed by Executive that he has activities and other business interests and opportunities which will provide him adequate means of support if the provisions of this Section 11 are enforced after the Termination Date; and

(8) the enforcement of this Agreement in general, and of this Section 11 in particular, will neither deprive the public of needed goods or services nor otherwise be injurious to the public.

(d) JUDICIAL MODIFICATION. Executive agrees that if an arbitrator (pursuant to Section 21) or a court of competent jurisdiction determines that the length of time or any other restriction, or portion thereof, set forth in this Section 11 is overly restrictive and unenforceable, the arbitrator or court shall reduce or modify such restrictions to those which it deems reasonable and enforceable under the circumstances, and as so reduced or modified, the parties hereto agree that the restrictions of this Section 11 shall remain in full force and effect. Executive further agrees that if an arbitrator or court of competent jurisdiction determines that any provision of this Section 11 is invalid or against public policy, the remaining provisions of this Section 11 and the remainder of this Agreement shall not be affected thereby, and shall remain in full force and effect.

12 REMEDIES. In the event of any pending, threatened or actual breach of any of the covenants or provisions of Section 9, 10, or 11, it is understood and agreed by Executive that the remedy at law for a breach of any of the covenants or provisions of these Sections may be inadequate

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and, therefore, Company shall be entitled to a restraining order or injunctive relief from any court of competent jurisdiction, in addition to any other remedies at law and in equity. In the event that Company seeks to obtain a restraining order or injunctive relief, Executive hereby agrees that Company shall not be required to post any bond in connection therewith. Should a court of competent jurisdiction or an arbitrator (pursuant to Section 21) declare any provision of Section 9, 10, or 11 to be unenforceable due to an unreasonable restriction of duration or geographical area, or for any other reason, such court or arbitrator is hereby granted the consent of each of the Executive and Company to reform such provision and/or to grant the Company any relief, at law or in equity, reasonably necessary to protect the reasonable business interests of Company or any of its affiliated entities. Executive hereby acknowledges and agrees that all of the covenants and other provisions of Sections 9, 10, and 11 are reasonable and necessary for the protection of the Company's reasonable business interests. Executive hereby agrees that if the Company prevails in any action, suit or proceeding with respect to any matter arising out of or in connection with Section 9, 10, or 11, Company shall be entitled to all equitable and legal remedies, including, but not limited to, injunctive relief and compensatory damages.

13 DEFENSE OF CLAIMS. Executive agrees that, during the Employment Period and for a period of two (2) years after his Termination Date, upon request from the Company, he will reasonably cooperate with the Company and its Affiliates in the defense of any claims or actions that may be made by or against the Company or any of its Affiliates that affect his prior areas of responsibility, except if Executive's reasonable interests are adverse to the Company or Affiliates in such claim or action. To the extent travel is required to comply with the requirements of this Section 13, the Company shall, to the extent possible, provide Executive with notice at least 10 days prior to the date on which such travel would be required. The Company agrees to promptly pay or reimburse Executive upon demand for all of his reasonable travel and other direct expenses incurred, or to be reasonably incurred, to comply with his obligations under this Section 13.

14 DETERMINATIONS BY THE COMPENSATION COMMITTEE.

(a) TERMINATION OF EMPLOYMENT. Prior to a Change in Control (as defined in Section 6(b)), any question as to whether and when there has been a termination of Executive's employment, the cause of such termination, and the Termination Date, shall be determined by the Compensation Committee in its discretion exercised in good faith.

(b) COMPENSATION. Prior to a Change in Control (as defined in Section 6(b)), any question regarding salary, bonus and other compensation payable to Executive pursuant to this Agreement shall be determined by the Compensation Committee in its discretion exercised in good faith.

15 WITHHOLDINGS: RIGHT OF OFFSET. Company may withhold and deduct from any benefits and payments made or to be made pursuant to this Agreement (a) all federal, state, local and

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other taxes as may be required pursuant to any law or governmental regulation or ruling, (b) all other employee deductions made with respect to Company's employees generally, and (c) any advances made to Executive and owed to Company.

16 NONALIENATION. The right to receive payments under this Agreement shall not be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge or encumbrance by Executive, his dependents or beneficiaries, or to any other person who is or may become entitled to receive such payments hereunder. The right to receive payments hereunder shall not be subject to or liable for the debts, contracts, liabilities, engagements or torts of any person who is or may become entitled to receive such payments, nor may the same be subject to attachment or seizure by any creditor of such person under any circumstances, and any such attempted attachment or seizure shall be void and of no force and effect.

17 INCOMPETENT OR MINOR PAYEES. Should the Board determine that any person to whom any payment is payable under this Agreement has been determined to be legally incompetent or is a minor, any payment due hereunder may, notwithstanding any other provision of this Agreement to the contrary, be made in any one or more of the following ways: (a) directly to such minor or person; (b) to the legal guardian or other duly appointed personal representative of the person or estate of such minor or person; or (c) to such adult or adults as have, in the good faith knowledge of the Board, assumed custody and support of such minor or person; and any payment so made shall constitute full and complete discharge of any liability under this Agreement in respect to the amount paid.

18 SEVERABILITY. It is the desire of the parties hereto that this Agreement be enforced to the maximum extent permitted by law, and should any provision contained herein be held unenforceable by a court of competent jurisdiction or arbitrator (pursuant to Section 21), the parties hereby agree and consent that such provision shall be reformed to create a valid and enforceable provision to the maximum extent permitted by law; provided, however, if such provision cannot be reformed, it shall be deemed ineffective and deleted herefrom without affecting any other provision of this Agreement.

19 TITLE AND HEADINGS; CONSTRUCTION. Titles and headings to Sections hereof are for the purpose of reference only and shall in no way limit, define or otherwise affect the provisions hereof. Any and all Exhibits referred to in this Agreement are, by such reference, incorporated herein and made a part hereof for all purposes. The words "herein", "hereof", "hereunder" and other compounds of the word "here" shall refer to the entire Agreement and not to any particular provision hereof.

20 CHOICE OF LAW. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS, WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAW.

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21 ARBITRATION.

(a) ARBITRABLE MATTERS. If any dispute or controversy arises between Executive and the Company relating to (1) this Agreement in any way or arising out of the parties' respective rights or obligations under this Agreement or (2) the employment of Executive or the termination of such employment, then either party may submit the dispute or controversy to arbitration under the then-current Commercial Arbitration Rules of the American Arbitration Association (AAA) (the "RULES"); provided, however, the Company shall retain its rights to seek a restraining order or injunctive relief pursuant to Section 12. Any arbitration hereunder shall be conducted before a panel of three arbitrators unless the parties mutually agree that the arbitration shall be conducted before a single arbitrator. The arbitrators shall be selected (from lists provided by the AAA) through mutual agreement of the parties, if possible. If the parties fail to reach agreement upon appointment of arbitrators within twenty (20) days following receipt by one party of the other party's notice of desire to arbitrate, then within five (5) days following the end of such 20-day period, each party shall select one arbitrator who, in turn, shall within five (5) days jointly select the third arbitrator to comprise the arbitration panel hereunder. The site for any arbitration hereunder shall be in Harris County or Montgomery County, Texas, unless otherwise mutually agreed by the parties, and the parties hereby waive any objection that the forum is inconvenient.

(b) SUBMISSION TO ARBITRATION. The party submitting any matter to arbitration shall do so in accordance with the Rules. Notice to the other party shall state the question or questions to be submitted for decision or award by arbitration. Notwithstanding any provision of this Section 21, Executive shall be entitled to seek specific performance of the Executive's right to be paid during the pendency of any dispute or controversy arising under this Agreement. In order to prevent irreparable harm, the arbitrator may grant temporary or permanent injunctive or other equitable relief for the protection of property rights.

(c) ARBITRATION PROCEDURES. The arbitrator shall set the date, time and place for each hearing, and shall give the parties advance written notice in accordance with the Rules. Any party may be represented by counsel or other authorized representative at any hearing. The arbitration shall be governed by the Federal Arbitration Act, 9 U.S.C. Sections 1 et. seq. (or its successor). The arbitrator shall apply the substantive law (and the law of remedies, if applicable) of the State of Texas to the claims asserted to the extent that the arbitrator determines that federal law is not controlling.

(d) COMPLIANCE WITH AWARD.

(1) Any award of an arbitrator shall be final and binding upon the parties to such arbitration, and each party shall immediately make such changes in its

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conduct or provide such monetary payment or other relief as such award requires. The parties agree that the award of the arbitrator shall be final and binding and shall be subject only to the judicial review permitted by the Federal Arbitration Act.

(2) The parties hereto agree that the arbitration award may be entered with any court having jurisdiction and the award may then be enforced as between the parties, without further evidentiary proceedings, the same as if entered by the court at the conclusion of a judicial proceeding in which no appeal was taken. The Company and the Executive hereby agree that a judgment upon any award rendered by an arbitrator may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

(e) COSTS AND EXPENSES. Each party shall pay any monetary amount required by the arbitrator's award, and the fees, costs and expenses for its own counsel, witnesses and exhibits, unless otherwise determined by the arbitrator in the award. The compensation and costs and expenses assessed by the arbitrator(s) and the AAA shall be split evenly between the parties unless otherwise determined by the arbitrator in the award. If court proceedings to stay litigation or compel arbitration are necessary, the party who opposes such proceedings to stay litigation or compel arbitration, if such party is unsuccessful, shall pay all associated costs, expenses, and attorney's fees which are reasonably incurred by the other party as determined by the arbitrator.

22 BINDING EFFECT; THIRD PARTY BENEFICIARIES. This Agreement shall be binding upon and inure to the benefit of the parties hereto, and to their respective heirs, executors, personal representatives, successors and permitted assigns hereunder, but otherwise this Agreement shall not be for the benefit of any third parties.

23 ENTIRE AGREEMENT AND AMENDMENT. This Agreement contains the entire agreement of the parties with respect to Executive's employment and the other matters covered herein; moreover, this Agreement supersedes all prior and contemporaneous agreements and understandings, oral or written, between the parties hereto concerning the subject matter hereof. This Agreement may be amended, waived or terminated only by a written instrument executed by both parties hereto.

24 SURVIVAL OF CERTAIN PROVISIONS. Wherever appropriate to the intention of the parties hereto, the respective rights and obligations of said parties, including, but not limited to, the rights and obligations set forth in Sections 6 through 14 and 21 hereof, shall survive any termination or expiration of this Agreement.

25 WAIVER OF BREACH. No waiver by either party hereto of a breach of any provision of this Agreement by any other party, or of compliance with any condition or provision of this

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Agreement to be performed by such other party, will operate or be construed as a waiver of any subsequent breach by such other party or any similar or dissimilar provision or condition at the same or any subsequent time. The failure of either party hereto to take any action by reason of any breach will not deprive such party of the right to take action at any time while such breach continues.

26 SUCCESSORS AND ASSIGNS. This Agreement shall be binding upon and inure to the benefit of the Company and its Affiliates (as defined in Section 2), and upon any successor to the Company following a Change in Control (as defined in Section 6(b)); provided, however, any such assignment by the Company shall not relieve Company of its obligations hereunder unless such successor to the Company has fully and expressly assumed the obligations of the Company to the Executive under this Agreement. Any reference herein to "Company" shall mean the Company as first written above, as well as any successor or successors thereto.

This Agreement is personal to Executive, and Executive may not assign, delegate or otherwise transfer all or any of his rights, duties or obligations hereunder without the consent of the Board. Any attempt by the Executive to assign, delegate or otherwise transfer this Agreement, any portion hereof, or his rights, duties or obligations hereunder without the prior approval of the Board shall be deemed void and of no force and effect.

27 NOTICES. Notices provided for in this Agreement shall be in writing and shall be deemed to have been duly received (a) when delivered in person or sent by facsimile transmission, (b) on the first business day after it is sent by air express overnight courier service, or (c) on the third business day following deposit in the United States mail, registered or certified mail, return receipt requested, postage prepaid and addressed, to the following address, as applicable:

(1) If to Company, addressed to:

Lexicon Genetics Incorporated
4000 Research Forest Drive
The Woodlands, Texas 77381
Attention: Corporate Secretary

(2) If to Executive, addressed to the address set forth below his name on the execution page hereof;

or to such other address as either party may have furnished to the other party in writing in accordance with this Section 27.

28 COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument. Each counterpart may consist of a copy hereof containing multiple signature pages, each signed by one party, but together signed by both parties hereto.

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Initials: _____

29 EXECUTIVE ACKNOWLEDGMENT; NO STRICT CONSTRUCTION. The Executive represents to Company that he is knowledgeable and sophisticated as to business matters, including the subject matter of this Agreement, that he has read the Agreement and that he understands its terms and conditions. The parties hereto agree that the language used in this Agreement shall be deemed to be the language chosen by them to express their mutual intent, and no rule of strict construction shall be applied against either party hereto. Executive also represents that he is free to enter into this Agreement including, without limitation, that he is not subject to any other contract of employment or covenant not to compete that would conflict in any way with his duties under this Agreement. Executive acknowledges that he has had the opportunity to consult with counsel of his choice, independent of Employer's counsel, regarding the terms and conditions of this Agreement and has done so to the extent that he, in his unfettered discretion, deemed to be appropriate.

30 SUPERSEDING AGREEMENT. This Employment Agreement shall supersede any prior employment agreement entered into between the Company and Executive.

[Intentionally left blank -- signature page follows]

Initials: _____

Initials: _____

IN WITNESS WHEREOF, the Executive has hereunto set his hand, and Company has caused this Agreement to be executed in its name and on its behalf, to be effective as of the Effective Date first above written.

EXECUTIVE:

Signature: ----------

Date: ----------

Address for Notices: ----------

LEXICON GENETICS INCORPORATED

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

Name: ----------

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

Date: ----------

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EXHIBIT 10.11

SUMMARY OF NON-EMPLOYEE DIRECTOR COMPENSATION

Each non-employee member of our Board of Directors currently receives the following cash compensation:

- an annual retainer of $15,000 for service on the Board of Directors ($30,000 for service as non-executive Chairman of the Board of Directors), prorated for any partial year of service;

- an annual retainer of $2,500 for service on each committee of the Board of Directors of which he or she is a member ($5,000 for service as chairman of any such committee), prorated for any partial year of service;

- a fee of $2,500 for each meeting of the Board of Directors that he or she attends in person ($500 for each telephonic meeting of the Board of Directors in which he or she participates); and

- a fee of $1,000 for each committee meeting that he or she attends in person other than in connection with a meeting of the full Board of Directors ($500 for each telephonic committee meeting in which he or she participates).

All directors are reimbursed for expenses in connection with attendance at Board of Directors and committee meetings.

Our 2000 Non-Employee Directors' Stock Option Plan provides for the grant of options to purchase shares of common stock to our non-employee directors. Non-employee directors first elected after the closing of our initial public offering receive an initial option to purchase 30,000 shares of common stock. In addition, all non-employee directors who have served in such capacity for six months receive an annual option to purchase 10,000 shares of common stock. All options granted under the non-employee directors' plan have an exercise price equal to the fair market value of our common stock on the date of grant.

The Chairman of our Board of Directors will receive an additional annual option under our 2000 Equity Incentive Plan to purchase 10,000 shares of common stock. All such options will have an exercise price equal to the fair market value of our common stock on the date of grant.

EXHIBIT 10.12

SUMMARY OF 2006 NAMED EXECUTIVE OFFICER CASH COMPENSATION

The Compensation Committee of our Board of Directors has determined that 2006 base salaries of our named executive officers would remain unchanged from 2005 as set forth below:

NAME AND POSITION	2006 BASE SALARY
Arthur T. Sands, M.D., Ph.D. President and Chief Executive Officer	$473,000
Julia P. Gregory Executive Vice President, Corporate Development and Chief Financial Officer	$329,000
Jeffrey L. Wade, J.D. Executive Vice President and General Counsel	$292,000
Brian P. Zambrowicz, Ph.D. Executive Vice President of Research	$312,000
Alan J. Main, Ph.D. Senior Vice President, Lexicon Pharmaceuticals	$312,000

Our named executive officers are also eligible to receive cash bonuses, within the discretion of the Compensation Committee, based on the achievement of certain corporate and individual goals in 2006. The corporate goals include objectives relating to the development of drug candidates and the achievement of specified financial targets. The achievement of these goals will be evaluated by the Compensation Committee in making determinations regarding bonuses for 2006 performance.

The Compensation Committee has established a bonus target, expressed as a percentage of base salary, for each of our named executive officers, assuming that corporate and individual goals are fully achieved. The bonus target percentage for each of our named executive officers is set forth below:

NAME AND POSITION	BONUS TARGET
Arthur T. Sands, M.D., Ph.D. President and Chief Executive Officer	50%
Julia P. Gregory Executive Vice President, Corporate Development and Chief Financial Officer	35%
Jeffrey L. Wade, J.D. Executive Vice President and General Counsel	35%
Brian P. Zambrowicz, Ph.D. Executive Vice President of Research	40%
Alan J. Main, Ph.D. Senior Vice President, Lexicon Pharmaceuticals	30%

LEXICON GENETICS INCORPORATED
2000 NON-EMPLOYEE DIRECTORS' STOCK OPTION PLAN

(RESTATED TO REFLECT SPLIT PRIOR TO IPO)

1. PURPOSES.

(a) ELIGIBLE OPTION RECIPIENTS. The persons eligible to receive Options are the Non-Employee Directors of the Company.

(b) AVAILABLE OPTIONS. The purpose of the Plan is to provide a means by which Non-Employee Directors may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Nonstatutory Stock Options.

(c) GENERAL PURPOSE. The Company, by means of the Plan, seeks to retain the services of its Non-Employee Directors, to secure and retain the services of new Non-Employee Directors and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Affiliates.

2. DEFINITIONS.

(a) "AFFILIATE" means any parent corporation or subsidiary corporation of the Company, whether now or hereafter existing, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(b) "ANNUAL GRANT" means an Option granted annually to all Non-Employee Directors who meet the specified criteria pursuant to subsection 6(b) of the Plan.

(c) "ANNUAL MEETING" means the annual meeting of the stockholders of the Company.

(d) "BOARD" means the Board of Directors of the Company.

(e) "CODE" means the Internal Revenue Code of 1986, as amended.

(f) "COMMON STOCK" means the common stock, par value $.001 per share, of the Company.

(g) "COMPANY" means Lexicon Genetics Incorporated, a Delaware corporation.

(h) "CONSULTANT" means any person, including an advisor, (i) engaged by the Company or an Affiliate to render consulting or advisory services and who is compensated for such services or (ii) who is a member of the Board of Directors of an Affiliate. However, the term "Consultant" shall not include either Directors of the Company who are not compensated by the Company for their services as Directors or Directors of the Company who are merely paid a director's fee by the Company for their services as Directors.

(i) "CONTINUOUS SERVICE" means that the Optionholder's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. The Optionholder's Continuous Service shall not be deemed to have terminated merely because of a change in the capacity in which the Optionholder renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the entity for which the Optionholder renders such service, provided that there is no interruption or termination of the Optionholder's Continuous Service. For example, a change in status from a Non-Employee Director of the Company to a Consultant of an Affiliate or an Employee of the Company will not constitute an interruption of Continuous Service. The Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service shall be considered interrupted in the case of any leave of absence approved by that party, including sick leave, military leave or any other personal leave.

(j) "DIRECTOR" means a member of the Board of Directors of the Company.

(k) "DISABILITY" means the permanent and total disability of a person within the meaning of Section 22(e)(3) of the Code.

(l) "EMPLOYEE" means any person employed by the Company or an Affiliate. Mere service as a Director or payment of a director's fee by the Company or an Affiliate shall not be sufficient to constitute "employment" by the Company or an Affiliate.

(m) "EXCHANGE ACT" means the Securities Exchange Act of 1934, as amended.

(n) "FAIR MARKET VALUE" means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on the Nasdaq National Market or the Nasdaq SmallCap Market, the Fair Market Value of a share of Common Stock shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the last market trading day prior to the day of determination, as reported in The Wall Street Journal or such other source as the Board deems reliable.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value shall be determined in good faith by the Board.

(o) "INITIAL GRANT" means an Option granted to a Non-Employee Director who meets the specified criteria pursuant to subsection 6(a) of the Plan.

(p) "IPO DATE" means the effective date of the initial public offering of the Common Stock.

(q) "NON-EMPLOYEE DIRECTOR" means a Director who is not an Employee.

(r) "NONSTATUTORY STOCK OPTION" means an Option not intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(s) "OFFICER" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(t) "OPTION" means a Nonstatutory Stock Option granted pursuant to the Plan.

(u) "OPTION AGREEMENT" means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an individual Option grant. Each Option Agreement shall be subject to the terms and conditions of the Plan.

(v) "OPTIONHOLDER" means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(w) "PLAN" means this Lexicon Genetics Incorporated 2000 Non-Employee Directors' Stock Option Plan.

(x) "RULE 16B-3" means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(y) "SECURITIES ACT" means the Securities Act of 1933, as amended.

3. ADMINISTRATION.

(a) ADMINISTRATION BY BOARD. The Board shall administer the Plan. The Board may not delegate administration of the Plan to a committee.

(b) POWERS OF BOARD. The Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine the provisions of each Option to the extent not specified in the Plan.

(ii) To construe and interpret the Plan and Options granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Option Agreement, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

(iii) To amend the Plan or an Option as provided in Section 12.

(iv) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company that are not in conflict with the provisions of the Plan.

(c) EFFECT OF BOARD'S DECISION. All determinations, interpretations and constructions made by the Board in good faith shall not be subject to review by any person and shall be final, binding and conclusive on all persons.

4. SHARES SUBJECT TO THE PLAN.

(a) SHARE RESERVE. Subject to the provisions of Section 11 relating to adjustments upon changes in the Common Stock, the Common Stock that may be issued pursuant to Options shall not exceed in the aggregate Six Hundred Thousand (600,000) shares of Common Stock.

(b) EVERGREEN SHARE RESERVE INCREASE.

(i) Notwithstanding subsection 4(a) hereof, on the day after each Annual Meeting (the "Calculation Date") for a period of ten (10) years, commencing with the Annual Meeting in 2000, the aggregate number of shares of Common Stock that is available for issuance under the Plan shall automatically be increased by that number of shares equal to the greater of (1) three-tenths of one percent (0.3%) of the Diluted Shares Outstanding or (2) the number of shares of Common Stock subject to Options granted during the prior 12-month period; provided, however, that the Board, from time to time, may provide for a lesser increase in the aggregate number of shares of Common Stock that is available for issuance under the Plan.

(ii) "Diluted Shares Outstanding" shall mean, as of any date, (1) the number of outstanding shares of Common Stock of the Company on such Calculation Date, plus (2) the number of shares of Common Stock issuable upon such Calculation Date assuming the conversion of all outstanding Preferred Stock and convertible notes, plus (3) the additional number of dilutive Common Stock equivalent shares outstanding as the result of any options or warrants outstanding during the fiscal year, calculated using the treasury stock method.

(c) REVERSION OF SHARES TO THE SHARE RESERVE. If any Option shall for any reason expire or otherwise terminate, in whole or in part, without having been exercised in full, the shares of Common Stock not acquired under such Option shall revert to and again become available for issuance under the Plan.

(d) SOURCE OF SHARES. The shares of Common Stock subject to the Plan may be unissued shares or reacquired shares, bought on the market or otherwise.

5. ELIGIBILITY.

The Options as set forth in section 6 automatically shall be granted under the Plan to all Non-Employee Directors.

6. NON-DISCRETIONARY GRANTS.

(a) INITIAL GRANTS. Without any further action of the Board, each person who is elected or appointed for the first time to be a Non-Employee Director automatically shall, upon the date of his or her initial election or appointment to be a Non-Employee Director, be granted an Initial Grant to purchase Thirty Thousand (30,000) shares of Common Stock on the terms and conditions set forth herein.

(b) ANNUAL GRANTS. Without any further action of the Board, on the day following each Annual Meeting, commencing with the Annual Meeting in 2001, each person who is then a Non-Employee Director, and has been a Non-Employee Director for at least six (6) months, automatically shall be granted an Annual Grant to purchase Ten Thousand (10,000) shares of Common Stock on the terms and conditions set forth herein.

7. OPTION PROVISIONS. Each Option shall be in such form and shall contain such terms and conditions as required by the Plan. Each Option shall contain such additional terms and conditions, not inconsistent with the Plan, as the Board shall deem appropriate. Each Option shall include (through incorporation of provisions hereof by reference in the Option or otherwise) the substance of each of the following provisions:

(a) TERM. No Option shall be exercisable after the expiration of ten (10) years from the date it was granted.

(b) EXERCISE PRICE. The exercise price of each Option shall be one hundred percent (100%) of the Fair Market Value of the stock subject to the Option on the date the Option is granted. Notwithstanding the foregoing, an Option may be granted with an exercise price lower than that set forth in the preceding sentence if such Option is granted pursuant to an assumption or substitution for another option in a manner satisfying the provisions of Section 424(a) of the Code.

(c) CONSIDERATION. The purchase price of stock acquired pursuant to an Option may be paid, to the extent permitted by applicable statutes and regulations, in any combination of (i) cash or check, or (ii) delivery to the Company of other Common Stock. The purchase price of Common Stock acquired pursuant to an Option that is paid by delivery to the Company of other Common Stock acquired, directly or indirectly from the Company, shall be paid only by shares of the Common Stock of the Company that have been held for more than six (6) months (or such longer or shorter period of time required to avoid a charge to earnings for financial accounting purposes). At any time that the Company is incorporated in Delaware, payment of the Common Stock's "par value," as defined in the Delaware General Corporation Law, shall not be made by deferred payment.

(d) TRANSFERABILITY. An Option is not transferable, except (i) by will or by the laws of descent and distribution, (ii) by instrument to an inter vivos or testamentary trust, in a form accepted by the Company, in which the Option is to be passed to beneficiaries upon the death of the trustor (settlor) and (iii) by gift, in a form accepted by the Company, to a member of the "immediate family" of the Optionholder as that term is defined in 17 C.F.R. 240.16a-1(e). In addition, Optionholder may, by delivering written notice to the Company, in a form satisfactory to the Company, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to exercise the Option.

(e) VESTING. Options shall vest as follows:

(i) Initial Grants shall provide for vesting of 1/60th of the shares subject to the Option each month after grant for five (5) years after the date of the grant.

(ii) Annual Grants shall provide for vesting of 1/12th of the shares subject to the Option each month after grant for twelve (12) months after the date of the grant.

(f) TERMINATION OF CONTINUOUS SERVICE. In the event an Optionholder's Continuous Service terminates (other than upon the Optionholder's death or Disability), the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise it as of the date of termination) but only within such period of time ending on the earlier of (i) the date six (6) months following the termination of the Optionholder's Continuous Service, or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination, the Optionholder does not exercise his or her Option within the time specified in the Option Agreement, the Option shall terminate.

(g) EXTENSION OF TERMINATION DATE. If the exercise of the Option following the termination of the Optionholder's Continuous Service (other than upon the Optionholder's death or Disability) would be prohibited at any time solely because the issuance of shares would violate the registration requirements under the Securities Act, then the Option shall terminate on the earlier of (i) the expiration of the term of the Option set forth in subsection 7(a) or (ii) the expiration of a period of three (3) months after the termination of the Optionholder's Continuous Service during which the exercise of the Option would not be in violation of such registration requirements.

(h) DISABILITY OF OPTIONHOLDER. In the event an Optionholder's Continuous Service terminates as a result of the Optionholder's Disability, the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise it as of the date of termination), but only within such period of time ending on the earlier of (i) the date twelve (12) months following such termination or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination, the Optionholder does not exercise his or her Option within the time specified herein, the Option shall terminate.

(i) DEATH OF OPTIONHOLDER. In the event (i) an Optionholder's Continuous Service terminates as a result of the Optionholder's death or (ii) the Optionholder dies within the three-month period after the termination of the Optionholder's Continuous Service for a reason other than death, then the Option may be exercised (to the extent the Optionholder was entitled to exercise the Option as of the date of death) by the Optionholder's estate, by a person who acquired the right to exercise the Option by bequest or inheritance or by a person designated to exercise the Option upon the Optionholder's death, but only within the period ending on the earlier of (1) the date eighteen (18) months following the date of death or (2) the expiration of the term of such Option as set forth in the Option Agreement. If, after death, the Option is not exercised within the time specified herein, the Option shall terminate.

8. COVENANTS OF THE COMPANY.

(a) AVAILABILITY OF SHARES. During the terms of the Options, the Company shall keep available at all times the number of shares of Common Stock required to satisfy such Options.

(b) SECURITIES LAW COMPLIANCE. The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Options and to issue and sell shares of Common Stock upon exercise of the Options; provided, however, that this undertaking shall not require the Company to register under the Securities Act the Plan, any Option or any stock issued or issuable pursuant to any such Option. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority which counsel for the Company deems necessary for the lawful issuance and sale of stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell stock upon exercise of such Options unless and until such authority is obtained.

9. USE OF PROCEEDS FROM STOCK. Proceeds from the sale of stock pursuant to Options shall constitute general funds of the Company.

10. MISCELLANEOUS.

(a) STOCKHOLDER RIGHTS. No Optionholder shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares subject to such Option unless and until such Optionholder has satisfied all requirements for exercise of the Option pursuant to its terms.

(b) NO SERVICE RIGHTS. Nothing in the Plan or any instrument executed or Option granted pursuant thereto shall confer upon any Optionholder any right to continue to serve the Company as a Non-Employee Director or shall affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(c) INVESTMENT ASSURANCES. The Company may require an Optionholder, as a condition of exercising or acquiring stock under any Option, (i) to give written assurances satisfactory to the Company as to the Optionholder's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Option; and (ii) to give written assurances satisfactory to the Company stating that the Optionholder is acquiring the stock subject to the Option for the Optionholder's own account and not with any present intention of selling or otherwise distributing the stock. The foregoing requirements, and any assurances given pursuant to such requirements, shall be inoperative if (iii) the issuance of the shares upon the exercise or acquisition of stock under the Option has been registered under a then currently effective registration statement under the Securities Act or (iv) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the stock.

(d) WITHHOLDING OBLIGATIONS. The Optionholder may satisfy any federal, state or local tax withholding obligation relating to the exercise or acquisition of stock under an Option by any of the following means (in addition to the Company's right to withhold from any compensation paid to the Optionholder by the Company) or by a combination of such means: (i) tendering a cash payment; (ii) authorizing the Company to withhold shares from the shares of the Common Stock otherwise issuable to the Optionholder as a result of the exercise or acquisition of stock under the Option, provided, however, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law; or (iii) delivering to the Company owned and unencumbered shares of the Common Stock.

11. ADJUSTMENTS UPON CHANGES IN STOCK.

(a) CAPITALIZATION ADJUSTMENTS. If any change is made in the stock subject to the Plan, or subject to any Option, without the receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other transaction not involving the receipt of consideration by the Company), the Plan will be appropriately adjusted in the class(es) and maximum number of securities subject both to the Plan pursuant to subsection 4(a) and to the nondiscretionary Options specified in Section 5, and the outstanding Options will be appropriately adjusted in the class(es) and number of securities and price per share of stock subject to such outstanding Options. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. (The conversion of any convertible securities of the Company shall not be treated as a transaction "without receipt of consideration" by the Company.)

(b) CHANGE IN CONTROL -- DISSOLUTION OR LIQUIDATION. In the event of a dissolution or liquidation of the Company, then all outstanding Options shall terminate immediately prior to such event.

(c) CHANGE IN CONTROL -- ASSET SALE, MERGER, CONSOLIDATION OR REVERSE MERGER.

(i) In the event of (i) a sale, lease or other disposition of all or substantially all of the assets of the Company, (ii) a merger or consolidation in which the Company is not the surviving corporation or (iii) a reverse merger in which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger are converted by virtue of the merger into other property,

whether in the form of securities, cash or otherwise, then any surviving corporation or acquiring corporation shall assume any Options outstanding under the Plan or shall substitute similar Options (including an option to acquire the same consideration paid to the stockholders in the transaction described in this subsection 11(c) for those outstanding under the Plan).

(ii) In the event any surviving corporation or acquiring corporation refuses to assume such Options or to substitute similar Options for those outstanding under the Plan, then the vesting of such Options and the vesting of any shares of Common Stock acquired pursuant to such Options shall be accelerated in full, and the Options shall terminate if not exercised at or prior to such event.

(iii) In the event any surviving corporation or acquiring corporation assumes such Options or substitutes similar Options for those outstanding under the Plan but the Optionholder is not elected or appointed to the board of directors of the surviving corporation or acquiring corporation at the first meeting of such board of directors after such change in control event, then the vesting of such Options and the vesting of any shares of Common Stock acquired pursuant to such Options shall be accelerated by eighteen (18) months on the day after the first meeting of the board of directors of the surviving corporation or acquiring corporation.

(iv) In the event any surviving corporation or acquiring corporation assumes such Options or substitutes similar Options for those outstanding under the Plan and the Optionholder is elected or appointed to the board of directors of the surviving corporation or acquiring corporation at the first meeting of such board of directors after such change in control event, then the vesting of such Options and the vesting of any shares of Common Stock acquired pursuant to such Options shall not be accelerated.

12. AMENDMENT OF THE PLAN AND OPTIONS.

(a) AMENDMENT OF PLAN. The Board at any time, and from time to time, may amend the Plan. However, except as provided in Section 11 relating to adjustments upon changes in stock, no amendment shall be effective unless approved by the stockholders of the Company to the extent stockholder approval is necessary to satisfy the requirements of Rule 16b-3 or any Nasdaq or securities exchange listing requirements.

(b) STOCKHOLDER APPROVAL. The Board may, in its sole discretion, submit any other amendment to the Plan for stockholder approval.

(c) NO IMPAIRMENT OF RIGHTS. Rights under any Option granted before amendment of the Plan shall not be impaired by any amendment of the Plan unless (i) the Company requests the consent of the Optionholder and (ii) the Optionholder consents in writing.

(d) AMENDMENT OF OPTIONS. The Board at any time, and from time to time, may amend the terms of any one or more Options; provided, however, that the rights under any Option shall not be impaired by any such amendment unless (i) the Company requests the consent of the Optionholder and (ii) the Optionholder consents in writing.

13. TERMINATION OR SUSPENSION OF THE PLAN.

(a) PLAN TERM. The Board may suspend or terminate the Plan at any time. Unless sooner terminated, the Plan shall terminate on the day before the tenth (10th) anniversary of the date the Plan is adopted by the Board or approved by the stockholders of the Company, whichever is earlier. No Options may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) NO IMPAIRMENT OF RIGHTS. Suspension or termination of the Plan shall not impair rights and obligations under any Option granted while the Plan is in effect except with the written consent of the Optionholder.

14. EFFECTIVE DATE OF PLAN. The Plan shall become effective on the IPO Date, but no Option shall be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval shall be within twelve (12) months before or after the date the Plan is adopted by the Board.

15. CHOICE OF LAW. All questions concerning the construction, validity and interpretation of this Plan shall be governed by the law of the State of Delaware, without regard to such state's conflict of laws rules.

EXHIBIT 10.17

STOCK OPTION AGREEMENT

(CHAIRMAN OF BOARD OF DIRECTORS STOCK OPTION)

THIS STOCK OPTION AGREEMENT (this "Agreement"), effective as of _____ (the "Grant Date"), is by and between LEXICON GENETICS INCORPORATED, a Delaware corporation (the "Company"), and _____ ("Optionee").

To carry out the purposes of the Lexicon Genetics Incorporated 2000 Equity Incentive Plan (the "Plan"), by providing Optionee the opportunity to purchase shares of Common Stock, par value $0.001 per share, of the Company ("Stock"), and in consideration of the mutual agreements and other matters set forth herein and in the Plan, the Company and Optionee hereby agree as follows:

1. Grant of Option. The Company hereby grants to Optionee the right and option (the "Option") to purchase all or any part of an aggregate of _____ shares of Stock, on the terms and conditions set forth in this Agreement and in the Plan. The Option shall be treated as a non-statutory stock option and not as an "incentive stock option" within the meaning of section 422(b) of the Internal Revenue Code of 1986, as amended (the "Code").

2. Exercise Price. The price at which Optionee may purchase Stock upon exercise of the Option (the "Exercise Price") shall be $_____ per share, which has been determined to be the Fair Market Value (as defined in the Plan) of the Stock on the Grant Date. The Exercise Price is subject to adjustment under certain circumstances as provided in the Plan.

3. Term. The Option shall expire on the 10th anniversary of the Grant Date, subject to earlier termination under the circumstances specified in Section 8 of this Agreement.

4. Exercisability and Vesting. (a) Subject to the terms and conditions set forth in this Agreement and the Plan, the Option may be exercised, in whole or in part, at any time and from time to time during the term of the Option, to purchase the number of shares of Stock that have vested and become exercisable in accordance with this Agreement. The Option shall vest and become exercisable with respect to 1/12 of the total number of shares of Stock subject to the Option each month after grant for 12 months after the Grant Date; provided that such Option shall become vested with respect to all remaining unvested shares in the event any surviving corporation or acquiring corporation in connection with a Change in Control (as defined below) assumes such Option or substitutes similar options, but the Optionee is not elected or appointed to the board of directors of the surviving corporation or acquiring corporation at the first meeting of such board of directors after such Change in Control; and provided further, that, upon the termination of Optionee's Continuous Service (as defined in the Plan), the Option shall cease to vest and shall terminate with respect to all shares of Stock that have not vested and become exercisable prior to such time.

(b) A "Change in Control" shall be deemed to have occurred if any of the following shall have taken place: (i) a sale, lease or other disposition of all or substantially all of the assets of the Company, (ii) a merger or consolidation in which the Company is not the surviving corporation or (iii) a reverse merger in which the Company is the surviving corporation but the shares of Stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise.

5. Procedures for Exercise. Subject to the terms and conditions set forth in this Agreement and the Plan, the Option may be exercised by delivery to the Company at its principal executive office of (i) written notice addressed to the Secretary of the Company specifying the number of shares of Stock as to which the Option is being exercised and (ii) payment in full of the Exercise Price for such shares. The Exercise Price shall be paid in cash or in such other manner as may be authorized by the administrator of the Plan in accordance with the terms of the Plan. If the offering, sale and delivery of the shares of Stock issuable upon exercise of the Option have not been registered under the Securities Act of 1933 (the "Securities Act"), the Company may require Optionee, as a condition to Optionee's exercise of the Option, to enter into a stock purchase agreement containing such representations and warranties as the Company may deem necessary to permit the issuance of the Stock purchased upon exercise of the Option in compliance with the Securities Act and applicable state securities laws.

6. No Rights of Ownership in Stock Before Issuance. No person shall be entitled to the rights and privileges of stock ownership with respect to any shares of Stock issuable upon exercise of the Option until such shares have been issued in accordance with the terms of this Agreement and the Plan.

7. Non-Transferability. The Option may not be transferred by Optionee otherwise than (i) by will or the laws of descent and distribution (ii) by instrument to an inter vivos or testamentary trust, in a form accepted by the Company, in which the Option is to be passed to beneficiaries upon the death of the trustor (settler), (iii) by gift, in a form accepted by the Company, to a member of the "immediate family" of the Optionee as that term is defined in 17 C.F.R. 240.16a-1(e) or (iv) pursuant to a qualified domestic relations order (as defined in Title I of the Employee Retirement Income Security Act of 1974, as amended, or the rules thereunder).

8. Termination of Option. If Optionee's Continuous Service is terminated for any reason other than the Disability (as defined in the Plan) or death of Optionee, the Option shall remain exercisable, with respect to the shares of Stock that had vested under the terms of this Agreement before the date of such termination, for a period of six months after the date of such termination (subject to extension as provided in Section 6(i) of the Plan, but in no event later than the expiration date of the Option specified in Section 3 of this Agreement), following which six-month period this Agreement and Optionee's right to exercise the Option shall terminate. If Optionee's Continuous Service is terminated because of Disability of Optionee, the Option shall remain exercisable, with respect to the shares of Stock that had vested under the terms of this Agreement before the date of such termination, for a period of 12 months after the date of such termination (but in no event later than the expiration date of the Option specified in Section 3 of this Agreement), following which 12-month period this Agreement and Optionee's right to exercise the Option shall terminate. If (i) Optionee's Continuous Service is terminated because of death of Optionee or (ii) Optionee dies within the three-month period after the termination of Optionee's Continuous Service for a reason other than death, the Option shall remain exercisable, with respect to the shares of Stock that had vested under the terms of this Agreement before the date of death, for a period of 18 months after the date of death (but in no event later than the expiration date of the Option specified in Section 3 of this Agreement), following which 18-month period this Agreement and the right to exercise the Option shall terminate. Notwithstanding the foregoing, if the Optionee is removed from the Company's Board of Directors for cause in accordance with the Company's Bylaws, this Agreement and Optionee's right to exercise any portion of the Option, whether or not vested, shall terminate at the commencement of business on the date of such removal.

9. Withholding of Tax. To the extent that the Company is required under applicable federal or state income tax laws to withhold any amount on account of any present or future tax imposed as a result of the exercise of the Option, Optionee shall pay the Company, at the time of such exercise, funds in an amount sufficient to permit the Company to satisfy such withholding obligations in full. If Optionee fails to pay such amount, the Company shall be authorized (i) to withhold from any cash remuneration then or thereafter payable

to Optionee any tax required to be withheld or (ii) to refuse to issue or transfer any shares otherwise required to be issued pursuant to the terms of this Agreement.

10. Status of Stock. (a) Unless the offering, sale and delivery of the shares of Stock issuable upon exercise of the Option have been registered under the Securities Act, Optionee agrees that any shares of Stock purchased upon exercise of the Option shall be acquired for investment without a view to distribution, within the meaning of the Securities Act, and shall not be sold, transferred, assigned, pledged or hypothecated in the absence of an effective registration statement under the Securities Act and applicable state securities laws or an applicable exemption from the registration requirements of the Act and any applicable state securities laws. Optionee further agrees that the shares of Stock which Optionee may acquire by exercising the Option will not be sold or disposed of in any manner which would constitute a violation of any other applicable federal or state securities laws. In addition, Optionee agrees (i) that the certificates representing the shares of Stock issued under this Agreement may bear such legend or legends as the administrator of the Plan deems appropriate in order to assure compliance with applicable securities laws, and (ii) that the Company may give instruction to its transfer agent, if any, to stop transfer of the shares of Stock issued under this Agreement on the stock transfer records of the Company, if such proposed transfer would, in the opinion of counsel to the Company, constitute a violation of any applicable securities law or any such agreements.

(b) Optionee further agrees that the Option granted herein shall be subject to the requirement that if at any time the administrator of the Plan shall determine, in its discretion, that the listing, registration or qualification of the shares of Stock subject to such Option upon any securities exchange or market or under any state or federal law, or the consent or approval of any governmental regulatory body, is necessary or desirable as a condition of, or in connection with, the purchase or issuance of shares of Stock hereunder, such Option may not be exercised in whole or in part unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not reasonably acceptable to the administrator of the Plan.

11. Stock Option Plan. The Plan, a copy of which is available for inspection by Optionee or other persons entitled to exercise this Option at the Company's principal executive office during business hours, is incorporated by reference in this Agreement. The Option is subject to, and the Company and Optionee agree to be bound by, all of the terms and conditions of the Plan. In the event of a conflict between this Agreement and the Plan, the terms of the Plan shall control. Subject to the terms of the Plan, the administrator of the Plan shall have authority to construe the terms of this Agreement, and the determinations of the administrator of the Plan shall be final and binding on Optionee and the Company.

12. Binding Agreement. This Agreement shall be binding upon and inure to the benefit of any successors to the Company and all persons lawfully claiming under Optionee.

13. Governing Law. This Agreement and all actions taken hereunder shall be governed by and construed in accordance with the laws of the State of Delaware.

IN WITNESS WHEREOF, the Company has caused this Agreement to be duly executed and Optionee has executed this Agreement as of the day and year first above written.

LEXICON GENETICS INCORPORATED

By:

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

OPTIONEE

CONFIDENTIAL MATERIALS OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION. ASTERISKS DENOTE OMISSIONS.

SECOND AMENDED AND RESTATED COLLABORATION AND LICENSE AGREEMENT

This Second Amended and Restated Collaboration and License Agreement (the "Agreement") is executed as of the 30th day of November, 2005 (the "Second Restatement Date") and made effective as of the 17th 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"). Throughout this Agreement, Genentech and Lexicon are sometimes referred to individually as a "Party" and collectively as "Parties."

This Agreement amends and restates that certain Amended and Restated Collaboration and License Agreement between Genentech and Lexicon dated November 19, 2003 (the "First Restated Agreement"), which such First Restated Agreement amended and restated that certain Collaboration and License Agreement between Genentech and Lexicon dated December 17, 2002 (the "Original Agreement").

RECITALS

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

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

WHEREAS, Lexicon further possesses technology for and expertise in the identification and validation of gene and protein targets for use in the discovery of pharmaceutical products, as well as in the research and development of such products;

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

WHEREAS, Genentech and Lexicon, on the terms and conditions herein, desire to collaborate with respect to the identification and validation of gene and protein targets based on the human gene sequences provided by Genentech and the research and discovery of pharmaceutical products based upon such gene and protein targets.

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 "Actual Knowledge" of a Party means knowledge or awareness of a fact by any board member or officer of such Party or of an Affiliate of such Party, or any employee or agent of such Party that a board member or officer would reasonably consult with regard to a particular fact, in each case after making reasonable inquiries and investigations.

1.2 "Advanced Phenotypic Analysis" means any one or more of the Advanced Phenotypic Panels or Supplementary Advanced Phenotypic Panels that (i) Lexicon will use Commercially Reasonable Efforts to perform, under Section 3.6, on the Knock-Out Mice of each Project so selected by the Steering Committee, or (ii) Lexicon has otherwise performed with respect to a Project Gene prior to the Second Restatement Date the data for which will be delivered to Genentech under Section 3.7(a)(i).

1.3 "Advanced Phenotypic Panel(s)" means the tests, observations, and analyses listed on Exhibit D. For the purposes of Sections 3.7(c) and 11.2, an Advanced Phenotypic Panel shall be deemed to be "complete" upon (i) [**] and (ii) [**].

1.4 "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.

1.5 "Applicable Laws" means all applicable statutes, ordinances, regulations, rules, or orders of any kind whatsoever of any government authority or court of competent jurisdiction.

1.6 "BLA" means a complete application for a "biologics license" under section 351 of the Public Health Service Act and containing the content, and in the format, required by 21 C.F.R. Part 601, or a corresponding application with a regulatory agency in a country other than the United States, together with all additions, deletions, and supplements thereto.

1.7 "Calendar Quarter" means a period of three (3) consecutive calendar months ending on each of March 31, June 30, September 30, or December 31.

1.8 "Calendar Year" means the respective period of a year commencing on January 1 and ending on December 31.

1.9 "Change in Control" of Lexicon means that during the Term of this Agreement (i) any sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all or substantially all of the assets of Lexicon shall have occurred to a Competitor; and/or (ii) the stockholders of Lexicon shall have approved of a plan or proposal for the liquidation or dissolution of the company; and/or (iii) any Competitor (whether individually or as part of a group) shall have become the owner, directly or indirectly, beneficially or of record, of shares representing more than fifty percent (50%) of the aggregate ordinary voting power represented by the issued and outstanding voting stock of Lexicon.

1.10 "Clinical Development" means the program of work to develop and evaluate the safety and efficacy of a Genentech IND-Opted Product or Genentech Phase II Opted Product, such work to be conducted in accordance with the scope, objectives and responsibilities set forth in a Clinical Development Plan.

1.11 "Clinical Development Plan" means the written plan, prepared by Genentech, and approved by the Steering Committee, in accordance with Section 4.7(b) setting forth in reasonable detail the various Clinical Development activities to by undertaken by the Parties. The Clinical Development Plan may be amended or modified from time to time in accordance with Section 4.7(b).

1.12 "Collaboration Product" means a Genentech Licensed Product and/or Lexicon Licensed Product, as applicable.

1.13 "Collaborator" means (i) a principal investigator, employed at a university or other not-for-profit academic research institution, who is performing collaborative research with Genentech involving use of a Knock-Out Mouse or Progeny, or (ii) a Third Person or Affiliate with whom Genentech has a bona fide research or development collaboration with regard to a Project Gene, Protein Candidate, Genentech Advanced Research Protein Candidate or Genentech Licensed Product.

1.14 "Commercially Reasonable Efforts" or "commercially reasonable efforts" means those diligent efforts consistent with the exercise of prudent scientific and business judgment, as applied to its own high priority research projects or pharmaceutical products, at a similar stage of development and of similar potential and market size, by the Party in question. 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 [**]. For clarity, and without prejudice to the generality of the foregoing, a Party shall not be deemed to have failed to exercise Commercially Reasonable Efforts with respect to the development or commercialization of a Collaboration Product (to the extent an obligation to exercise Commercially Reasonable Efforts is applicable in accordance with a provision of this Agreement) in the event, and to the extent, that [**]. Activities by Genentech Licensees and Affiliates, with respect to Genentech, and by Lexicon Product Licensees and Affiliates, with respect to Lexicon, will be respectively considered as Genentech's or Lexicon's activities under this Agreement for purposes of determining whether Genentech or Lexicon has complied with an obligation to exercise Commercially Reasonable Efforts in accordance with a provision of this Agreement.

1.15 "Commercialization Plan" has the meaning set forth in Section 5.2.

1.16 "Competitor" means [**].

1.17 "Confidential Information" means Lexicon Confidential Information, Project Confidential Information and/or Genentech Confidential Information, as applicable.

1.18 "Contract Service Provider" means any Third Person that enters into an agreement with Genentech providing for the performance of services for Genentech, on a fee for service basis, relating to [**].

1.19 "Co-Promotion" and "Co-Promote" means performing sales calls by Lexicon sales representatives to [**]. Co-Promotion shall not be included within the term "marketing" as such term is used within the Agreement.

1.20 "Co-Promote Territory" has the meaning set forth in Section 5.1.

1.21 "Derivative Protein" means (i) [**] or (ii) [**].

1.22 "Development Costs" has the meaning set forth in the Financial Appendix.

1.23 "Dollars" means United States dollars.

1.24 "Draft Candidate" has the meaning set forth in Section 3.7(b)(iii).

1.25 "Effective Date" has the meaning set forth in the introductory paragraph of the Agreement.

1.26 "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. With regard to ES Cell Lines to be delivered to Genentech pursuant to this Agreement, the term ES Cell Line, with respect to each Project Gene, shall refer to [**].

1.27 "Excluded Gene(s)" means those Project Genes set forth on Exhibit E.

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

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

1.30 "Financial Appendix" means Exhibit F to this Agreement, which sets forth certain financial terms and conditions.

1.31 "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.

1.32 "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.

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

1.34 "Genentech Advanced Research Product" means a pharmaceutical preparation, other than a Small Molecule Drug, that is ready for administration to the ultimate consumer and that: (i) [**] or (ii) [**].

1.35 "Genentech Advanced Research Protein Candidate" means a Protein designated or selected as such pursuant to Section 3.7, and shall include Derivative Proteins thereof.

1.36 "Genentech Confidential Information" means all 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 and Project 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.

1.37 "Genentech [**] Fields" means the diagnosis, prevention and treatment, in humans or animals, of: (i) [**]; (ii) any disease or condition by means of [**]; and (iii) [**].

1.38 "Genentech Excluded IP" means all rights in and to any of the following, each of which is defined on Exhibit G: (i) [**]; (ii) [**]; (iii) [**]; (iv) [**]; (v) [**]; and (vi) [**].

1.39 "Genentech Gene Patents and Know How" means (i) all Patents which (A) are owned, controlled or licensed by Genentech as of the Effective Date and (B) claim a Project Gene, polypeptides encoded by a Project Gene and/or antibodies directed toward such polypeptides and/or methods of treatment employing such Project 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 which relates to any of

the foregoing (also referred to herein as "Genentech Gene Know-How"); provided that Genentech Gene Patents and Know-How shall not include (x) Genentech Excluded IP or (y) general Patents that cover inventions that could be used for products other than a Collaboration Product, including, without limitation, Patents covering manufacturing or process (including purification process) inventions. Without limiting the generality of the foregoing, Genentech Gene Know How includes any Genentech Confidential Information regarding Project Genes and [**]. Except as expressly set forth herein, Genentech shall have no obligation to transfer Genentech Gene Know-How to Lexicon.

1.40 "Genentech IND Opted Product(s)" means those Lexicon Advanced Research Products for which Genentech has exercised its IND Opt-In.

1.41 "Genentech Licensed Product(s)" means (i) Protein Candidate Product(s), (ii) Genentech Advanced Research Product(s), (iii) [**] Product(s) for use in the Genentech Retained Fields, (iv) [**] Product(s) for use in the Genentech Retained Fields, (v) Genentech IND Opted Product(s), and (vi) Genentech Phase II Opted Product(s) for which a Genentech Opt-Out has not become effective.

1.42 "Genentech Opt-Out" has the meaning set forth in Section 4.10.

1.43 "Genentech Opt-Out Product(s)" means those Genentech Phase II Opted Products for which a Genentech Opt-Out has become effective.

1.44 "Genentech Phase II Opted Product(s)" means those Lexicon Advanced Research Products for which Genentech has exercised its Phase II Opt-In.

1.45 "Genentech 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 Genentech Licensed Product.

1.46 "Genentech Retained Field" means the diagnosis, prevention and treatment, in humans or animals, of any disease or condition in the Genentech [**] Fields, other than [**].

1.47 "Genentech Trademarks" has the meaning set forth in Section 5.6.

1.48 "Good Laboratory Practices" or "GLP" means the practices and procedures set forth in Title 21, United States Code of Federal Regulations, Part 58, and any other regulations, guidelines or guidance documents relating to good laboratory practices.

1.49 "Gross Sales" means the gross amount invoiced by a Party and/or its respective Genentech Product Licensees and Lexicon Product Licensees for sales of a Collaboration Product to any Third Person in arms-length transactions. Consideration for sales of Collaboration Products for other than cash shall be valued at fair market value at the time of final sale. Notwithstanding anything to the contrary herein, sale(s) of Collaboration Products by and between a Party and its Genentech Product Licensee or Lexicon Product Licensees, as applicable, shall be excluded from Gross Sales and Net Sales, provided that the final sales of Collaboration Products by such Genentech Product Licensee or Lexicon Product Licensees, as applicable, to third parties are included in Gross Sales and Net Sales.

In the event a Collaboration Product is sold in combination with one or more other active compounds or ingredients (as used in this definition of Gross Sales, a "Combination Product"), then Gross Sales for that Collaboration Product shall be calculated by multiplying the Gross Sales of such Combination Product by the fraction A/B, where "A" is the gross selling price of the Collaboration Product sold separately and "B" is the gross selling price of the Combination Product. The gross selling price for Collaboration Product and Combination Product for such purposes will be calculated using data arising from the Calendar Quarter in which such Gross Sales are recorded.

In the event that no such separate sales are made and the average amount invoiced for the other active compounds or ingredients can be determined, but the average amount invoiced for the Collaboration Product cannot be determined, Gross Sales shall be calculated by multiplying the Gross Sales of the Combination Product by the following: 1-(C/C+D), where "C" is the average amount invoiced for the other active compounds or ingredients and "D" is the difference between the average amount invoiced for the Combination Product and the average amount invoiced for the other active compounds or ingredients. When determining the average amount invoiced for a Combination Product using the 1-(C/C+D) formula, the average amount invoiced will be calculated using data arising from the most recent Calendar Quarter in which all of the elements of the formula are known to Genentech.

In the event that the average amount invoiced for both the Collaboration Product and the other active compounds or ingredients in the Combination Product cannot be determined, the Gross Sales of the Collaboration Product shall be negotiated in good faith by the Parties.

1.50 "IND" means a complete "Investigational New Drug Application" as defined in 21 C.F.R. 312.3 and containing the content, and in the format, required by 21 C.F.R. 312.23, or a corresponding application with a regulatory agency in a country other than the United States, together with all additions, deletions, and supplements thereto.

1.51 "IND Opt-In" has the meaning set forth in Section 4.6(a).

1.52 "IND Opt-In Period" means the period of time commencing on the Second Restatement Date and [**].

1.53 "IND Package" means [**].

1.54 "Interest Rate" means the annual rate equal to the prime rate of interest quoted in the Federal Reserve Bulletin H15, or successor source thereto, on the last business day of the applicable Calendar Quarter prior to the date on which such payment is due, plus [**].

1.55 "Joint Project Team" means the committee established and described in Section 2.2.

1.56 "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.

1.57 "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.

1.58 "Lexicon Advanced Research Product" means a pharmaceutical preparation, other than a Small Molecule Drug, that is ready for administration to the ultimate consumer and that: (i) [**] or (ii) [**]. Following Section 3.7(b)(i), [**] Products and [**] Products, in each case, for use in the Lexicon Field shall be considered Lexicon Advanced Research Products.

1.59 "Lexicon Advanced Research Protein Candidate" means a Protein designated or selected as such pursuant to Section 3.7, and shall include Derivative Proteins thereof.

1.60 "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, Lexicon Product Patents and Know-How and Project 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, 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.

1.61 "Lexicon Field" means all human or animal healthcare applications including, without limitation, the diagnosis, prevention and treatment of diseases or conditions, other than applications in the Genentech Retained Field.

1.62 "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 and Overexpression Mice. "Lexicon Knock-out Technology" shall also include (A) the Know-How consisting of the Knock-Out Mice and the Overexpression 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 and Overexpression 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. "Lexicon Knock-Out Technology" shall not include Patents claiming Know-How to the extent that such Patents claim methods of making or methods of use of Proteins or nucleic acids encoding such Proteins.

1.63 "Lexicon Licensed Product(s)" means (i) Lexicon Advanced Research Product(s), excluding Genentech IND Opted Product(s) and Genentech Phase II Opted Product(s), (ii) [**] Product(s) for use in the Lexicon Field, (iii) [**] Product(s) for use in the Lexicon Field, and (iv) Genentech Opt-Out Products; in each case provided that such Lexicon Advanced Research Product, [**] Product or [**] Product has not been converted to a Genentech Advanced Research Product in accordance with Section 4.5, 11.2(b)(iv) or 11.2(a)(iv).

1.64 "Lexicon Pre-Existing Patents and Know-How" means all Patents ("Lexicon Pre-Existing Patents") and Know-How ("Lexicon Pre-Existing Know-How") which (i) relate to a Project Gene designated as a Pre-Existing Project, (ii) are (A) owned, controlled or licensed by Lexicon as of the Effective Date or (B) created or acquired by Lexicon prior to expiration of this Agreement, and (iii) which either (A) are conceived or created during the conduct of, or in connection with, First Pass Phenotypic Analysis or Advanced Phenotypic Analysis of a Project Gene, Pre-Clinical Development, Clinical Development, any activities conducted under a Commercialization Plan, or [**], or (B) relate to a product that [**]; provided in each case that Lexicon Pre-Existing Patents and Know-How shall not include (a) Lexicon Knock-Out Technology, (b) Lexicon Product Patents and Know-How, (c) Genentech Gene Patents and Know How, (d) Restricted Rights Project Patents and Know-How, or (e) general Patents that cover inventions that could be used for products other than a Collaboration Product, including, without limitation, Patents covering manufacturing or process (including purification process) inventions. Notwithstanding the foregoing, Lexicon Pre-Existing Patents and Know-How shall exclude Patents and Know-How specific to (i) [**], (ii) [**], and (iii) [**].

1.65 "Lexicon Product Licensee" means any Third Person which enters into an agreement with Lexicon or its Affiliates involving the grant to such Third Person of a license to sell a Lexicon Advanced Research Product.

1.66 "Lexicon Product Patents and Know-How" means all (i) Patents owned or controlled by Lexicon that claim (A) a Lexicon Advanced Research Protein Candidate corresponding to a Lexicon Licensed Product or a method of making or using such Lexicon Advanced Research Protein Candidate or (B) a Lexicon Licensed Product or a method of making or using a Lexicon Licensed Product, [**] (also referred to herein as "Lexicon Product Patents")

and (ii) Know How owned or controlled by Lexicon which relates to any of the above (also referred to herein as "Lexicon Product Know How"); provided in each case that Lexicon Product Patents and Know How shall not include (A) Lexicon Knock-Out Technology, (B) Genentech Gene Patents and Know-How, (C) Genentech Excluded IP, or (D) general Patents that cover inventions that could be used for products other than a Collaboration Product, including, without limitation, Patents covering manufacturing or process inventions.

1.67 "NDA" means a complete "application" or "New Drug Application" as defined in 21 C.F.R. 314.3 and containing the content, and in the format, required by 21 C.F.R. Part 314, Subpart B, or a corresponding application with a regulatory agency in a country other than the United States, together with all additions, deletions, and supplements thereto.

1.68 "Net Sales" means, with respect to a Collaboration Product, Gross Sales of such Collaboration Product less Sales Returns and Allowances for such Collaboration Product.

1.69 "Note Agreement" has the meaning set forth in Section 8.25.

1.70 "Operating Profits (Losses)" has the meaning set forth in the Financial Appendix.

1.71 "Overexpression Analysis" has the meaning set forth in Section 3.8.

1.72 "Overexpression Mouse" means a mouse made by Lexicon under this Agreement in which Lexicon has overexpressed a specific gene or portion thereof, homologous to a Project Gene, [**], to exaggerate the function of such gene in such mouse.

1.73 "Patent" means:

(i) a U.S. and corresponding foreign patent application (including provisional application, division, re-filing, 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) above.

1.74 "Phase I Clinical Trial" means, as to a specific Collaboration Product, a well-controlled and lawful study in humans designed with the principal purpose of preliminarily determining the safety of a pharmaceutical product in healthy individuals or patients, and for which there are no primary endpoints related to efficacy, as further defined in 21 C.F.R. Section 312.21(a); or similar clinical study in a country other than the United States.

1.75 "Phase II Clinical Trial" means, as to a specific Collaboration Product, a well-controlled and lawful study in humans designed with the principal purpose of determining initial efficacy and dosing of such Collaboration Product in patients for the indication(s) being studied, as further defined in 21 C.F.R. Section 312.21(b), or similar clinical study in a country other than the United States.

1.76 "Phase II Data Package" means the collection of data from a Phase II Clinical Trial, and related materials, [**].

1.77 "Phase II Opt-In" has the meaning set forth in Section 4.6(b).

1.78 "Phase III Clinical Trial" means, as to a specific Collaboration Product, a well-controlled and lawful study in humans of the efficacy and safety of such Collaboration Product, which is prospectively designed to demonstrate statistically whether such Collaboration 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 Collaboration Product in the United States or another country for the indication being investigated by the study, as further defined in 21 C.F.R. Section 312.21.

1.79 "Pipeline Project" means a Project involving a Project Gene for which Lexicon had already created or begun to create (i.e., to the stage of targeting vector generation or beyond), prior to the proposal of such Project Gene by Genentech, a Knock-Out Mouse involving a mouse or human gene sequence, as the case may be, with [**] to the full length sequence of any Proposed Gene, as determined at the protein level [**].

1.80 "Pre-Clinical Development" means the program of work to identify, screen, select, develop and/or evaluate the safety and efficacy of a Genentech Advanced Research Product sufficient to enable human clinical development under an approved IND, such work to be conducted in accordance with the scope, objectives and responsibilities set forth in a Pre-Clinical Development Plan.

1.81 "Pre-Clinical Development Budget" means a budget covering the activities under the Pre-Clinical Development Plan, prepared and agreed to by the Joint Project Team, and unanimously approved by the Steering Committee, which budget shall set forth in reasonable detail the various Pre-Clinical Development activities for which Pre-Clinical Development Costs will be incurred. The Pre-Clinical Development Budget may be amended or modified from time to time by the Joint Project Team, subject to [**].

1.82 "Pre-Clinical Development Costs" means the costs and expenses directly related to Pre-Clinical Development incurred by Lexicon in accordance with the approved Pre-Clinical Development Plan and the approved Pre-Clinical Development Budget.

1.83 "Pre-Clinical Development Option" has the meaning set forth in Section 4.4(a).

1.84 "Pre-Clinical Development Plan" means the written plan, prepared by the Joint Project Team, and [**], in accordance with Section 4.4(b), setting forth in reasonable detail the various Pre-Clinical Development activities to be undertaken by the Parties. The Pre-Clinical Development may be amended or modified from time to time by the Joint Project Team, subject to [**].

1.85 "Pre-Existing Project" means a Pipeline Project involving a Project Gene for which Lexicon had already [**] prior to the proposal of such Project Gene by Genentech.

1.86 "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).

1.87 "Project" has the meaning set forth in Section 3.1(e).

1.88 "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 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.

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

1.90 "Project Materials" means, with respect to a Project, (i) the Knock-Out Mice made in the course of such Project, [**], and, if applicable, [**], (ii) the data from the First Pass Phenotypic Analysis of such Knock-Out Mice, (iii) the data from any Advanced Phenotypic Analysis of such Knock-Out Mice, (iv) the Overexpression Mice, if any, made in the course of such Project and (v) the data, if any, from the Overexpression Analysis of such Overexpression Mice.

1.91 "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 [**], (ii) which relate to a Project Gene, Rejected Project Gene, Protein Candidate, Genentech Advanced Research Protein Candidate, Lexicon Advanced Research Protein Candidate, Genentech Licensed Product or a Collaboration Product, and (iii) which either (A) are conceived or created during the conduct of, or in connection with, First Pass Phenotypic Analysis or Advanced Phenotypic Analysis of a Project Gene, Pre-Clinical Development, Clinical Development, any activities conducted under a Commercialization Plan, or [**], or (B) relate to [**]; provided 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) Lexicon Product Patents

and Know-How, (F) Genentech Excluded IP, or (G) general Patents that cover inventions that could be used for products other than a Collaboration Product, including, without limitation, Patents covering manufacturing or process (including purification process) inventions. Notwithstanding the foregoing, any Know-How created or acquired by Genentech after a Project Gene has been designated as a Rejected Project Gene (or Patents claiming any such Know-How) shall not be included in the definition of Project Patents and Know-How and shall not be subject to this Agreement. Notwithstanding the foregoing, Project Patents and Know-How shall exclude Patents and Know-How specific to (i) [**], (ii) [**], and (iii) [**].

1.92 "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.

1.93 "Protein" means a high molecular weight [**], polymer compound composed of a variety of amino acids joined by peptide linkages, including allelic variants thereof and post-translationally modified variants thereof (e.g., glycosylated proteins) that is produced by a Proposed Gene or a Project Gene.

1.94 "Protein Candidate" has the meaning set forth in Section 3.5, and shall include Derivative Proteins thereof.

1.95 "Protein Candidate Product" means a pharmaceutical preparation, other than a Small Molecule Drug, that is ready for administration to the ultimate consumer and that: (i) [**] or (ii) [**].

1.96 "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 Collaboration Product in any country or other regulatory jurisdiction. "Regulatory Approval" shall include, without limitation, approval granted with respect to any BLA, NDA or foreign equivalent.

1.97 "Rejected Project Gene" means a Project Gene whose Protein is not designated as (i) a Protein Candidate under Section 3.5(b), (ii) a Genentech Advanced Research Protein Candidate under Section 3.7, or (iii) a Lexicon Advanced Research Protein Candidate under Section 3.7; or is designated a "Rejected Project Gene" pursuant to Section 3.5(c).

1.98 "Rejected Proposed Gene" means a Proposed Gene (i) that is rejected under Section 3.1(b), 3.1(c) or 3.1(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.

1.99 "Research Costs" has the meaning set forth in the Financial Appendix.

1.100 "Restricted Rights Project" means a Project involving a Project Gene which is subject to [**] prior to the initial proposal of such Project Gene by Genentech.

1.101 "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 (i) relate to a Project Gene designated as a Restricted Rights Project, (ii) are (A) owned, controlled or licensed by Lexicon as of the Effective Date or (B) created or acquired by Lexicon prior to expiration of this Agreement, and (iii) which either (A) are conceived or created during the conduct of, or in connection with, First Pass Phenotypic Analysis or Advanced Phenotypic Analysis of a Project Gene, Pre-Clinical Development, Clinical Development, any activities conducted under a Commercialization Plan, or [**], or (B) [**] or (y) [**]; provided in each case that Restricted Rights Project Patents and Know-How shall not include (A) Lexicon Knock-Out Technology, (B) Lexicon Product Patents and Know-How, (C) Genentech Gene Patents and Know-How, (D) general Patents that cover inventions that could be used for products other than a Collaboration Product, including, without limitation, Patents covering manufacturing or process (including purification process) inventions, or (E) any Patent claims or Know-How arising from work performed not in relation to this Agreement. Notwithstanding the foregoing, Restricted Rights Project Patents and Know-How shall exclude Patents and Know-How specific to (i) [**], (ii) [**], and (iii) [**].

1.102 "Sales Returns and Allowances" means, with respect to a Collaboration Product, the sum of (a) and (b), where: (a) is a provision, [**] for sales of such Collaboration Product under GAAP as provided hereinabove for (i) cash and quantity discounts or rebates on such Collaboration 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 Collaboration 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 Collaboration Product, as adjusted for rebates and refunds, (iv) charges for freight and insurance directly related to the distribution of such Collaboration 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 Collaboration Product; and (b) is a periodic adjustment of the provision determined in (a) to reflect amounts actually incurred by Genentech or Lexicon, as the case may be, and their respective Affiliates and Genentech Product Licensees and Lexicon Product Licensees, as applicable, for items (i), (ii), (iii), (iv) and (v) in clause (a).

1.103 "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.

1.104 "Steering Committee" means the committee established and described in Section 2.1.

1.105 "Supplementary Advanced Phenotypic Panel" has the meaning set forth in Section 3.6(b).

1.106 "Third Person" means any person or entity other than Lexicon, Genentech or any Affiliate of Lexicon or Genentech.

1.107 "[**]" means the nucleotide sequence set forth in Exhibit H.

1.108 "[**] 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 produced by [**] or (ii) directly modulates either a Protein produced by [**] or a nucleic acid that encodes a Protein encoded by [**]; in each case excluding endogenous, naturally-occurring ligands of such Protein produced by [**].

1.109 "[**]" means the nucleotide sequence set forth in Exhibit I.

1.110 "[**] Product" means a pharmaceutical preparation, other than a Small Molecule Drug, that is ready for administration to the ultimate consumer and that: (i) [**] or (ii) [**].

1.111 "Valid Co-Funded Patent Claim" means a Valid Claim of [**].

1.112 "Valid Advanced Research Patent Claim" means a Valid Claim of: (i) [**]; (ii) [**]; or (iii) [**]. [**].

1.113 "Valid Claim" means a claim of an issued and unexpired Patent, which has not been revoked, held 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 which has not been admitted to be invalid or unenforceable through reissue or disclaimer or otherwise.

ARTICLE 2: GOVERNANCE OF COLLABORATION

2.1 Steering Committee.

(a) Creation of a Steering Committee. Within [**] days of the Effective Date, the Parties shall establish a Steering Committee to oversee and, as set forth herein, approve the Parties' activities under 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.

(b) 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, data and results related to any Advanced Phenotypic analysis (including any Advanced Phenotypic Panels) and Overexpression Analysis;

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

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

(iv) the selection of Project Genes for Advanced Phenotypic Analysis and the Advanced Phenotypic Panels to be conducted on such Project Genes under Section 3.6,

(v) the designation or selection, as applicable, of Genentech Advanced Research Protein Candidates and Lexicon Advanced Research Protein Candidates under Section 3.7;

(vi) overseeing and, as required, approving the actions of the Joint Project Team with respect to Pre-Clinical Development, Clinical Development and Co-Promotion;

(vii) coordinating the activities of the Parties hereunder;

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

(ix) settling disputes or disagreements that arise between the Parties hereunder and as set forth in Article 14: ; and

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

(c) 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.

(d) Steering Committee Meetings. Within [**] days 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.

(e) Dissolution of the Steering Committee. The Steering Committee will have no further responsibilities or authority under this Agreement, and will be considered dissolved by the Parties, on the later of (i) [**], or (ii) [**].

2.2 Joint Project Teams.

(a) Creation of Joint Project Teams. The Parties shall, as required under this Agreement, establish one or more "Joint Project Teams" to oversee certain specified activities of the Parties, and have those responsibilities, as set forth in this Agreement (including as set forth in Sections 4.4(b), 4.7 and Article 5:). In addition, the Parties may upon mutual agreement, or the Steering Committee may by [**] vote, from time-to-time establish one or more additional Joint Project Teams to oversee specific aspects of the Parties' activities under this Agreement as appropriate to implement the objectives of this Agreement. Any Joint Project Team shall consist of such number of representatives of each Party as are reasonably necessary to undertake and fulfill the responsibilities of the Joint Project Team as set forth in this Agreement; provided that each Party shall have the right to appoint at least [**] representatives to each Joint Project Team. The Joint Project Team is intended to be an operational committee and each Party's representatives shall include individuals with expertise and responsibilities in the areas of preclinical development, clinical development, process sciences, manufacturing, regulatory affairs, market research, product development, marketing, and/or sales, as applicable to the stage of development or commercialization of a Collaboration Product. One such representative from each Party shall be designated as that Party's "Project Team Leader." Such Project Team Leaders will act as the primary Joint Project Team contact for that Party. Either Party may replace any or all of its representatives at any time upon written notice to the other Party. Any member of the Joint Project Team may designate a substitute to attend and perform the functions of that member at any meeting of the Joint Project Team.

(b) Joint Project Team Decisions. With respect to decisions reserved for the Joint Project Team, the Joint Project Team will operate by [**]. In the event that the Joint Project Team members do not [**] with respect to a matter that is within the purview of the Joint Project Team herein, such matter shall be referred to the Steering Committee for resolution.

(c) Joint Project Team Meetings. With respect to each activity under this Agreement for which the Joint Project Team is tasked with oversight, the Joint Project Team shall hold an initial meeting as set forth herein. Such initial meeting shall be in-person and shall include the establishment of the Joint Project Team's operating procedures with respect to such activities. After the initial meeting, a Joint Project Team will meet at such times as are agreed to by the Joint Project Team 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 Joint Project Team meetings will alternate between South San Francisco, California and The Woodlands, Texas, or may take place at another agreed upon location. Each Party will bear the expense of its respective Joint Project Team members' participation in Joint Project Team meetings. Minutes will be kept of all Joint Project Team meetings. Responsibility for keeping minutes will alternate

between the Parties, beginning with Genentech. Meeting minutes will be sent to each member of the Joint Project Team for review as soon as practicable after a meeting.

(d) Disputes. Any dispute arising in the Joint Project Team that are unable to be resolved within [**] after the matter is first referred to the Joint Project Team shall be referred to the Steering Committee for resolution. In such event, the decision of the Steering Committee shall be deemed the decision of the Joint Project Team

(e) Dissolution of the Joint Project Team. Upon the expiration of [**] after all of the activities for which a Joint Project Team was established have been completed, the Joint Project Team will have no further responsibilities or authority under this Agreement and will be considered dissolved by the Parties.

2.3 Accounting and Financial Reporting. Each Party will appoint [**] with expertise in the areas of accounting, cost allocation, budgeting and financial reporting. Such representatives shall work under the direction of the Steering Committee, or as necessary the Joint Project Team, to provide services to and consult with the Steering Committee or Joint Project Team in order to address the financial, budgetary and accounting issues which arise in connection with the Pre-Clinical Development Budget, Clinical Development, Co-Promotion and the Financial Appendix. [**] may designate a substitute to perform such functions, or may be replaced at any time by the represented Party by providing notice thereof to the other Party.

ARTICLE 3: KNOCK-OUT MICE PROJECTS

3.1 Genentech Submission of Proposed Genes.

(a) Initial Submission of Proposed Genes. Genentech, within [**] days after the Effective Date, will provide the Steering Committee with a written list of up to five hundred (500) 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), 3.1(c) or 3.1(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) Lexicon is working (or under contractual obligation to begin work) for, or on behalf of, any other person or entity or for itself involving a mouse or human gene sequence, as the case may be, with [**] to any Proposed Gene, as determined at the protein level using [**]. If so, Lexicon shall additionally notify Genentech which Proposed Gene(s) are the subject of such patents or intellectual property rights or such work, as the case may be, and whether such work is under an exclusive or non-exclusive license or arrangement for any Proposed Gene. Any Proposed Gene for which Lexicon is working for a Third Person under an exclusive license or arrangement shall automatically be deemed a Rejected Proposed Gene; provided, however, that Genentech may propose [**], in which case

Lexicon will [**] and, if the Steering Committee elects to [**], the Parties will [**]. In the event Genentech does not [**], 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.

(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 pursuant to this Article 3: 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. To the extent that the total number of Project Genes is less than (i) 500 minus (ii) the number of Proposed Genes removed by Genentech under Section 3.1(d), Genentech shall have the right, during the period ending [**], to propose up to [**] additional Proposed Genes, until the aggregate number of Project Genes is (x) 500 minus (y) the number of Proposed Genes removed by Genentech under Section 3.1(d). Within [**] 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 Section 3.1(f) in respect of the Project Gene being removed. Any such removed Project Gene shall be considered a Rejected Proposed Gene for purposes of this Agreement.

(g) Status as of Second Restatement Date. As of the Second Restatement Date, the Parties have designated all Project Genes, and neither Party may reject, remove or replace any such Project Gene under this Section 3.1.

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 [**]. 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 Section 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) regarding [**], and (ii) for Projects other than Pipeline Projects, [**]. With regard to Pipeline Projects involving the use of an ES Cell Line generated through Lexicon's gene trapping technology in the creation of a Knock-Out Mouse, [**], Lexicon will [**]; provided that, [**]. For all Projects that are not Pipeline Projects, Lexicon will [**].

(d) Status as of Second Restatement Date. As of the Second Restatement Date, the Steering Committee has reviewed and approved all Projects pursuant to this Section 3.2.

3.3 Lexicon's Creation and Testing of Knock-Out Mice and ES Cell Lines. 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) if requested by the Steering Committee pursuant to Section 3.8, create Overexpression Mice for some or all Project Genes corresponding to Protein Candidates. Lexicon agrees to use Commercially Reasonable Efforts to perform and complete such activities on a Project [**] 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.

3.4 Review of First Pass Phenotypic Analysis. [**] 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.

3.5 Designation of Protein Candidates.

(a) Initial Designation of Protein Candidates. [**] shall have the right to designate the Proteins produced by up to an aggregate of [**] as "Protein Candidates;" provided that [**] shall make such designations no later than [**]. [**] shall have the rights and obligations set forth in Article 4: and Article 7: and otherwise in this Agreement with regard to such Protein Candidates.

(b) Rejected Project Genes. Any Project Gene the Protein product of which has not been designated as a Protein Candidate pursuant to this Section 3.5, shall be deemed a Rejected Project Gene for purposes of this Agreement, unless and until such Rejected Project Gene has been designated a Genentech Advanced Research Protein Candidate or a Lexicon Advanced Research Protein Candidate pursuant to Section 3.7. Genentech shall have the rights and obligations set forth in Article 6: and Article 7: with regard to such Rejected Project Genes.

(c) [**]. From time to time following the designation of Protein Candidates pursuant to Section 3.5(a), but no later than [**] following the earlier of (i) [**] or (ii) [**], Lexicon shall be permitted to [**], [**].

3.6 Selection of Project Genes for Advanced Phenotypic Analysis.

(a) Submission for Advanced Phenotypic Analysis. In addition to the completion of any Advanced Phenotypic Panels initiated on a Project Genes prior to the Second

Restatement Date in accordance with Section 3.6(c), the Steering Committee may elect to submit for Advanced Phenotypic Analysis any Project Gene other than an Excluded Gene. The timing pursuant to which the Steering Committee shall select the Advanced Phenotypic Panels to be conducted with respect to each Project Gene, other than an Excluded Gene, selected for Advanced Phenotypic Analysis shall be as follows: (i) no later than [**] following the Second Restatement Date, the Steering Committee may select up to [**] Advanced Phenotypic Panels to be conducted by Lexicon on such Project Genes; (ii) no later than [**] following receipt by Genentech of [**], provided that [**], the Steering Committee may select up to [**] Advanced Phenotypic Panels to be conducted by Lexicon on such Project Genes; and (iii) no later than [**] following receipt by Genentech of [**], the Steering Committee may select up to [**] Advanced Phenotypic Panels to be conducted by Lexicon on such Project Genes, or if the conditions set forth in (ii) above are not met [**] Advanced Phenotypic Panels. In conjunction with the Steering Committee's selection of Advanced Phenotypic Panels in accordance with above, the Steering Committee shall designate the priority in which such Advanced Phenotypic Analysis and Advanced Phenotypic Panels will be conducted. For the avoidance of doubt, [**].

(b) Additional Advanced Phenotypic Analysis. At any time prior to [**] following the Second Restatement Date, Genentech may, through the Steering Committee, select supplementary Advanced Phenotypic Panels, in addition to those selected under Section 3.6(a), to be conducted by Lexicon on a Project Gene (each a "Supplementary Advanced Phenotypic Panel"). Genentech shall fund each Supplementary Advanced Phenotypic Panel it selects in accordance with this Section 3.6(b) as set forth in Section 8.4.

(c) Additional Assays within Certain Advanced Phenotypic Panels. With respect to [**] Advanced Phenotypic Panels conducted prior to the Second Restatement Date for which Lexicon delivered data (pursuant to Section 3.7(a)(i)), the Steering Committee may elect, at any time prior to [**] following the Second Restatement Date, to proceed with additional assays within up to [**] of such Advanced Phenotypic Panels. Such additional assays, if any, will be [**].

(d) Activities Performed by Lexicon. Once the Steering Committee elects to proceed with Advanced Phenotypic Analysis on a Project Gene under Section 3.6(a) or 3.6(c), or Genentech selects a Supplementary Advanced Phenotypic Panel pursuant to Section 3.6(b), Lexicon will, [**], use Commercially Reasonable Efforts to complete such Advanced Phenotypic Analysis within [**] of the Steering Committee's election or, as applicable, Genentech selection. If any Advanced Phenotypic Analysis 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. [**].

3.7 Selection of Genentech Advanced Research Protein Candidates and Lexicon Advanced Research Protein Candidates.

(a) Delivery and Review of Advanced Phenotypic Analysis.

(i) Data Collected Prior to the Second Restatement Date. With respect to [**].

(ii) Data Collected Following the Second Restatement Date. Other than as set forth in Section 3.7(a)(i) above, Lexicon will submit to Genentech, through the Steering Committee, the data from all Advanced Phenotypic Analysis as Lexicon completes the Advanced Phenotypic Analysis on each such Project Gene. The Steering Committee will meet to review such data and designate and select "Genentech Advanced Research Protein Candidates" and "Lexicon Advanced Research Protein Candidates" in accordance with Sections 3.7(b) and 3.7(c).

(b) Initial Selection of Advanced Protein Candidates. The Steering Committee shall designate the Proteins produced by the Project Genes upon which Advanced Phenotypic Analysis requested pursuant to Section 3.6(a) was completed or for which Lexicon delivered data to Genentech pursuant to Section 3.7(a)(i) as either Genentech Advanced Research Protein Candidates, Lexicon Advanced Research Protein Candidates or Draft Candidates in accordance with the following rules and procedures:

(i) As of the Second Restatement Date, the Parties and Steering Committee acknowledge that, as of the Second Restatement Date, Lexicon has the right to develop and commercialize [**] Products and [**] Products, each in the Lexicon Field subject to the limitations set forth in Sections 4.2(b) and 4.5(a) and other relevant provisions, and that within such Lexicon Field the Proteins produced by [**] and [**] shall, as of the Second Restatement Date, each be designated a Lexicon Advanced Research Protein Candidate;

(ii) At each meeting, with respect to each Project Gene (other than [**] and [**]) for which [**] reasonably determines that the data from any First Pass Phenotypic Analysis, Advanced Phenotypic Analysis or any other scientifically relevant data or information regarding such Project Gene indicates a [**], the Protein produced by such Project Gene shall be designated a Genentech Advanced Research Protein Candidate; and

(iii) All other Project Genes upon which Advanced Phenotypic Analysis was completed shall be designated "Draft Candidates" and be subject to the selection process set forth in Section 3.7(c).

(c) Draft Selection. The Proteins produced by each Draft Candidate shall be designated either a Genentech Advanced Research Protein Candidate or a Lexicon Advanced Research Protein Candidate in accordance with the following: At a meeting of the Steering Committee, such meeting to be held [**] following the completion of [**], the Proteins produced by the remaining Draft Candidates not previously selected shall be designated as Genentech Advanced Research Protein Candidates or Lexicon Advanced Research Protein Candidates as follows and in the following order: (A) Genentech shall select the Proteins encoded by [**] of the Draft Candidates to be designated as Genentech Advanced Research Protein Candidates; (B) Lexicon shall select the Proteins encoded by [**] of the remaining Draft Candidates to be designated as Lexicon Advanced Research Protein Candidates; (C) Genentech shall select the Proteins encoded by [**] of the remaining Draft Candidates to be designated as Genentech

Advanced Research Protein Candidates; (D) Lexicon shall select the Proteins encoded by [**] of the remaining Draft Candidates to be designated as Lexicon Advanced Research Protein Candidates; and (E) the Proteins encoded by all remaining Draft Candidates shall be designated as Genentech Advanced Research Protein Candidates.

3.8 Creation of Overexpression Mice; Overexpression Analysis. With respect to any Project Gene, the Steering Committee may elect to have Lexicon produce an Overexpression Mouse which overexpresses the Project Gene for further testing, by voting to make such election no later than [**] following the Second Restatement Date. Lexicon agrees, [**], to promptly use Commercially Reasonable Efforts to create such Overexpression Mouse, and to promptly perform phenotypic tests, observations, or analyses selected from the assays set forth on Exhibit K ("Overexpression Analysis") for up to [**]. Alternately, Genentech may elect to perform Overexpression Analysis on any Overexpression Mouse itself. Once Lexicon or Genentech, as the case may be, has completed such Overexpression Analysis on a Project, it will submit to the Steering Committee for the Steering Committee's review of the Project the data from such Overexpression Analysis. The Party performing such Overexpression Analysis shall use Commercially Reasonable Efforts to complete such Overexpression Analysis no later than [**] after the creation of such Overexpression Mouse, subject to unanimous decision by the Steering Committee for any subsequent extension of time, but in any event will submit to the Steering Committee all available data related to such Overexpression Analysis, whether complete or not, within such time period.

3.9 Reports; Consultation and Site Visits. Within [**] after the end of each Calendar Quarter, Lexicon will provide each Steering Committee member with a written report describing the status of its work on each Project, and, on a monthly basis, Lexicon will provide a Genentech Steering Committee member with the same monthly 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 10: 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.

3.10 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 10:.

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 10:.

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

ARTICLE 4: DEVELOPMENT OF COLLABORATION PRODUCTS

4.1 Development of Protein Candidate Products and Genentech Advanced Research Products.

(a) Exclusive Right to Develop and Commercialize. Genentech shall have the sole right and responsibility for, and control over, developing and commercializing Protein Candidate Products and Genentech Advanced Research Products; provided, however, that with regard to Restricted Rights Projects, nothing in this Section 4.1(a) 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.

(b) Transfer to Genentech of Lexicon Pre-Existing Know-How, Restricted Rights Project Know-How and Project Know-How. Within [**] days after designation of a Protein Candidate pursuant to Section 3.5 or a Genentech Advanced Research Protein Candidate pursuant to Section 3.7, 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 Project Know-How in Lexicon's possession or control related to such Protein Candidate or Genentech Advanced Research Protein Candidate.

(c) Development Costs. Genentech shall bear all costs and expenses associated with, and shall have sole control over, developing and commercializing Protein Candidate Products and Genentech Advanced Research Products.

4.2 Development and Commercialization of [**] Products and [**] Products.

(a) Genentech [**] Products and [**] Products. Genentech shall have the sole right and responsibility for, and control over, and shall bear all costs and expenses associated with, developing and commercializing [**] Products and [**] Products in the Genentech Retained Fields. Within [**] after the Second Restatement Date, Lexicon will provide Genentech, to the extent not previously provided, with a copy of all Lexicon Pre-Existing Know-How, and if applicable Project Know-How and Restricted Rights Know-How, in Lexicon's possession or control related to Proteins produced by [**] and [**] and [**] Products and [**] Products.

(b) Lexicon [**] Products and [**] Products. Subject to Sections 4.5(a) and 4.5(b), Lexicon shall have the sole right and responsibility for, and control over, and shall bear all costs and expenses associated with, developing and commercializing [**] Products and [**] Products in the Lexicon Fields; provided, however, that nothing in this Section 4.2(b) will be deemed to grant Lexicon rights beyond the scope of the licenses granted to Lexicon (or limit the rights of Genentech, its collaborators or licensees) in Section 6.3. Within [**] after the Second Restatement Date, Genentech will, subject to any Third Person obligations of Genentech, provide Lexicon, to the extent not previously provided, with a copy of all Project Know-How in Genentech's possession and control related to Proteins produced by [**] and [**] and [**] Products and [**] Products.

4.3 Development and Commercialization of Lexicon Advanced Research Products. Subject to Sections 4.5, 4.6, 4.7, 4.8 and 4.15, and with respect to [**] Products and [**] Products subject to the additional limitations set forth in Sections 4.2(b), Lexicon shall have sole right and responsibility for, and control over, and shall bear all costs and expenses associated with, developing and commercializing Lexicon Advanced Research Products. Within [**] following selection by Lexicon of a Lexicon Advanced Research Protein Candidate pursuant to Section 3.7, Genentech will, subject to any Third Person obligations of Genentech, provide Lexicon, to the extent not previously provided, with a copy of all Project Know-How in Genentech's possession and control related to such Lexicon Advanced Research Protein Candidate and relevant to Lexicon's further development of Lexicon Advanced Research Products corresponding to such Lexicon Advanced Research Protein Candidates.

4.4 Option for Pre-Clinical Development by Lexicon of a Genentech Advanced Research Product.

(a) Pre-Clinical Development Option. Genentech shall have the option ("Pre-Clinical Development Option") to select up to [**] Genentech Advanced Research Protein Candidates for which Pre-Clinical Development of a Genentech Advanced Research Product will be conducted by Lexicon. In order to exercise the Pre-Clinical Development Option, Genentech must provide Lexicon with written notice thereof, which such notice shall identify the Genentech Advanced Research Protein Candidate selected for Pre-Clinical Development by Lexicon.

(b) Responsibilities of the Joint Project Team. Within [**] following receipt by Lexicon of Genentech's written notice under Section 4.4(a), the Joint Project Team, established in accordance with Section 2.2, shall meet to initiate its oversight of Pre-Clinical

Development and Lexicon's implementation thereof. As part of its responsibilities for oversight of any Pre-Clinical Development, the Joint Project Team shall prepare and agree to a Pre-Clinical Development Plan and Pre-Clinical Development Budget governing any Pre-Clinical Development to be undertaken. The Joint Project Team shall present the Pre-Clinical Development Plan and Pre-Clinical Development Budget to the Steering Committee for review and approval. The Pre-Clinical Development Plan and Pre-Clinical Development Budget shall require [**] approval of the Steering Committee.

(c) Conduct of Pre-Clinical Development.

(i) Performance of Pre-clinical Development Activities. Pre-Clinical Development shall be conducted by Lexicon, subject to oversight by the Joint Project Team, in accordance with the Pre-Clinical Development Plan and the terms and conditions of this Agreement. Lexicon shall use Commercially Reasonable Efforts to complete all activities under the Pre-Clinical Development Plan within the timeframes established therein. All activities under the Pre-Clinical Development Plan shall be conducted at facilities provided or procured by Lexicon that are in compliance with Good Laboratory Practices and shall use such personnel, methods and resources as shall be approved by the Joint Project Team, and all in accordance with the Pre-Clinical Development Plan and the terms and conditions of this Agreement. All Pre-Clinical Development activities conducted by Lexicon shall be conducted in a professional and competent manner, in compliance with GLP, all Applicable Laws and in accordance with the terms and conditions of this Agreement.

(ii) Records. Lexicon shall maintain complete and accurate records, in good scientific manner and in appropriate detail for [**], and the Pre-Clinical Development Plan. Genentech shall have the right, during normal business hours and upon reasonable notice, to [**]. Lexicon shall maintain such records and the information contained therein in confidence in accordance with Article 10: . All such records shall be owned by and be the property of Genentech. In addition, Lexicon shall maintain complete and accurate records of all costs associated with any Pre-Clinical Development activities.

(iii) Reports. [**], and as otherwise specified in the Pre-Clinical Development Plan, Lexicon shall prepare and provide to the Joint Project Team a written summary describing, in reasonable detail, the status of Pre-Clinical Development, including all Know-How conceived or reduced to practice in the course of any Pre-Clinical Development activities.

(iv) Hazards. Lexicon [**] shall report to Genentech, and no later than [**] following Lexicon's own notification or receipt of knowledge thereof, of any findings associated with the use of any Genentech Advanced Research Protein Candidate or associated Genentech Advanced Research Product that may suggest significant hazards, significant contraindications,

significant side effects or significant precautions pertinent to the safety of such Genentech Advanced Research Protein Candidate or Genentech Advanced Research Product.

(v) Access. Representatives of Genentech, including Joint Project Team members, may, upon reasonable notice during normal business hours, (a) visit any facilities where Pre-Clinical Development activities are being conducted, and (b) consult informally, during such visits and by telephone, concerning Pre-Clinical Development.

(d) Pre-Clinical Development Costs. Genentech shall be responsible for [**] approved by the Steering Committee and set forth in the approved Pre-Clinical Development Budget.

(i) Invoicing. Within [**], Lexicon shall submit to Genentech a written invoice detailing the Pre-Clinical Development Costs [**] for the performance of Pre-Clinical Development as detailed in the Pre-Clinical Development Plan and the approved Pre-Clinical Development Budget. In the event that [**].

(ii) Payment. Within [**] of receipt of an invoice issued pursuant to Section 4.4(d)(i) [**], Genentech shall pay to Lexicon the invoiced amount. Notwithstanding the foregoing, Genentech shall not be obligated to assume any financial obligations that are not expressly set forth and duly authorized by the Steering Committee in the approved Pre-Clinical Development Budget, unless Lexicon has obtained prior written authorization from Genentech for such costs.

4.5 Diligent Development of Lexicon Advanced Research Protein Candidates.

(a) Development Progress of [**] and [**]. In addition to the obligations set forth in Section 4.5(b), in the respective event that Lexicon has [**] with a [**] Product and/or [**] [**], then, as applicable [**].

(b) Development Progress of Lexicon Advanced Research Products. Lexicon shall use Commercially Reasonable Efforts to develop and commercialize at least one Lexicon Advanced Research Product for each Lexicon Advanced Research Protein Candidate. In the event that, with respect to a particular Lexicon Advanced Research Protein Candidate, Lexicon has [**].

(c) Diligent Development of Lexicon Licensed Products. In addition to Sections 4.5(a) and 4.5(b), prior to the expiration of the period in which Genentech may exercise an IND Opt-In or Phase II Opt-In, Lexicon shall use Commercially Reasonable Efforts to develop at least one Lexicon Licensed Product for each Lexicon Advanced Research Protein Candidate corresponding thereto. In the event that Lexicon fails to exercise Commercially Reasonable Efforts with respect to the development of a particular Lexicon Licensed Product in accordance with this Section 4.5(c), [**].

4.6 Genentech Opt-In Rights.

(a) Pre-IND Opt-In.

(i) Pre-Clinical Information and IND Package. Lexicon shall, through the Steering Committee, [**]. In addition, prior to submission to the FDA of an IND with respect to the first Lexicon Advanced Research Product corresponding to a particular Lexicon Advanced Research Protein Candidate, Lexicon shall provide to Genentech a complete copy of the IND Package for such Lexicon Advanced Research Product, along with [**].

(ii) IND Opt-In Period. At any time prior to the expiration of the IND Opt-In Period, Genentech shall have the option ("IND Opt-In") to assume the sole right and responsibility for, and control over, developing and commercializing such Lexicon Advanced Research Product [**], subject to the financial obligations set forth in Article 8: . In order to exercise the IND Opt-In, Genentech must provide Lexicon with written notice thereof prior to the expiration of the IND Opt-In Period.

(b) Phase II Opt-In. Within [**] following the later of: (i) completion of the first Phase II Clinical Trial with respect to the first Lexicon Advanced Research Product corresponding to a particular Lexicon Advanced Research Protein Candidate [**], and (ii) completion of [**]; Lexicon shall provide a complete copy of the corresponding Phase II Data Package to Genentech, along with [**]. Within [**] following Genentech's receipt of the Phase II Data Package and any other information required above, Genentech shall have the option ("Phase II Opt-In") to assume the sole right and responsibility for, and control over developing and commercializing such Lexicon Advanced Research Product [**], subject to Lexicon's right to Co-Promote such Lexicon Advanced Research Product as set forth in Article 5: and the financial terms set forth in Article 8: . In order to exercise the Phase II Opt-In, Genentech must provide Lexicon with written notice thereof within [**] following Genentech's receipt of the Phase II Data Package.

(c) Reimbursement of Incurred Research Costs and Development Costs. Genentech shall reimburse Lexicon for incurred Research Costs and Development Costs as set forth in Section 8.9.

4.7 Development of Genentech IND Opted Products and Genentech Phase II Opted Products.

(a) Oversight by Joint Project Team.

(i) Initial Meeting. Within [**] of Genentech's exercise of an IND Opt-In or Phase II Opt-In, the Joint Project Team shall meet to discuss the further development of the Genentech IND Opted Product or Genentech Phase II Opted Product for which Genentech has exercised its opt-in, the transition of control over such development to Genentech, and Lexicon's role in such development.

(ii) Purpose and Responsibilities. The purpose of the Joint Project Team is to facilitate the exchange of information and the coordination between the Parties relating to the development of the Genentech IND Opted Product or Genentech Phase II Opted Product for which Genentech has exercised its opt-in, and to serve as a forum for each Party to keep the other Party updated with regard to such development, including with respect to (i) the commencement and progress of clinical trials, the results of any clinical trials, and the strategy for obtaining Regulatory Approval, and (ii) a comparison of the development efforts to date as measured against the Clinical Development Plan.

(b) Clinical Development Plan.

(i) Initial Clinical Development Plan; Modifications. Within [**] of the Joint Project Team's initial meeting pursuant to Section 4.7(a)(i), Genentech will create an initial Clinical Development Plan which will address the further development of the Genentech IND Opted Product or Genentech Phase II Opted Product subsequent to Genentech's exercise of its IND Opt-In or Phase II Opt-In. Genentech will update the Clinical Development Plan as needed to address any changes in the plans for development and Regulatory Approval.

(ii) Lexicon Review and Comment. Although Genentech shall be responsible for the creation of the Clinical Development Plan, Genentech, through the Joint Project Team, shall provide Lexicon [**]. Genentech shall promptly inform Lexicon between meetings of the Joint Project Team of significant changes to the Clinical Development Plan and material events adverse to the development of a Genentech IND Opted Product or Genentech Phase II Opted Product.

(c) Development Responsibilities.

(i) Generally. The Parties intend and agree that the development, filing for any Regulatory Approval, and commercialization (subject to Lexicon's right to Co-Promote as set forth in Article 5:) of Genentech IND Opted Products and Genentech Phase II Opted Products shall be controlled by Genentech. Without limiting the generality of the foregoing, Genentech shall be responsible for making and have authority to make all decisions, and undertake any actions necessary as a result of such decisions, regarding development (including additional preclinical and clinical development and testing), selecting drug candidates and preparing and filing NDAs, BLAs and any other applications for Regulatory Approval. Notwithstanding the foregoing, Genentech shall provide Lexicon [**].

(ii) Lexicon Development Activities. Without limiting the generality of Section 4.7(c)(i), the Parties, through the Joint Project Team, may agree that certain activities related to the development and seeking of Regulatory

Approval of Genentech IND Opted Products and Genentech Phase II Opted Products be performed by Lexicon, provided, however, that no such activities shall be allocated to Lexicon without the prior consent of Lexicon. Lexicon shall perform all activities allocated to Lexicon hereunder with commercially reasonable efforts and in compliance with all Applicable Laws.

(iii) Cooperation. Each Party shall cooperate with and provide reasonable support to the other Party in its conduct of any activities in the development and seeking of Regulatory Approval of Genentech IND Opted Products and Genentech Phase II Opted Products, including any activities set forth in the Clinical Development Plan. To the extent that both Lexicon and Genentech are participating in the development of a Genentech IND Opted Product or Genentech Phase II Opted Product, the parties shall enter into an agreement governing the Parties' compliance with Applicable Laws, including any requirements for the reporting of adverse events (as provided in Title 21 of the Code of Federal Regulations).

(iv) Transfer of Information and Regulatory Filings. Lexicon agrees to transfer to Genentech all Lexicon Pre-Existing Know-How, Project Know-How, Restricted Rights Know-How and Lexicon Product Know-How, including any preclinical data, clinical data, assays and associated materials, protocols, procedures and any other information in Lexicon's possession or control, necessary or useful to continue or initiate pre-clinical or clinical development, or in seeking Regulatory Approval, of Genentech IND Opted Products and Genentech Phase II Opted Products. Without limiting the generality of the foregoing, upon Genentech's request Lexicon shall assign to Genentech (i) all applications and filings made with the FDA with respect to a Genentech IND Opted Product or Genentech Phase II Opted Product, including any IND and orphan drug designations, (ii) all agreements related to the conduct of any clinical trial with respect to a Genentech IND Opted Product or Genentech Phase II Opted Product, and (iii) all agreements related to the manufacture, supply or distribution of clinical supplies of a Genentech IND Opted Product or Genentech Phase II Opted Product.

4.8 Diligent Development of Genentech IND Opted Products and Phase II Opted Products. Following exercise of an IND Opt-In or Phase II Opt-In, as applicable, and provided that Lexicon has not exercised a Lexicon Opt-Out with respect thereto, Genentech shall use Commercially Reasonable Efforts to further develop and commercialize at least one Genentech IND Opted Product or Genentech Phase II Opted Product, as applicable, for each Lexicon Advanced Research Protein Candidate corresponding thereto.

4.9 Lexicon Opt-Out Rights.

(a) Lexicon Opt-Out. In the event that Genentech exercised either its IND Opt-In or Phase II Opt-In with respect to those Lexicon Advanced Research Products corresponding to a particular Lexicon Advanced Research Protein Candidate and a Genentech Opt-Out has not been exercised with respect thereto, Lexicon shall have the option ("Lexicon Opt-Out") to decline to participate in the future development and commercialization and the sharing of costs and profits relating to all such Lexicon Advanced Research Products in accordance with either of the following:

(i) At any time, by providing Genentech with at [**] prior written notice thereof. A Lexicon Opt-Out exercised in accordance with this Section 4.9(a)(i) shall become effective [**] following Genentech's receipt of Lexicon's written notice, or at Genentech's option an earlier date selected by Genentech.

(ii) Upon [**], Lexicon shall have the option to exercise a Lexicon Opt-Out by notifying Genentech in writing before [**]. A Lexicon Opt-Out exercised in accordance with this Section 4.9(a)(ii) shall become effective [**] of the Calendar Year following the Calendar Year of exercise of the Lexicon Opt-Out, or at Genentech's option an earlier date selected by Genentech.

(iii) [**], Lexicon shall have the option to exercise a Lexicon Opt-Out by notifying Genentech in writing within [**] of the delivery of [**]. If Lexicon does not elect to exercise such option within such [**] period, it will forego its right to such Lexicon Opt-Out for the remainder of that Calendar Year. A Lexicon Opt-Out exercised in accordance with this Section 4.9(a)(iii) shall become effective [**] following Genentech's receipt of Lexicon's written notice hereunder, or at Genentech's option an earlier date selected by Genentech.

(b) Effect of Lexicon Opt-Out. Prior to the effective date of a Lexicon Opt-Out, Lexicon shall remain responsible for, and if applicable entitled to, its share of Research Costs, Development Costs and Operating Profits (Losses) as set forth in Section 8.14. Following the effective date of the Lexicon Opt-Out with respect to the applicable Genentech IND Opted Products or Genentech Phase II Opted Products, Lexicon shall be entitled to receive [**].

(c) Transition. If Lexicon exercises a Lexicon Opt-Out and is responsible for conducting activities under an applicable Development Plan, the Parties will agree to a transition plan to transition such activities to Genentech. Lexicon shall exercise Commercially Reasonable Efforts in undertaking any activities under a transition plan and shall be obligated to undertake such activities for no less than [**] after the applicable Lexicon Opt-Out is effective, unless [**]. The transition plan shall include a plan for the reimbursement of the direct costs of Lexicon's activities under a Development Plan and in accordance with a transition plan and actually incurred by Lexicon following the effective date of an applicable Lexicon Opt-Out.

4.10 Genentech Opt-Out.

(a) Genentech Phase II Opted Product.

(i) In the event [**], Genentech shall be considered to have opted-out with respect to the further development and commercialization of that particular Genentech Phase II Opted Product and the sharing of costs and profits relating to such Genentech Phase II Opted Product ("Genentech Opt-Out"). A Genentech Opt-Out shall become effective [**] following [**]. Prior to the effective date of the Genentech Opt-Out, Genentech shall remain responsible for, and if applicable entitled to, its share of Operating Profits (Losses) as set forth in Section 8.14. Following the effective date of the Genentech Opt-Out with respect to the applicable Genentech Phase II Opted Product, Genentech shall be entitled to receive [**].

(ii) [**], Genentech agrees to transfer to Lexicon all Lexicon Pre-Existing Know-How, Project Know-How, and Restricted Rights Know-How, including any preclinical data, clinical data, assays and associated materials, protocols, procedures and any other information in Genentech's possession or control, necessary or useful to continue or initiate pre-clinical or clinical development, or in seeking Regulatory Approval, of such Genentech Phase II Opted Product. Without limiting the generality of the foregoing, upon Lexicon's request Genentech shall assign to Lexicon (i) all applications and filings made with the FDA with respect to such Genentech Phase II Opted Product, including any IND and orphan drug designations, (ii) all agreements related to the conduct of any clinical trial with respect to such Genentech Phase II Opted Product, and (iii) all agreements related to the manufacture, supply or distribution of clinical supplies of such Genentech Phase II Opted Product.

(b) Genentech IND Opted Product.

(i) [**].

(ii) [**].

(iii) [**].

4.11 Regulatory Filings. Genentech shall own all regulatory submissions, including all applications for Regulatory Approval, for Genentech Licensed Products. Subject to Lexicon's obligation to assign to Genentech pursuant to Section 4.7(c)(iv), Lexicon shall own all regulatory submissions, including all applications for Regulatory Approval, for Lexicon Licensed Products. Lexicon shall assist Genentech and any Genentech Licensee in the preparation and filing for any Regulatory Approval with respect to Genentech Licensed Products, including by delivering all information in Lexicon's possession (in a complete and accurate form) necessary or useful to complete and file any Regulatory Approval for a Genentech Licensed Product. If Lexicon is responsible for preparation of a portion of and filings for Regulatory Approval, or participates

substantively in its preparation, then Lexicon shall have the right, at its expense, to have observer status with regard to the parts of meetings and primary communications with the FDA in which such portions are discussed.

4.12 Regulatory Meetings and Materials.

(a) Genentech Observation Right. Genentech shall have the right to have one or more of its representatives observe Lexicon's substantive discussions and meetings with FDA and other government and regulatory authorities with respect to a Lexicon Licensed Product during the period commencing upon the Effective Date and ending upon the expiration of the period in which Genentech may exercise its IND Opt-In or Phase II Opt-In. Lexicon shall have the right to initiate meetings with Regulatory Authorities independently of Genentech during such period, provided that Genentech shall have the right to observe in such discussions and meetings as set forth above.

(b) Lexicon Observation Right. Lexicon shall have the right to have one or more of its representatives observe Genentech's substantive discussions and meetings with FDA and other government and regulatory authorities with respect to a Genentech IND Opted Product or Genentech Phase II Opted Product during the period commencing upon Genentech's exercise of its IND Opt-In or Phase II Opt-In, as applicable, and ending upon the date on which Lexicon exercises its Lexicon Opt-Out with respect to such Genentech IND Opted Product or Genentech Phase II Opted Product, if applicable. Genentech shall have the right to initiate meetings with Regulatory Authorities independently of Lexicon during such period, provided that Lexicon shall have the right to observe in such discussions and meetings as set forth above.

4.13 Regulatory Documents.

(a) Copies to Genentech. During the period commencing upon the Effective Date and ending upon the expiration of the period in which Genentech may exercise its IND Opt-In or Phase II Opt-In, Lexicon shall provide Genentech with a copy of any material documents or reports to be filed with the FDA or any other government or regulatory authority in connection with development work related to a Lexicon Licensed Product, and shall consider in good faith Genentech's comments. To the extent Lexicon receives any material written or oral communication from the FDA or any other government or regulatory authority relating to a Lexicon Licensed Product during the period commencing upon the Effective Date and ending upon the expiration of the period in which Genentech may exercise its IND Opt-In or Phase II Opt-In, Lexicon shall, as soon as reasonably practicable, notify Genentech and provide Genentech with a copy of any written communication received by Lexicon or, if applicable, complete and accurate minutes of such oral communication. All such documents, reports and communications with respect to Lexicon Licensed Products provided pursuant to this Section 4.13(a) shall be considered Lexicon Confidential Information.

(b) Copies to Lexicon. During the period commencing upon Genentech's exercise of its IND Opt-In or Phase II Opt-In, as applicable, and ending upon the date on which Lexicon exercises its Lexicon Opt-Out with respect to a Genentech IND Opted Product or Genentech Phase II Opted Product, if applicable, Genentech shall provide Lexicon with a copy of any material documents or reports to be filed with the FDA or any other government or

regulatory authority in connection with development work related to such Genentech IND Opted Product or Genentech Phase II Opted Product, and shall consider in good faith Lexicon's comments. To the extent Genentech receives any material written or oral communication from the FDA or any other government or regulatory authority relating to a Genentech IND Opted Product or Genentech Phase II Opted Product during the period commencing upon Genentech's exercise of its IND Opt-In or Phase II Opt-In, as applicable, and ending upon the date on which Lexicon exercises its Lexicon Opt-Out with respect to a Genentech IND Opted Product or Genentech Phase II Opted Product, if applicable, Genentech shall, as soon as reasonably practicable, notify Lexicon and provide Lexicon with a copy of any written communication received by Genentech or, if applicable, complete and accurate minutes of such oral communication. All such documents, reports and communications with respect to Genentech IND Opted Products or Genentech Phase II Opted Products provided pursuant to this Section 4.13(b) shall be considered Genentech Confidential Information

4.14 Genentech Product Licensees. Genentech agrees to notify Lexicon [**] of any (sub)license that it enters into with a Genentech Product Licensee, and Genentech further covenants that any such (sub)license shall contain terms and conditions consistent with Genentech's obligations and Lexicon's rights under this Agreement.

4.15 Lexicon Product Licensees.

(a) Lexicon Product Licensees. Subject to the limitations set forth in this Section 4.15, Lexicon agrees to notify Genentech [**] of any (sub)license that it enters into with a Lexicon Product Licensee, and Lexicon further covenants that any such (sub)license shall contain terms and conditions consistent with Lexicon's obligations and Genentech's rights under this Agreement.

(b) Prior to Opt-In Expiration. Prior to expiration of the period of time in which Genentech has the right to exercise its IND Opt-In or Phase II Opt-In under Section 4.6, Lexicon shall not enter into any agreement with a Third Person relating to any Lexicon Advanced Research Protein Candidate or any Lexicon Advanced Research Product without the prior written consent of Genentech (such consent not to be unreasonably withheld).

(c) [**].

(i) [**].

(ii) [**].

ARTICLE 5: CO-PROMOTION OF GENENTECH PHASE II OPTED PRODUCTS

5.1 Lexicon Co-Promote Election. Lexicon shall have the right to elect to Co-Promote in the Co-Promote Territory (as defined below) all Genentech Phase II Opted Products corresponding to a particular Protein, except those Genentech Phase II Opted Products that are [**] Products or [**] Products, for which Lexicon has not exercised its Lexicon Opt-Out under Section 4.8, which right shall be exercisable no later than [**] following the filing with the FDA of the first application for Regulatory Approval with respect to the first such Genentech Phase II Opted Product. In order to exercise such right to Co-Promote, Lexicon must provide Genentech

with written notice thereof no later than [**] following the filing with the FDA of the first application for Regulatory Approval with respect to the first such Genentech Phase II Opted Product. Such written notice shall include [**]; which election shall become the "Co-Promote Territory." For those Genentech Phase II Opted Products which Lexicon elects to Co-Promote in accordance with the foregoing, the provisions of this Article 5: shall govern such Co-Promotion.

5.2 Commercialization Plan. Within [**] after submission of an application for Regulatory Approval for a Genentech Phase II Opted Product (except those Genentech Phase II Opted Products that are [**] Products or [**] Products), Genentech shall submit to the Joint Project Team a detailed annual plan and budget (the "Commercialization Plan") for the commercialization of such Genentech Phase II Opted Product in the Co-Promote Territory. [**]. Following review and comment of the initial Commercialization Plan by the Joint Project Team, the Commercialization Plan shall be presented to the Steering Committee for review and approval. Thereafter, [**] shall update the Commercialization Plan on a yearly basis on or before the anniversary date of the applicable Regulatory Approval and present the budget for such updated Commercialization Plan to the Steering Committee for review and approval. [**].

5.3 Co-Promotion Responsibilities. [**]. Subject to the term and conditions of this Article 5: and [**], Lexicon shall have the right to deploy, in the Co-Promote Territory, a Co-Promotion sales force comprising a reasonable number of sales representatives consistent with the percentage with which Operating Profits (or Losses) are shared between Lexicon and Genentech, or as otherwise [**] determined by the Steering Committee. [**] shall allocate markets and accounts within the Co-Promote Territory to Lexicon's Co-Promotion sales force in a reasonable manner in view of (i) the objective of maximizing Operating Profits (Losses) and efficiency, and (ii) how Co-Promotion efforts by Lexicon will benefit the collaboration by resulting in incremental profits.

5.4 Commercialization Efforts. Each Party, to the extent that such Party is participating in the Co-Promotion of Genentech Phase II Opted Products, shall use Commercially Reasonable Efforts in marketing Genentech Phase II Opted Products in accordance with the Commercialization Plan developed by Genentech.

(a) Sales and Distribution. Unless otherwise agreed in writing, Genentech shall have the sole responsibility for the following with respect to Genentech Phase II Opted Products:

(i) Booking sales for and distributing Genentech Phase II Opted Products. If Lexicon receives any orders for Genentech Phase II Opted Products, it shall refer such orders to Genentech.

(ii) Handling all returns of Genentech Phase II Opted Products. If any Genentech Phase II Opted Product is returned to Lexicon, it shall promptly be shipped to the facility responsible for shipment of such Genentech Phase II Opted Product in the country in question to the attention of the "returned goods department" or another location as may be designated by Genentech.

(iii) Handling all recalls of Genentech Phase II Opted Products. Lexicon will make available to Genentech, upon request, all of its pertinent records which Genentech may reasonably request to assist Genentech in effecting any recall.

(iv) Handling all aspects of order processing, invoicing and collection, distribution, warehousing, inventory and receivables, and collection of data of sales to hospitals and other end users (e.g., DDD data).

(v) Handling all other customer service related functions, including providing customer medical information.

(b) Marketing and Promotional Materials. All marketing and promotional materials related to Genentech Licensed Products shall be prepared by Genentech. Genentech shall be entitled to select any Third Persons involved in the preparation of such materials.

(c) Training Program. Genentech shall develop training programs relating to Genentech Phase II Opted Products for the sales forces of each respective Party and for any Third Persons engaged in selling or promotion, and shall reasonably assign responsibility to itself, Lexicon or a Third Person for the preparation of materials and conduct of training. The Parties agree to utilize such training programs on an ongoing basis to assure a consistent, focused promotional strategy. The initial training shall be carried out at a time which is mutually acceptable to the Parties, and which is prior to but reasonably near the date on which the first Regulatory Approval is expected. As additional members are added to the Parties' respective sales forces, training will be given to groups of the newly selected members.

(d) Co-Promotion Compliance Responsibilities. Each Party Co-Promoting a Genentech Phase II Opted Product in the Co-Promote Territory shall in all material respects conform its practices and procedures relating to such Co-Promotion to the Federal Food Drug and Cosmetic Act ("FFD&C Act"), the Public Health Service ("PHS Act"), the Pharmaceutical Research and Manufacturers of America ("PhRMA") Code of Pharmaceutical Marketing Practices (the "PhRMA Code") and the American Medical Association ("AMA") Guidelines on Gifts to Physicians from Industry (the "AMA Guidelines"), as the same may be amended from time to time, and the rules and regulations promulgated under any of the foregoing, and promptly notify the other Parties of and provide the other Parties with a copy of any material correspondence or other reports with respect to the Co-Promotion of a Licensed Product submitted to or received from the FDA, PhRMA or the AMA relating to the FFD&C Act, the PHS Act, the PhRMA Code, or the AMA Guidelines.

5.5 Commercialization Costs. Except as otherwise provided herein, all costs related to the commercialization of a Genentech Phase II Opted Product for which Lexicon has not exercised its Lexicon Opt-Out under Section 4.8 shall be shared by the Parties as set forth in Section 8.14.

5.6 Trademarks.

(a) Selection, Prosecution and Maintenance. All Genentech Phase II Opted Products shall be sold under trademarks and trade dress selected and owned by Genentech

worldwide (collectively, "Genentech Trademarks"). Genentech shall control the preparation, prosecution and maintenance of applications related to any and all Genentech Trademarks.

(b) Enforcement and Defense. Each Party shall notify the other Party promptly upon learning of any actual, alleged or threatened infringement of a Genentech Trademark in the Co-Promote Territory, or of any unfair trade practices, trade dress imitation, passing off of counterfeit goods, or like offenses. Upon learning of such offenses, the Parties shall confer regarding the defense of the Genentech Trademark. [**].

(c) Costs. All of the costs, expenses and legal fees associated with preparing filing, prosecuting, registering and maintaining a Genentech Trademark, as well as any action to maintain, protect or defend a Genentech Trademark, and any recovery, shall be shared by the Parties as set forth in Section 8.14 and the Financial Appendix.

5.7 Party Name on Licensed Packaging and Labeling. With respect to each Genentech Phase II Opted Product marketed in the Co-Promote Territory and then currently Co-Promoted by Lexicon, to the extent such Genentech Phase II Opted Product's packaging or labeling identifies or otherwise references any of the Parties, both Genentech and Lexicon shall be presented and described with equal prominence and emphasis as having joined and participated in the development and Co-Promotion thereof, as permitted by the Applicable Laws.

5.8 Termination of Co-Promotion.

(a) Breach of Agreement. [**].

(b) Lexicon Opt-Out. Lexicon's rights to Co-Promote a Genentech Phase II Opted Product shall terminate upon Lexicon's exercise of its Lexicon Opt-Out with respect to such Genentech Phase II Opted Product, and such termination shall become effective as set forth in Section 4.8. Upon termination of Lexicon's right to Co-Promote a Genentech Phase II Opted Product pursuant to this Section 5.7(b), the licenses granted in Section 6.4 shall immediately terminate.

(c) [**]. [**].

(d) Transitional Assistance. Upon any termination of Lexicon's Co-Promotion rights in accordance with this Section 5.8, Lexicon covenants and agrees to cooperate, and cause its employees and agents to cooperate, with Genentech to enable Genentech to transition any Co-Promotion activities performed by Lexicon to Genentech in a timely and orderly manner.

ARTICLE 6: GRANT OF LICENSE RIGHTS

6.1 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 Genentech 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 Genentech 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 Genentech Product Licensee shall relieve Genentech of primary responsibility for all payments and royalties due to Lexicon under Article 8: with respect to Genentech Licensed Product(s) licensed to such Genentech Product Licensee.

6.2 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 Genentech 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 Genentech Licensed Products and Lexicon 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 6.2, 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.

6.3 License to Lexicon for the Research, Development and Commercialization of Lexicon Licensed Products. Subject to the terms of this Agreement, Genentech hereby grants to Lexicon an exclusive (even as to Genentech), world-wide right and license under the (i) Genentech Gene Patents and Know-How and (ii) Project Patents and Know-How, in each case to research, develop, make (or have made), use, sell, offer for sale, and import Lexicon Licensed Products in the Field, except that such license shall be limited to the Lexicon Field with respect to Lexicon Licensed Products which are [**] Products or [**] Products. Subject to Section 4.15 such license includes the right to grant sublicenses of all or part of such rights without Genentech'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 Lexicon Product Licensee shall relieve Lexicon of primary responsibility for all payments and royalties due to

Genentech under Article 8: with respect to Lexicon Licensed Product(s) licensed to such Lexicon Product Licensee.

6.4 License to Genentech Under the Lexicon Product Patents and Know-How for the Research, Development and Commercialization of Genentech Licensed Products. Subject to the terms of this Agreement, Lexicon hereby grants to Genentech an exclusive (even as to Lexicon, but subject to any sub-license granted to Lexicon under Sections 6.5 and 6.6), world-wide right and license under the Lexicon Product Patents and Know-How to research, develop, make (or have made), use, sell, offer for sale, and import Genentech 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 Genentech Product Licensee shall relieve Genentech of primary responsibility for all payments and royalties due to Lexicon under Article 8: with respect to Genentech Licensed Product(s) licensed to such Genentech Product Licensee.

6.5 Licenses for the Co-Promotion of Genentech Phase II Opted Products.

(a) Gene Patents and Know-How and Project Patents and Know-How. Subject to the terms of this Agreement, Genentech hereby grants to Lexicon a non-exclusive, non-transferable, non-sublicenseable, right and license under the (i) Genentech Gene Patents and Know-How, (ii) Lexicon Pre-Existing Patents, (iii) Restricted Rights Project Patents, (iv) Project Patents and Know-How and (v) Lexicon Product Patents and Know-How (to the extent licensed to Genentech pursuant to Section 6.4), in each case solely to the extent necessary to offer for sale in the Co-Promote Territory Genentech Phase II Opted Products in the Field in accordance with the Commercialization Plan and Article 5: , and in accordance with the requirements of all applicable Regulatory Approvals.

(b) Genentech Trademarks. Subject to the terms of this Agreement, Genentech hereby grants to Lexicon a non-exclusive, non-transferable, non-sublicenseable, right and license to use the Genentech Trademarks solely in connection with Lexicon's offering for sale in the Co-Promote Territory Genentech Phase II Opted Products in the Field in accordance with the requirements of the applicable Regulatory Approval, and to such limited extent as set forth in the Commercialization Plan and Article 5: . All Genentech Trademarks are and shall remain the sole and exclusive property of Genentech and all use thereof and goodwill associated therewith shall inure to the benefit of Genentech.

(i) Maintenance and Quality Control. Lexicon shall not prepare, disseminate or otherwise make available any printed materials or any other sales, marketing or promotional materials containing or referencing any Genentech Trademark or Genentech Phase II Opted Product without the prior written approval of Genentech. In the event that Genentech reasonably determines that Lexicon is not complying with the terms and conditions of this Agreement with respect to the usage of Genentech Trademarks, or is otherwise improperly using a Genentech Trademark, Genentech shall notify Lexicon in writing, and Lexicon shall promptly correct such improper usage.

(ii) Termination of License. Genentech may terminate the license granted in Section 6.4(b) immediately upon the written notice by Genentech to Lexicon if Genentech, in its reasonable business judgment, determines that there is any conflict with a Third Person, or liability, that has arisen or could arise, from Lexicon's use of a Genentech Trademark. The license granted in Section 6.4(b) shall automatically and immediately terminate if (i) Lexicon is prohibited by law or regulation from using a Genentech Trademark, (ii) Lexicon fails to correct its use of a Genentech Trademark in accordance with Section 6.4(b)(i), or (iii) Lexicon's right to Co-Promote Genentech Phase II Opted Products is terminated in accordance with Section 5.7. Upon the occurrence of any of the foregoing events, Lexicon shall immediately cease all use of the Genentech Trademarks.

6.6 Licenses for Lexicon Development of Genentech Licensed Products.

(a) Pre-Clinical Development. Subject to the terms of this Agreement, Genentech hereby grants to Lexicon a non-exclusive, non-transferable, non-sublicenseable, right and license under the (i) Genentech Gene Patents and Know-How, (ii) Project Patents and Know-How, (iii) Lexicon Pre-Existing Patents and Know-How and (iv) Restricted Rights Project Patents and Know-How, in each case, as applicable, to research, develop and use Genentech Advanced Research Products in the Field solely to the extent necessary for Lexicon to conduct those activities specified in an approved Pre-Clinical Development Plan.

(b) Clinical Development. Subject to the terms of this Agreement, Genentech hereby grants to Lexicon a non-exclusive, non-transferable, non-sublicenseable, right and license under the (i) Genentech Gene Patents and Know-How, (ii) Project Patents and Know-How, (iii) Lexicon Pre-Existing Patents and Know-How, (iv) Restricted Rights Project Patents and Know-How and (v) Lexicon Product Patents and Know-How (to the extent licensed to Genentech pursuant to Section 6.4), in each case, as applicable, to research, develop and use Genentech IND Opted Products and Genentech Phase II Opted Products in the Field solely to the extent necessary to conduct those activities that Lexicon is authorized to conduct under an approved Clinical Development Plan.

6.7 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 those Project Patents and Know-How created or acquired solely by Lexicon or jointly by Lexicon and Genentech 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 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 6.7, subject to the restrictions, if any, on Project Materials set forth in Section 6.9.

6.8 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 6.9, 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 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 6.14, 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.

6.9 Exclusivity Period for Project Materials. Notwithstanding the provisions of Sections 6.2, 6.3 and 6.8:

(a) Lexicon shall not [**] unless [**] (and then only to the extent permitted under Section 6.9(b) below); and

(b) Lexicon shall not provide Project Materials from a Project to any Third Person before the expiration of (i) [**] following the submission to the Steering Committee of the data from the First Pass Phenotypic Analysis for such Project Gene in accordance with Section 3.4, for Project Genes that become Rejected Project Genes, and (ii) [**] following the submission to the Steering Committee of the data from the First Pass Phenotypic Analysis for such Project Gene in accordance with Section 3.4, for Project Genes that become Protein Candidates; provided that no such restriction shall apply to Project Materials generated in the course of Projects that qualify as Pre-Existing Projects unless Genentech shall have exercised the option specified below; provided, further, that the restriction set forth in clause (ii) shall nevertheless apply to a Pre-Existing Project in the event that, at the time such Project Gene becomes a Protein Candidate, Lexicon has no obligation to a Third Person with respect to such Pre-Existing Project or the Project Materials generated in the course thereof. In addition to the foregoing, for Pre-Existing Projects with respect to which Lexicon has no obligation to a Third Person, at any time prior to designation of such Pre-Existing Project as a Protein Candidate, Genentech shall have the option to obtain the foregoing exclusivity period by delivering notice of such exercise to Lexicon, together with payment of the option fee specified in Section 8.4; provided that such option is exercised at a time when Lexicon has no obligation to a Third Person with respect to such Pre-Existing Project. Such option fee shall be credited against next performance or milestone payment payable by Genentech in the event the Project Gene to which such Pre-Existing Project relates shall be designated as a Protein Candidate. Nothing herein shall be deemed to restrict, at any time (except as provided in Section 6.10 below), Lexicon's right to develop for a Third Person a transgenic or Knock-Out mouse with a mutation in a Project

Gene independently requested by such Third Person or provide such Third Person with phenotypic data derived therefrom; provided that, [**].

6.10 Exclusivity Period for Specified Projects. At any time after the initial designation of Project Genes under Section 3.1(e), Genentech may designate as [**], by delivering written notice of such designations to Lexicon. Except as may be independently requested under agreements with Lexicon in effect on [**], Lexicon shall not [**] prior to the submission to the Steering Committee of the data from the First Pass Phenotypic Analysis for such Project Gene in accordance with Section 3.4.

6.11 Reservation of Rights. Notwithstanding the non-exclusive rights and licenses granted to Genentech under Sections 6.2 and 6.8, but subject to the exclusive rights and licenses granted to Genentech under Sections 6.1 and 6.2 and the restrictions, if any, on Project Materials set forth in Section 6.9 and [**] set forth in Section 6.10:

(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.

6.12 Limited License to Genentech Gene Patents and 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 3.8, such Knock-Out Mice;

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

(v) conduct a Advanced Phenotypic Analysis on such Project Gene under Section 3.6; and

(vi) create Overexpression Mice and do additional testing under Section 3.6.

Except as may be otherwise explicitly set forth in this Agreement, 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, Genentech Advanced Research Protein Candidate, Genentech Licensed Product, or the completion of Lexicon's activities under this Section 6.12.

6.13 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.

6.14 Transfers to Collaborators or Contract Service Providers. Genentech shall have the right to transfer a Knock-Out Mouse or Progeny made pursuant to this Agreement to Collaborators or Contract Service Providers, provided that such Collaborators or Contract Service Providers shall have entered into an agreement with Genentech containing terms that expressly (i) prohibit the use of such Knock-Out Mice or Progeny thereof for any purpose other than such Collaborator's collaborative research or development 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 Collaborator or Contract Service Provider to any other Third Person. Within [**] of transferring a Knock-Out Mouse or Progeny pursuant to this Section 6.14, , Genentech shall provide Lexicon with notice thereof (which such notice and the information contained therein shall be deemed Genentech Confidential Information).

6.15 License to Lexicon Isogenic Technology. On the Effective Date, Lexicon and Genentech shall enter into the Sublicense Agreement attached hereto as Exhibit B.

6.16 License to Genentech Excluded IP. At any time following [**] Lexicon Licensed Product, Lexicon may, by giving written notice to Genentech, request a license under the Genentech Excluded IP to make, use, sell, offer for sale and import such Lexicon Licensed Product. Following receipt of such written notice, Genentech and Lexicon shall [**] definitive license agreement in accordance with the foregoing, and such agreement shall include provisions for (i) the grant by Genentech to Lexicon of a non-exclusive license under the Genentech Excluded IP; (ii) the payment by Lexicon to Genentech under such agreement, which payments shall [**], of (A) [**], (B) [**], (C) [**], (D) [**], and (E) [**]; and (iii) additional provisions to be negotiated in good faith by the Parties, provided that the [**] for a license under [**] set forth in this Section 6.16.

ARTICLE 7: REQUEST FOR AND DELIVERY OF KNOCK-OUT MICE

7.1 Requests for Project Materials by Genentech.

(a) Knock-Out Mice. During the period of [**] following the selection or designation of [**], Genentech shall have the option, subject to the terms and conditions of this

Agreement, to have Lexicon deliver to Genentech [**] of the Knock-Out Mice for a Project Gene, by delivering written notice of such request to Lexicon.

(b) Genentech Project Materials and Project Know-How. During the period beginning on [**] and ending on the later of (i) [**], (ii)[**], (iii) [**], and (iv) [**], 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.

(c) [**] Knock-Out Mice. Genentech may also have, during such period, Lexicon [**] and deliver to Genentech [**] of the Knock-Out Mice for such Project Gene, subject to the payment of the fee specified in Section 8.7. Lexicon shall have no further obligation to deliver Project Materials to Genentech following such period; provided that, following such period, Genentech may have Lexicon deliver to Genentech [**] to the Knock-Out Mice for such Project Gene, to the extent any such materials remain available, subject to the payment of the fee specified in Section 8.8.

7.2 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 7.1, Lexicon shall retain a back-up colony of such Knock-Out Mice sufficient to replace any mice shipped to Genentech under this Article 7: (i.e., at least [**]) which die or are otherwise unable to breed during or within [**] after shipment to Genentech hereunder. Thereafter, until the expiration of [**] following the submission to the Steering Committee of the data from the last Advanced Phenotypic Analysis to be submitted to the Steering Committee in accordance with Section 3.7, Lexicon shall retain [**], if requested by Genentech. In the event Genentech requests that Lexicon maintain any such colony for a period of more than [**] after the delivery of a particular Knock-Out Mouse requested by Genentech under Section 7.1, 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.

7.3 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 at least [**], promptly following its receipt of written notice that Genentech is prepared to accept shipment. [**]. 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 7.1, Genentech shall pay Lexicon a storage and maintenance charge of [**] for such requested line of Knock-Out Mice [**] thereafter until Lexicon receives such notice.

ARTICLE 8: PAYMENTS

8.1 Up-Front Fees. As partial consideration for the work to be performed by Lexicon under this Agreement, Genentech shall pay Lexicon the following fees:

(i) Nine Million Dollars (U.S.$9,000,000), which fee shall be payable within ten (10) days of the Effective Date; and

(ii) [**], which fee shall be payable within ten (10) days of the Second Restatement Date.

Lexicon acknowledges that, as of the Second Restatement Date, the fee set forth in Section 8.1(i) has been timely paid by Genentech.

8.2 Performance Payments. Within [**] of achieving each of the research milestones listed below, Genentech shall pay to Lexicon the following amounts:

[**]

Lexicon acknowledges that, as of the Second Restatement Date, the fees set forth in Sections 8.2[**] have been timely paid by Genentech.

8.3 Advanced Research Funding. As partial consideration for the Advanced Phenotypic Analysis performed by Lexicon under this Agreement, Genentech shall pay Lexicon [**], payable in three (3) installments as follows: (i) [**] due within thirty (30) days following the Second Restatement Date, (ii) [**] due within thirty (30) days following the first anniversary of the Second Restatement Date, and (iii) [**] due within thirty (30) days following the second anniversary of the Second Restatement Date.

8.4 Supplementary Advanced Phenotypic Panel Funding. To the extent Genentech selects any Supplementary Advanced Phenotypic Panels, Genentech shall pay Lexicon funding of [**] for each Supplementary Advanced Phenotypic Panel so selected, which funding shall be payable [**].

8.5 Option Fee. In the event Genentech exercises its option under Section 6.10 with respect to a Pre-Existing Project, Genentech shall pay Lexicon an option fee of [**] concurrently with its delivery of its notice exercising such option.

8.6 Overexpression Funding. To the extent the Steering Committee elects to have Lexicon produce an Overexpression Mouse for more than [**] Project Genes, Genentech shall pay Lexicon funding of [**] for each additional Project Gene for which the Steering Committee elects to have Lexicon produce an Overexpression Mouse, which funding shall be payable within [**] of such election.

8.7 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 3.4, or with respect to a Project Gene selected for Advanced Phenotypic Analysis in accordance with Section 3.6 more than [**]

following the submission to the Steering Committee of the data from the Advanced Phenotypic Analysis in accordance with Section 3.7, that Lexicon [**], Genentech shall pay Lexicon a fee of [**] concurrently with its delivery of such request.

8.8 Fee for Delivery of [**]. 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, (ii) [**] following the date of submission to the Steering Committee of the data from the First Pass Phenotypic Analysis for a Project Gene, (iii) with respect to a Project Gene selected for Advanced Phenotypic Analysis in accordance with Section 3.6 submission to the Steering Committee of the data from the last Advanced Phenotypic Analysis to be submitted under this Agreement, and (iv) with respect to a Project Gene selected for Advanced Phenotypic Analysis in accordance with Section 3.6 [**] following the submission to the Steering Committee of the data from the Advanced Phenotypic Analysis for such Project Gene, that [**], Genentech shall pay Lexicon a fee of [**] within [**] of Lexicon's notice that [**].

8.9 Reimbursement of Incurred Research Costs and Development Costs Upon Opt-In.

(a) IND Opt-In. Within [**] of Genentech's exercise of its IND Opt-In with respect to a particular Lexicon Advanced Research Product, Lexicon may provide Genentech with a written request for reimbursement of [**] of the Research Costs and Development Costs incurred by Lexicon from the date on which the Lexicon Advanced Research Protein Candidate corresponding to such Lexicon Advanced Research Product was so designated pursuant to Section 3.7 through the date upon which Genentech exercised its IND Opt-In for such Lexicon Advanced Research Product.

(b) Phase II Opt-In for [**] Products and [**] Products. Within [**] of Genentech's exercise of its Phase II Opt-In with respect to a particular Lexicon Advanced Research Product which is either a [**] Product or a [**] Product, Lexicon may provide Genentech with a written request for reimbursement of [**] of the Research Costs and Development Costs incurred by Lexicon from the date on which the Lexicon Advanced Research Protein Candidate corresponding to such Lexicon Advanced Research Product was so designated pursuant to Section 3.7 through the date upon which Genentech exercised its Phase II Opt-In for such Lexicon Advanced Research Product.

(c) Phase II Opt-In. Within [**] of Genentech's exercise of its Phase II Opt-In with respect to a particular Lexicon Advanced Research Product which is not a [**] Product or a [**] Product, Lexicon may provide Genentech with a written request for reimbursement of [**] of the Research Costs and Development Costs incurred by Lexicon from the date on which the Lexicon Advanced Research Protein Candidate corresponding to such Lexicon Advanced Research Product was so designated pursuant to Section 3.7 through the date upon which Genentech exercised its Phase II Opt-In for such Lexicon Advanced Research Product.

(d) Supporting Documentation and Payment. Any request by Lexicon under Section 8.9(a), 8.9(b), or 8.9(c) shall be accompanied by documentation supporting any incurred Research Costs and Development Costs. Within [**] following Genentech's receipt of such request and accompanying documentation, Genentech shall pay Lexicon any amounts owed.

8.10 Genentech Payments on Protein Candidate Products.

(a) Milestones. With respect to the first Protein Candidate 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:

(i) [**] upon filing of the first IND for such Protein Candidate Product;

(ii) [**] upon commencement (i.e., first patient enrolled) of the first Phase III Clinical Trial for such Protein Candidate Product; and

(iii) [**] upon receipt of the first Regulatory Approval of such Protein Candidate Product.

TOTAL: $17,000,000

Genentech shall give Lexicon written notice of the achievement of any milestone event no later than [**] after such achievement.

(b) Royalties. As consideration for its exclusive rights with respect to Protein Candidate 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 Protein Candidate 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 Protein Candidate Product in such country; provided that, in the event the worldwide Net Sales of such Protein Candidate 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 Protein Candidate Product that exceeds [**] in such Calendar Year.

8.11 Genentech Payments on [**] Products and [**] Products in the Genentech Retained Fields.

(a) Milestones. With respect to the first [**] Product and the first [**] Product to achieve the following development milestones listed below, within [**] days of achieving each such development milestones, Genentech shall pay Lexicon the following amounts:

(i) [**] upon filing of the first IND by Genentech for such [**] Product and [**] Product for an indication in the Genentech Retained Field;

(ii) [**] upon commencement (i.e., first patient enrolled) of the first Phase III Clinical Trial by Genentech for an indication in the Genentech Retained Field; and

(iii) [**] upon receipt of the first Regulatory Approval of such [**] Product and [**] Product by Genentech for an indication in the Genentech Retained Field.

Genentech shall give Lexicon written notice of the achievement of any milestone event no later than [**] after such achievement.

(b) Royalties. As consideration for its exclusive rights with respect to [**] Products and [**] Products in the Genentech Retained Fields and the other rights provided and activities performed by Lexicon hereunder, Genentech agrees to pay Lexicon a royalty of [**] of Net Sales by Genentech, its Affiliates and Genentech Product Licensees of each [**] Product and [**] Product the making, using, selling, offering for sale, or import of which, in each case for use in the Genentech Retained Field, would (but for ownership of, or a license under, the relevant Patent) infringe a Valid Advanced Research Patent Claim, on a country-by-country basis, commencing with the first sale for use or consumption by the general public of such [**] Product or, as applicable, [**] Product in the Genentech Retained Field in a country after Regulatory Approval in such country.

8.12 Genentech Payments on Advanced Research Products.

(a) Milestones. With respect to the first Genentech Advanced Research Product relating to a specified Genentech Advanced Research Protein Candidate to achieve the following development milestones listed below, within [**] of achieving each such development milestones, Genentech shall pay Lexicon the following amounts:

(i) [**] upon filing of the first IND for such Genentech Advanced Research Product;

(ii) [**] upon commencement (i.e., first patient enrolled) of the first Phase III Clinical Trial for such Genentech Advanced Research Product; and

(iii) [**] upon receipt of the first Regulatory Approval of such Genentech Advanced Research Product.

Genentech shall give Lexicon written notice of the achievement of any milestone event no later than [**] days after such achievement.

(b) Royalties. As consideration for its exclusive rights with respect to Genentech Advanced Research Products and the other rights provided and activities performed by Lexicon hereunder, Genentech agrees to pay Lexicon a royalty of [**] of Net Sales by Genentech, its Affiliates and Genentech Product Licensees of each Genentech Advanced Research Product, except those Genentech Advanced Research Products for which Lexicon has satisfactorily completed Pre-Clinical Development, the making, using, selling, offering for sale, or import of which, in each case for use in the Field, would (but for ownership of, or a license under, the relevant Patent) infringe a Valid Advanced Research Patent Claim, on a country-by-country basis, commencing with the first sale for use or consumption by the general public of a Genentech Advanced Research Product in a country after Regulatory Approval in such country.

(c) Royalties for Lexicon Completed Pre-Clinical Development. As consideration for its exclusive rights with respect to Genentech Advanced Research Products and the other rights provided and activities performed by Lexicon hereunder, Genentech agrees to pay Lexicon a royalty of [**] of Net Sales by Genentech, its Affiliates and Genentech Product Licensees of each Genentech Advanced Research Product for which Lexicon has satisfactorily completed Pre-Clinical Development the making, using, selling, offering for sale, or import of which, in each case for use in the Field, would (but for ownership of, or a license under, the relevant Patent) infringe a Valid Advanced Research Patent Claim, on a country-by-country basis, commencing with the first sale for use or consumption by the general public of a Genentech Advanced Research Product in a country after Regulatory Approval in such country.

8.13 Genentech Milestone Payments for Genentech IND Opted Products and Genentech Phase II Opted Products.

(a) IND Opt-In. With respect to the first Genentech IND Opted Product relating to a specified Lexicon Advanced Research Protein Candidate for which Lexicon has not exercised its Lexicon Opt-Out under Section 4.7 to achieve the following development milestones listed below, within [**] of achieving each such development milestones, Genentech shall pay Lexicon the following amounts:

(i) [**] upon filing of the first IND for such Genentech IND Opted Product;

(ii) [**] upon commencement (i.e., first patient enrolled) of the first Phase III Clinical Trial for such Genentech IND Opted Product; and

(iii) [**] upon receipt of the first Regulatory Approval of such Genentech IND Opted Product.

Genentech shall give Lexicon written notice of the achievement of any milestone event no later than [**] after such achievement.

(b) Phase II Opt-In. With respect to the first Genentech Phase II Opted Product relating to a specified Lexicon Advanced Research Protein Candidate for which Lexicon has not exercised its Lexicon Opt-Out under Section 4.7, and for which a Genentech Opt-Out has not been exercised in accordance with Section 4.10, to achieve the following development milestones listed below, within [**] of achieving each such development milestones, Genentech shall pay Lexicon the following amounts:

(i) [**] upon commencement (i.e., first patient enrolled) of the first Phase III Clinical Trial for such Genentech Phase II Opted Product; and

(ii) [**] upon receipt of the first Regulatory Approval of such Genentech Phase II Opted Product.

Genentech shall give Lexicon written notice of the achievement of any milestone event no later than [**] after such achievement.

(c) Lexicon Opt-Out. With respect to the first Genentech IND Opted Product or Genentech Phase II Opted Product relating to a specified Lexicon Advanced Research Protein Candidate for which Lexicon has exercised its Lexicon Opt-Out under Section 4.7, and for which a Genentech Opt-Out has not been exercised in accordance with Section 4.10, to achieve the following development milestones listed below, within [**] of achieving each such development milestones, Genentech shall pay Lexicon the following amount:

(i) If a Genentech IND Opted Product, [**] upon receipt of the first Regulatory Approval of such Genentech IND Opted Product; or

(ii) If a Genentech Phase II Opted Product, [**] upon receipt of the first Regulatory Approval of such Genentech Phase II Opted Product.

Genentech shall give Lexicon written notice of the achievement of any milestone event no later than [**] after such achievement.

8.14 Share of Operating Profits (Losses) for Genentech IND Opted Products and Genentech Phase II Opted Products.

(a) Generally. For all Genentech IND Opted Products and Genentech Phase II Opted Products for which Lexicon has not exercised its Lexicon Opt-Out under Section 4.7, and for which a Genentech Opt-Out has not been exercised in accordance with Section 4.10, in lieu of royalty payments, Genentech and Lexicon will share Operating Profits (Losses) as follows and as further detailed in the Financial Appendix.

(i) IND Opted Products. For Genentech IND Opted Products, Genentech will be allocated [**], and Lexicon will be allocated [**], of the Operating Profits (Losses) for each Genentech IND Opted Product.

(ii) Phase II Opted Products Other Than [**] and [**] Products . For Genentech Phase II Opted Products other than [**] Products and [**] Products, Genentech will be allocated [**], and Lexicon will be allocated [**], of the Operating Profits (Losses) for each Genentech Phase II Opted Product.

(iii) [**] and [**] Phase II Opted Products. For Genentech Phase II Opted Products that are [**] Products or [**] Products, Genentech will be allocated [**], and Lexicon will be allocated [**], of the Operating Profits (Losses) for each Genentech Phase II Opted Product.

(b) Financial Appendix. Terms describing calculations and reporting of Operating Profits (Losses) are set forth in the Financial Appendix. The Financial Appendix is applicable to revenues and expenses by a Party in the United States. For revenues and expenses by a Genentech Product Licensee, the definitions may need to be modified to comply with changes to GAAP or to comply with ex-U.S. financial accounting standards. Any such modification, however, will be consistent with the ratios set forth in Section 8.14(a) and with the material concepts in the Financial Appendix.

8.15 Genentech Royalties on Genentech Licensed Products on which Lexicon Opts-Out. As consideration for its rights with respect to Genentech Licensed Products for which Lexicon has exercised its Lexicon Opt-Out pursuant to Section 4.7, and for which a Genentech Opt-Out has not been exercised in accordance with Section 4.10, and the other rights provided and activities performed by Lexicon hereunder, Genentech agrees to pay Lexicon one of the following:

(i) if Lexicon exercised its Lexicon Opt-Out prior to enrollment of the first patient in a Phase II Clinical Trial for such Genentech Licensed Product, a royalty of [**] of Net Sales by Genentech, its Affiliates and Genentech Product Licensees of each such Genentech Licensed Product the making, using, selling, offering for sale, or import of which, in each case for use in the Field, would (but for ownership of, or a license under, the relevant Patent) infringe a Valid Advanced Research Patent Claim or Valid Co-Funded Patent Claim, on a country-by-country basis, commencing with the first sale for use or consumption by the general public of such Genentech Licensed Product in a country after Regulatory Approval in such country.

(ii) if Lexicon exercised its Lexicon Opt-Out after enrollment of the first patient in a Phase II Clinical Trial and before Regulatory Approval of such Genentech Licensed Product, a royalty of [**] of Net Sales by Genentech, its Affiliates and Genentech Product Licensees of each such Genentech Licensed Product the making, using, selling, offering for sale, or import of which, in each case for use in the Field, would (but for ownership of, or a license under, the relevant Patent) infringe a Valid Advanced Research Patent Claim or Valid Co-Funded Patent Claim, on a country-by-country basis, commencing with the first sale for use or consumption by the general public of such Genentech Licensed Product in a country after Regulatory Approval in such country.

(iii) if Lexicon exercised its Lexicon Opt-Out after Regulatory Approval of such Genentech Licensed Product, a royalty of [**] of Net Sales by Genentech, its Affiliates and Genentech Product Licensees of each such Genentech Licensed Product the making, using, selling, offering for sale, or import of which, in each case for use in the Field, would (but for ownership of, or a license under, the relevant Patent) infringe a Valid Advanced Research Patent Claim or Valid Co-Funded Patent Claim, on a country-by-country basis, commencing with the first sale for use or consumption by the general public of such Genentech Licensed Product in a country after Regulatory Approval in such country.

8.16 Lexicon Payments on Lexicon Licensed Products Other Than Genentech Opt-Out Products.

(a) Milestones. With respect to the first Lexicon Licensed Product relating to a specified Lexicon Advanced Research Protein Candidate, other than those Lexicon Licensed

Products that are Genentech Opt-Out Products, to achieve the following development milestones listed below, within [**] of achieving each such development milestones, Lexicon shall pay Genentech the following amounts:

(i) [**] upon receipt of the first Regulatory Approval of such Lexicon Advanced Research Product; and

(ii) [**] upon the first anniversary of the first Regulatory Approval of such Lexicon Advanced Research Product;

Lexicon shall give Genentech written notice of the achievement of any milestone event no later than [**] after such achievement.

(b) Royalties. As consideration for its rights with respect to Lexicon Licensed Products and the other rights provided hereunder, Lexicon agrees to pay Genentech a royalty of [**] of Net Sales by Lexicon, its Affiliates and Lexicon Product Licensees of each Lexicon Licensed Product, other than those Lexicon Licensed Products that are Genentech Opt-Out Products, the making, using, selling, offering for sale, or import of which, in each case for use in the Field, would (but for ownership of, or a license under, the relevant Patent) infringe a Valid Claim of a Project Patent, Genentech Gene Patent, Lexicon Pre-Existing Patent or Restricted Rights Project Patent, on a country-by-country basis, commencing with the first sale for use or consumption by the general public of a Lexicon Licensed Product in a country after Regulatory Approval in such country.

8.17 Lexicon Payments on Genentech Opt-Out Products.

(a) Milestones. With respect to the first Genentech Phase II Opted Product relating to a specified Lexicon Advanced Research Protein Candidate for which a Genentech Opt-Out has been exercised in accordance with Section 4.10 to achieve the following milestones listed below, within [**] of achieving each such milestones, Lexicon shall pay Genentech the following amounts:

(i) if the Genentech Opt-Out was exercised prior to filing with the FDA of an application for Regulatory Approval of such Genentech Phase II Opted Product, [**] upon receipt of the first Regulatory Approval of such Genentech Phase II Opted Product; and

(ii) if the Genentech Opt-Out was exercised after the to filing with the FDA of an application for Regulatory Approval of such Genentech Phase II Opted Product, [**] upon receipt of the first Regulatory Approval of such Genentech Phase II Opted Product;

Lexicon shall give Genentech written notice of the achievement of any milestone event no later than [**] after such achievement.

(b) Royalties. As consideration for its rights with respect to Genentech Phase II Opted Products for which a Genentech Opt-Out has been exercised in accordance with Section

4.10, and the other rights provided and activities performed by Genentech hereunder, Lexicon agrees to pay Genentech one of the following:

(i) if the Genentech Opt-Out was exercised prior to filing with the FDA of an application for Regulatory Approval of such Genentech Phase II Opted Product, a royalty of [**] of Net Sales by Lexicon, its Affiliates and Lexicon Product Licensees of each such Genentech Phase II Opted Product, the making, using, selling, offering for sale, or import of which, in each case for use in the Field, would (but for ownership of, or a license under, the relevant Patent) infringe a Valid Claim of a Genentech Gene Patent, Lexicon Pre-Existing Patent, Lexicon Product Patent, Project Patent, or Restricted Rights Project Patent, except for a Valid Claim of any of the foregoing which claims an invention that was conceived by or on behalf of Lexicon following the effective date of the Genentech Opt-Out with respect to such Genentech Phase II Opted Product, on a country-by-country basis, commencing with the first sale for use or consumption by the general public of such Genentech Phase II Opted Product in a country after Regulatory Approval in such country.

(ii) if the Genentech Opt-Out was exercised after the to filing with the FDA of an application for Regulatory Approval of such Genentech Phase II Opted Product, a royalty of [**] of Net Sales by Lexicon, its Affiliates and Lexicon Product Licensees of each such Genentech Phase II Opted Product, the making, using, selling, offering for sale, or import of which, in each case for use in the Field, would (but for ownership of, or a license under, the relevant Patent) infringe a Valid Claim of a Genentech Gene Patent, Lexicon Pre-Existing Patent, Lexicon Product Patent, Project Patent, or Restricted Rights Project Patent, except for a Valid Claim of any of the foregoing which claims an invention that was conceived by or on behalf of Lexicon following the effective date of the Genentech Opt-Out with respect to such Genentech Phase II Opted Product, on a country-by-country basis, commencing with the first sale for use or consumption by the general public of such Genentech Phase II Opted Product in a country after Regulatory Approval in such country.

8.18 Single Milestone and Royalty Payment.

(a) Milestones. With respect to each set of milestone payments to be made hereunder, only one set shall ever be due and payable per a particular Protein or Project Gene, regardless of the number of Genentech Licensed Products or Lexicon Licensed Products developed with respect to its such Protein or Project Gene, or the number of indications pursued or approved or whether a Genentech Licensed Product or Lexicon Licensed Product is discontinued after a milestone payment has been made. All milestone payments payable hereunder are non-refundable and non-creditable against any other payments hereunder.

(b) Royalties. Any royalty payable hereunder shall be payable only once with respect to the same unit of Genentech Licensed Product or Lexicon Licensed Product. In the

event that more than one category of royalty payment applies to a single Genentech Licensed Product or Lexicon Licensed Product, the highest applicable royalty rate shall apply.

8.19 Payment of Royalties; Royalty Reporting. Within [**] after the end of each [**], Genentech and/or Lexicon, as applicable, will pay (and/or cause its Affiliates and/or Genentech Product Licensees or Lexicon 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 Collaboration 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 Collaboration Products in any country during the reporting period, if applicable; and (v) the exchange rates used in determining the amount of Dollars payable hereunder. If no royalty or payment is due for any royalty period hereunder, the Party shall so report. Each Party shall keep, and shall require its Affiliates and Genentech Product Licensees or Lexicon Product Licensees, as applicable, 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.

8.20 U.S. Currency; Wire Transfers. All payments, including any interest pursuant to Section 8.23, payable by a Party, its Affiliates and Product Licensees to the other Party under this Agreement will be paid in Dollars and will be made by wire transfer, in immediately available funds, to an account designated by the receiving Party in writing.

8.21 Exchange Rates. For the purpose of computing Net Sales, Operating Profits (Losses), Research Costs and Development Costs in a currency other than Dollars, such currency shall be converted into Dollars in accordance with the standard exchange rate conversion practices used by Genentech or Lexicon, their respective Affiliates, Genentech Product Licensee or Lexicon Product Licensees, as applicable, for financial accounting purposes using the conversion rate for the relevant period as reported by Reuters Ltd on the last business day of the relevant period.

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

8.23 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 Interest Rate. Payment of accrued interest will accompany payment of the outstanding payment.

8.24 Records; Audit Rights. Each Party will keep, and maintain for a period of [**] following the end of a Calendar Year, accurate records in sufficient detail to enable royalties, Operating Profits (Losses), Research Costs, and Development Costs under this Agreement for such Calendar Year to be determined. In addition, Lexicon shall retain such records for such longer period of time as necessary to support an audit by Genentech of Research Costs and Development Costs reimbursable by Genentech upon exercise of an IND Opt-In or Phase II Opt-In pursuant to Section 4.6. A Party shall have the right, upon at least [**] prior written notice to the other Party, not more than once in any Calendar Year, through an independent certified public accountant acceptable to the other Party (which acceptance shall not be unreasonably refused) to have access during normal business hours to those records of the other Party as may be reasonably necessary to verify the accuracy of the royalty reports furnished by such other Party under this Agreement for the previous Calendar Years subject to audit hereunder, or for the verification of royalties, Operating Profits (Losses), Research Costs and Development Costs. Prior to implementing an audit, the auditing Party agrees to submit an audit plan, including audit scope, to the other Party for approval (which shall not be unreasonably withheld). The independent certified public accountant will be instructed to provide an audit report containing its conclusions regarding the audit, and specifying whether the amounts paid were correct, and, if incorrect, the amount of any underpayment or overpayment. The independent certified public accountant further will be instructed to provide that audit report first to the Party being audited, and will be further instructed to redact any of that Party's proprietary information that is not relevant to the calculation of royalties, Operating Profits (Losses), Research Costs and/or Development Costs prior to providing that audit report to the other Party. That audit report shall be deemed to be Confidential Information of the Party subject to the audit, and used only for purposes germane to this Section. The Party being audited shall have the right, at its own expense, to have its own independent certified public accountant review and confirm the results of any audit performed by the auditing Party'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. In the event that the Parties' accountants cannot resolve any discrepancies within a reasonable amount of time, such dispute shall be resolved by the Parties pursuant to Article 14:.

The Party requesting an audit is solely responsible for all the expenses of an audit, unless the independent certified public accountant's report correctly shows any underpayment exceeding [**] of amounts due hereunder. If the independent certified public accountant's report correctly shows an underpayment of more than [**], the Party being audited shall be responsible for the reasonable expenses incurred by the auditing Party for the independent certified public accountant's services.

If the independent certified public accountant's report correctly shows any underpayment, the Party being audited shall remit to the other Party within [**] after receipt of such report:

(i) the amount of such underpayment;

(ii) interest on the amount being paid in (i), which interest shall be calculated pursuant to Section 8.23; and

(iii) if such underpayment exceeds [**], the reasonable expenses incurred by the auditing Party for the independent certified public accountant's services.

If the independent certified public accountant's report correctly shows any overpayment, such overpayment shall be fully creditable against future payments due hereunder, or if no additional payments are due hereunder shall be reimbursed to the overpaying Party within [**] of that Party's receipt of the independent certified public accountant's report.

The calculation of royalties payable, Operating Profits (Losses), Research Costs and Development Costs 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 [**] period, is on-going or (ii) a Party has, in good faith and through written notice to the other Party, disputed such calculation before the expiration of such [**] period or, if applicable, within [**] after receipt of the audit report.

8.25 Convertible Note. Simultaneously with the execution and delivery of the Original Agreement, the parties hereto entered into a Note Agreement (the "Note Agreement"), dated as of the December 17, 2002, substantially in the form attached as Exhibit C hereto. Under the Note Agreement, Genentech loaned 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. Effective as of the Second Restatement Date, the Parties have amended the Note Agreement, which Amendment is attached hereto as Exhibit L.

ARTICLE 9: INTELLECTUAL PROPERTY RESPONSIBILITIES

9.1 Ownership.

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

(b) Lexicon shall assign all right, title and interest in inventions and Know-How 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 within a reasonable time after receiving notice from Genentech, but in no event later than [**] after the filing of a patent application claiming an invention or Know-How encompassed within Project Patents and Know-How. 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 (i) for perfecting the right, title and interest herein conveyed; (ii) for prosecuting any of said applications; (iii) for filing and prosecuting applications for reissuance of any of said patents;

(iv) for interference or other priority proceedings involving said invention; and (v) for legal proceedings involving said invention and any applications therefore 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.

(c) Lexicon shall, from time to time, but no less than once per Calendar Quarter, provide Genentech, to the extent not previously provided, with a copy of all Lexicon Pre-Existing Know-How, Project Know-How and Restricted Rights Project Know-How (with respect to Restricted Rights Project Know-How, to the extent licensed to Genentech) in Lexicon's possession or control related a Project Gene, Protein Candidate, Genentech Advanced Research Protein Candidate, or Genentech Licensed Product, in each case which is not a Lexicon Advanced Research Protein Candidate or Lexicon Licensed Product.

9.2 Patent Prosecution of Lexicon Owned Patents.

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

(b) Review and Comment. Lexicon shall provide Genentech with a copy of any patent application (including any provisional applications) within the Lexicon Knock-Out Technology or Lexicon Product Patents specifically related to a Genentech Licensed Product or a Lexicon Licensed Product prior to filing in any jurisdiction, for review and comment by Genentech. Genentech shall provide Lexicon with a copy of any patent application (including any provisional applications) within the Lexicon Pre-Existing Patents, Restricted Rights Project Patents and Lexicon Product Patents for which Genentech has responsibility under Section 9.2(a) specifically related to a Lexicon Licensed Product or a Genentech Licensed Product prior to filing in any jurisdiction, for review and comment by Lexicon. Each Party with responsibility for filing, prosecuting, and maintaining such Patents shall reasonably consider comments and suggestions provided in a timely manner by the other Party. The other Party shall maintain any such applications in confidence.

(c) Notice of Decision. If Lexicon decides not to file a patent application claiming Lexicon Knock-Out Technology or Lexicon Product Know-How specifically related to a Genentech Licensed Product or a Lexicon Licensed Product in any country, it shall give Genentech prompt notice to this effect. If Genentech decides not to file a patent application within the Lexicon Pre-Existing Patents, Restricted Rights Project Patents and Lexicon Product Patents for which Genentech has responsibility under Section 9.2(a) specifically related to a Lexicon Licensed Product or a Genentech Licensed Product in any country, it shall give Lexicon prompt notice to this effect.

(d) Prosecution and Maintenance. Lexicon agrees to use reasonable diligence to prosecute and maintain Patents claiming the Lexicon Knock-Out Technology and Lexicon Product Patents specifically related to a Genentech Licensed Product or a Lexicon Licensed Product it filed and to prosecute any interference proceedings with respect thereto, unless it provides Genentech notice under Section 9.2(c) or 9.2(e). Genentech agrees to use reasonable diligence to prosecute and maintain Patents within the Lexicon Pre-Existing Patents, Restricted Rights Project Patents and Lexicon Product Patents for which Genentech has responsibility under Section 9.2(a) specifically related to a Lexicon Licensed Product or a Genentech Licensed Product it filed and to prosecute any interference proceedings with respect thereto, unless it provides Lexicon notice under Section 9.2(c) or 9.2(e). Upon the other Party's request, the Party responsible for prosecuting and maintaining any such Patent shall provide the other Party with (i) a copy of communications with any patent office with respect to such Patent and (ii) the opportunity to review and comment on any or all such communications. The other Party shall provide its comments on any such communication within [**] after receipt of such communication, and should no comments be received by the Party responsible for prosecuting and maintaining any such Patent on or before the thirty-first day, then it shall be deemed that such other Party has no comment to make on such communication. The Party responsible for prosecuting and maintaining any such Patent shall reasonably consider comments and suggestions provided in a timely manner by the other Party. Such other Party shall maintain any such communications in confidence. All such communications provided to such other Party pursuant to this Section 9.2 shall be sent to a person to be designated by such other Party by written notice to the Party responsible for prosecuting and maintaining any such Patent.

(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 Patents claiming the Lexicon Knock-Out Technology or Lexicon Product Patents specifically related to a Genentech Licensed Product or a Lexicon Licensed Product 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. Genentech shall give prior written notice to Lexicon of any decision by Genentech to cease the prosecution (including any interference) and maintenance of Patents within the Lexicon Pre-Existing Patents, Restricted Rights Project Patents and Lexicon Product Patents for which Genentech has responsibility under Section 9.2(a) specifically related to a Lexicon Licensed Product 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.

9.3 Patent Prosecution of Genentech Owned Patents.

(a) Patentable Inventions. Genentech shall be responsible, at its sole discretion and expense, for filing, prosecuting, and maintaining Genentech Gene Patents, Project Patents and Genentech Excluded IP; provided that Lexicon shall be responsible, at its sole

discretion, for filing, prosecuting, and maintaining Project Patents to the extent such Patents are exclusively licensed to Lexicon.

(b) Review and Comment. Genentech shall provide Lexicon with a copy of any patent application (including any provisional applications) within the Project Patents specifically related to a Lexicon Licensed Product or a Genentech Licensed Product or Genentech Gene Patents specifically related to a Lexicon Licensed Product prior to filing in any jurisdiction, for review and comment by Lexicon. Lexicon shall provide Genentech with a copy of any patent application (including any provisional applications) within the Project Patents for which Lexicon has responsibility under Section 9.3(a) prior to filing in any jurisdiction, for review and comment by Genentech. Each Party with responsibility for filing, prosecuting, and maintaining such Patents shall reasonably consider comments and suggestions provided in a timely manner by the other Party. The other Party shall maintain any such applications in confidence.

(c) Notice of Decision. If Genentech decides not to file a patent application within the Project Patents specifically related to a Lexicon Licensed Product or a Genentech Licensed Product or Genentech Gene Patents specifically related to a Lexicon Licensed Product in any country, it shall give Lexicon prompt notice to this effect. If Lexicon decides not to file a patent application within the Project Patents for which Lexicon has responsibility under Section 9.3(a) in any country, it shall give Genentech prompt notice to this effect.

(d) Prosecution and Maintenance. Genentech agrees to use reasonable diligence to prosecute and maintain Project Patents specifically related to a Lexicon Licensed Product or a Genentech Licensed Product and Genentech Gene Patents specifically related to a Lexicon Licensed Product it filed and to prosecute any interference proceedings with respect thereto, unless it provides Lexicon notice under Section 9.3(c) or 9.3(e). Lexicon agrees to use reasonable diligence to prosecute and maintain Patents within the Project Patents for which Lexicon has responsibility under Section 9.3(a) it filed and to prosecute any interference proceedings with respect thereto, unless it provides Genentech notice under Section 9.3(c) or 9.3(e). Upon the other Party's request, the Party responsible for prosecuting and maintaining any such Patent shall provide the other Party with (i) a copy of communications with any patent office with respect to such Patent and (ii) the opportunity to review and comment on any or all such communications. The other Party shall provide its comments on any such communication within [**] after receipt of such communication, and should no comments be received by the Party responsible for prosecuting and maintaining any such Patent on or before the thirty-first day, then it shall be deemed that such other Party has no comment to make on such communication. The Party responsible for prosecuting and maintaining any such Patent shall reasonably consider comments and suggestions provided in a timely manner by the other Party. Such other Party shall maintain any such communications in confidence. All such communications provided to such other Party pursuant to this Section 9.3 shall be sent to a person to be designated by such other Party by written notice to the Party responsible for prosecuting and maintaining any such Patent.

(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 or Genentech Gene Patents specifically

related to a Lexicon Licensed Product or (ii) Project Patents containing any Valid Co-Funded Patent Claims or Valid Advanced Research Patent Claims (or, in the case of applications filed by Genentech, from which a Valid Co-Funded Patent Claims or Valid Advanced Research Patent Claim may issue), 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. Lexicon shall give prior written notice to Genentech of any decision by Lexicon to cease the prosecution (including any interference) and maintenance of Patents within the Project Patents for which Lexicon has responsibility under Section 9.3(a) 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.

9.4 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-Controlled Patent Claims. 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 and (ii), except to the extent such Patents (A) have been exclusively licensed to Genentech or (B) claim Lexicon Licensed Products or uses thereof, Lexicon Pre-Existing Patents, Restricted Rights Project Patents, and Lexicon Product Patents, 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.

Notwithstanding the above, if the infringement or alleged infringement of a Patent claiming Lexicon Knock-Out Technology specifically relates to a Genentech Licensed Product, 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 Genentech Licensed Product not later than [**] following its discovery or notice of alleged infringement of Lexicon Knock-Out Technology specifically related to such Genentech Licensed Product. 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 Genentech Licensed Product, 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.

If Lexicon brings an action under this Section 9.4(b), 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 Section 9.4(b) with respect to a Patent claiming Lexicon Knock-Out Technology specifically related to a Genentech Licensed Product, 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.

(c) Infringement of Genentech-Controlled Patent Claims Not Related to Lexicon Licensed Products. Genentech shall have the sole right, but not the obligation, to take appropriate steps to remove the infringement or alleged infringement of (i), to the extent such Patents have been exclusively licensed to Genentech and claim Genentech Licensed Products or uses thereof, Lexicon Pre-Existing Patents, Restricted Rights Project Patents, and Lexicon Product Patents and (ii), except to the extent such Patents have been exclusively licensed to Lexicon, Project Patents, 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.

Notwithstanding the above, if Genentech brings action under this Section 9.4(c) with respect to any Valid Advanced Research Patent Claim specifically related to a Genentech Licensed Product, 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 Net Sales, or equal to Lexicon's share of Operating Profits (Losses). If any balance remains after Lexicon's retained amount, such balance shall be the property of Genentech.

(d) Infringement of Genentech-Controlled Patent Claims Related to a Lexicon Licensed Product. Lexicon shall have the first right, but not the obligation, to take appropriate steps to remove the infringement or alleged infringement of (i), to the extent such Patents have been exclusively licensed to Lexicon and claim Lexicon Licensed Products or uses thereof, Project Patents, and (ii), to the extent such Patents claim Lexicon Licensed Products or uses thereof, Lexicon Pre-Existing Patents, Restricted Rights Project Patents, and Lexicon Product Patents, 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.

If Lexicon brings action under this Section 9.4(d) with respect to any claim to a Lexicon Licensed Product within a Project Patent, Lexicon Pre-Existing Patent, Restricted Rights Project Patent, or Lexicon Product Patent, 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, Genentech shall retain as its own property an amount of compensatory damages equal to the royalty that Genentech would otherwise be entitled to under this Agreement if such remaining balance was treated as Net Sales. If any balance remains after Genentech's retained amount, such balance shall be the property of Lexicon.

Lexicon shall keep Genentech reasonably informed of the progress of such suit, proceeding or legal action and provide 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 Project Patents and Know-How or Lexicon Pre-Existing Patents and Know-How related to Lexicon Licensed Products under this Section 9.4(d), not later than [**] following its discovery or notice of alleged infringement thereof. 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 under this Section 9.4(d), 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.

If the infringement or alleged infringement of a Patent claiming Genentech Gene Patents specifically relates to a Lexicon Licensed Product, Genentech 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 Genentech keeps Lexicon reasonably informed of the progress of such suit, proceeding or legal action and provides Lexicon with copies of any substantive documents related to such suit, proceeding or legal action and reasonable notice thereof. Genentech shall notify Lexicon of its decision to exercise its right to enforce Genentech Gene Patents specifically related to a Lexicon Licensed Product not later than [**] following its discovery or notice of alleged infringement of Genentech Gene Patents specifically related to such Lexicon Licensed Product. Lexicon shall have the right, at its own expense, to be represented in any such action by counsel of its own choice. If Genentech decides not to institute an infringement suit, proceeding or other legal action that Lexicon feels is reasonably required to protect such Genentech Gene Patents specifically related to a Lexicon Licensed Product, Lexicon shall have the right, at its sole discretion, to institute such suit, proceeding or other legal action and Genentech 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.

If Genentech brings an action further to an infringement or alleged infringement of a Patent claiming Genentech Gene Patents specifically related to a Lexicon Licensed Product, 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, such balance shall be the property of Genentech. If Genentech fails to bring such action with respect to a Patent claiming Genentech Gene Patents specifically related to a Lexicon Licensed Product, but Lexicon brings

an action, any damages or other monetary awards recovered by Lexicon 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 Lexicon.

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, proceeding or legal action in its own name. In such event, the licenses to Genentech under such a Project Patent shall remain unaffected.

9.5 Notice of Infringement by a Party. If the making, using, importing, offer for sale, or selling a Collaboration 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 Collaboration 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.

9.6 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 9:, including without limitation, the fees and expenses of that Party's counsel.

9.7 Settlement Approval. No settlement, consent judgment or other voluntary final disposition of a suit being prosecuted by a Party under this Article 9: 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.

9.8 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

9.9 Audit Rights Regarding Invoices. In the event there is a good faith dispute over an amount owed by a Party under this Article 9:, the disputed payment may be delayed, and such payment will not be considered delinquent pending a resolution of the Parties' dispute. Section 8.24 (i.e., "Records; Audit Rights") is applicable with regard to all invoices submitted by a Party to the other Party under this Article 9:.

9.10 Third Person Licenses for Genentech IND Opted Products and Genentech Phase II Opted Products. If in either Party's reasonable judgment it is desirable or useful to seek a license or immunity from suit from any Third Person in order to research, develop, make, have made, use, sell, offer to sell, or import a Genentech IND Opted Product or Genentech Phase II Opted Product (for which Lexicon has not exercised its Opt-Out), such Party shall bring such

matter to the other Party's attention. If in either Party's reasonable judgment, such matter is material to the research, development, making, having made, using, selling, offering to sell, or importing a Genentech IND Opted Product or Genentech Phase II Opted Product, such matter shall be referred to the Steering Committee. The Steering Committee shall discuss reasonable courses of action with respect thereto, giving due consideration to the advisability of seeking an opinion of counsel, the use of alternative technologies and the efforts required to design around any Patents at issue. Neither Party shall, without the approval of the Steering Committee, obtain any license or immunity from suit from a Third Person relating to the research, development, making, having made, using, selling, offering to sell, or importing a Genentech IND Opted Product or Genentech Phase II Opted Product, if such license or immunity from suit would place any material financial obligation on the other Party, either individually or through the sharing of Operating Profits (Losses), or otherwise affect a Party's ability to engage in such activities. As decided by the Steering Committee, a Party shall use commercially reasonable efforts to minimize the amount of any of payments or royalties to a Third Person relating to the manufacture, use or sale of a Genentech IND Opted Product or Genentech Phase II Opted Product.

ARTICLE 10: CONFIDENTIALITY

10.1 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 10.2), 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.

10.2 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;

(ii) 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"); or

(iii) 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 Section 10.2(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.

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.

(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.

10.3 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 Sections 10.2(a), 10.2(b), 10.2(c), or 10.2(d). 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.

10.4 Publicity about the Agreement.

(a) Press Releases and Public Statements. 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. All press releases and other publicity will conform to the publicity strategy and policy developed by the Steering Committee in accordance with Section 2.1(b)(viii). 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. Notwithstanding the foregoing, the Parties agree to the release of the press release attached hereto as Exhibit J upon full execution of this Agreement.

(b) Use of Trademarks and Logos. Neither Party may use any trademarks, logos, or symbols associated with the other Party without the prior written permission of such other Party.

(c) Specific Exclusions. Notwithstanding Sections 10.4(a) and 10.4(b), Genentech shall not be prohibited from making a statement regarding the development or commercialization of Genentech Licensed Product or Small Molecule Drug, and Lexicon shall not be prohibited from making a statement regarding the development or commercialization of a Lexicon Licensed Product or a Small Molecule Drug; provided that neither Party shall disclose any material term of condition or this Agreement, including any and all financial terms, except as expressly permitted under this Agreement.

10.5 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 9:) 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 10.5.

ARTICLE 11: TERM AND TERMINATION OF AGREEMENT

11.1 Term. This Agreement commences on the Effective Date and will remain in full force and effect, unless earlier terminated as provided in this Article 11:, until the later of: (i) [**] after the last Project Gene becomes a Rejected Project hereunder; (ii) the date on which all obligations under this Agreement between the Parties with respect to the payment of milestones or royalties, or the sharing of Operating Profits (Losses), with respect to Collaboration products have passed or expired; or (iii) the date on which the Parties are no longer developing or commercializing any Collaboration Products.

11.2 Genentech's Unilateral Right to Terminate.

(a) In the event that Lexicon has not completed, by December 1, 2008, Advanced Phenotypic Analysis on at least seventy-five percent (75%) of the Project Genes submitted for Advanced Phenotypic Analysis by the Steering Committee pursuant to Section 3.6, except for those assays within a particular Advanced Phenotypic Panel which were selected by the Steering Committee for performance on a date following selection of the Advanced Phenotypic Panel generally and which are not completed prior to December 1, 2008 for (A) a good scientific reason existing at the time of selection of such assay and (B) despite Lexicon's exercise of Commercially Reasonable Efforts thereon, then Genentech shall have the right to terminate this Agreement, and:

(i) Lexicon will provide Genentech, to the extent not previously provided, with a copy of all Project Patents and Know-How, Lexicon Pre-Existing Patents and Know-How, and Lexicon Product Patents and Know-How, and deliver Project Materials (to the extent not previously provided) related to such Projects;

(ii) all licenses granted by Genentech to Lexicon shall terminate;

(iii) all rights and licenses granted by Lexicon to Genentech shall continue;

(iv) any Lexicon Advanced Research Protein Candidates, and all corresponding Lexicon Advanced Research Products, shall become Genentech Advanced Research Protein Candidates and Genentech Advanced Research Products, respectively; and

(v) Genentech shall have no further payment obligations to Lexicon under this Agreement with respect to milestone payments, royalties or otherwise (notwithstanding the continuation of Genentech's rights and licenses hereunder), except for those set forth in Section 8.10.

(b) In the event that Lexicon has completed, by December 1, 2008, Advanced Phenotypic Analysis on at least seventy-five percent (75%) of the Project Genes submitted for Advanced Phenotypic Analysis by the Steering Committee pursuant to Section 3.6 but has not completed at least ninety-five percent (95%) of such Advanced Phenotypic Analysis, except for those assays within a particular Advanced Phenotypic Panel which were selected by the Steering Committee for performance on a date following selection of the Advanced Phenotypic Panel generally and which are not completed prior to December 1, 2008 for (A) a good scientific reason existing at the time of selection of such assay and (B) despite Lexicon's exercise of Commercially Reasonable Efforts thereon, then Genentech shall have the right to terminate this Agreement, and:

(i) Lexicon will provide Genentech, to the extent not previously provided, with a copy of all Project Patents and Know-How, Lexicon Pre-Existing Patents and Know-How, and Lexicon Products Patents and Know-How, and deliver Project Materials (to the extent not previously provided) related to such Projects;

(ii) all licenses granted by Genentech to Lexicon shall terminate;

(iii) all rights and licenses granted by Lexicon to Genentech shall continue;

(iv) any Lexicon Advanced Research Protein Candidates, and all corresponding Lexicon Advanced Research Products, shall become Genentech Advanced Research Protein Candidates and Genentech Advanced Research Products, respectively; and

(v) Genentech shall have no further payment obligations to Lexicon under this Agreement with respect to milestone payments, royalties or otherwise (notwithstanding the continuation of Genentech's rights and licenses hereunder), except for (A) those set forth in Section 8.10 and (B) those set forth in Section 8.12 with respect to only those Genentech Advanced Research Products for which Lexicon has completed Advanced Phenotypic Analysis on the corresponding Project Gene.

11.3 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.

11.4 Surviving Obligations. The rights and obligations of the Parties under Article 1: (Definitions), Article 10: (Confidentiality), Article 12: (Disclaimers, Representations and Warranties), Article 13: (Indemnification), and Article 15: (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 9: (Intellectual Property Responsibilities) and, to the extent applicable, the effects of termination contained in Sections 11.2 through 11.4. The provisions of Section 8.10 and Sections 8.17 through 8.24 shall survive termination of this Agreement under Section 11.2(a). The provisions of Sections 8.10 and 8.12 and Sections 8.17 through 8.24 shall survive termination of this Agreement under Section 11.2(b). 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 11.4 survives the termination or expiration of this Agreement for any reason.

ARTICLE 12: DISCLAIMERS, REPRESENTATIONS, AND WARRANTIES

12.1 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.

12.2 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).

12.3 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.

12.4 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 12.4 in writing to such other Party. If, at any time, a Party breaches a covenant under this Section 12.4, the breaching Party shall immediately notify the other Party of such fact.

12.5 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.

12.6 Genentech Representation Regarding Excluded IP. [**].

12.7 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.

12.8 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 12.8 IS INTENDED TO LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY.

ARTICLE 13: INDEMNIFICATION

13.1 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 Genentech Licensed Product 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").

However, Genentech shall not indemnify or hold harmless Lexicon Indemnitees from Damages from a Lexicon Third Person Claim to the extent that such Damages are finally determined to have resulted from the acts or omissions of a Lexicon Indemnitee or Third Person. Genentech's obligations under this Section 13.1(a) 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; or

(iii) the development, manufacture, marketing, sale or other disposition, offer to sell, use, importation, or exportation of a Small Molecule Drug, Lexicon Licensed Product, Genentech Phase II Opted Product for which Lexicon has not exercised its Opt-Out under Section 4.8, or other product in the Field by Lexicon, Lexicon's Affiliates, Lexicon Product Licensees, subcontractors, or customers, or the customers of Lexicon's Affiliates and Lexicon Product Licensees (any of clauses (i) through (iii), a "Genentech Third Person Claim").

However, Lexicon shall not indemnify or hold harmless Genentech Indemnitees from Damages from a Genentech Third Person Claim to the extent that such Damages are finally determined to have resulted from the acts or omissions of a Genentech Indemnitee or Third Person. Lexicon's obligations under this Section 13.1(b) shall survive expiration or termination of this Agreement for any reason.

13.2 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 13: (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 Section 13.2(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 Section 13.2(d) without the prior written consent of the Indemnifying Party shall relieve the Indemnifying Party of its obligations under this Article 13: .

13.3 Insurance.

(a) During the term of this Agreement, each Party shall maintain an ongoing basis, Commercial General Liability ("CGL") insurance, including contractual liability and completed operations insurance, 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 Genentech 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 and advertising and copyright 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 Genentech 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) Commencing not later than [**] prior to the first use in humans of the first potential Lexicon Licensed Product, or Genentech Phase I Opted Product or Genentech Phase II

Opted Product for which Lexicon has not exercised its Lexicon Opt-Out, and thereafter for the period of time required below, Lexicon shall obtain and maintain on an ongoing basis products liability insurance (including contractual liability and advertising and copyright 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 Lexicon Licensed Product with respect to the product liability insurance coverage, Lexicon shall provide to Genentech a certificate evidencing all such coverage required hereunder. Thereafter Lexicon 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.

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

(i) The Parties shall use Commercially Reasonable Efforts to name each other as an additional insured 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 14: DISPUTE RESOLUTION

14.1 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 14.1. 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).

14.2 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 (3) arbitrators. Each Party shall nominate in the request for arbitration and the answer thereto one (1) arbitrator and the two (2) 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 judgment 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 15: ASSIGNMENT

15.1 Assignment Generally.

(a) Neither Party may assign this Agreement (nor any part thereof) without the prior written consent of the other Party. Notwithstanding the foregoing but subject to Sections 5.8(c) and 15.2, if either Party is a party to a merger or acquisition 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 or acquisition 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 15.1, will be of no force or effect. Subject to the provisions set forth in this Section 15.1, this Agreement will be binding upon and will inure to the benefit of the successors and permitted assigns of the Parties.

15.2 Purchase of Lexicon's Share of Operating Profits (Losses) Upon Assignment.

(a) Upon any proposed assignment of this Agreement by Lexicon permitted by Section 15.1 or Change of Control of Lexicon, Lexicon shall deliver written notice thereof to Genentech (the "Sale Notice") at least [**] prior to the planned effective date of such permitted assignment. [**] (each a Sale Price") [**] Lexicon's share of Operating Profits (Losses) with respect to each Genentech IND Opted Product and Genentech Phase II Opted Product (each a "Purchase Option"). A Sale Notice shall be Lexicon Confidential Information.

(b) Within [**] of Genentech's receipt of the Sale Notice [**], Genentech shall deliver written notice to Lexicon identifying [**].

(c) On the date that is [**] after Genentech's receipt of the Sale Notice [**], for those Genentech IND Opted Products and Genentech Phase II Opted Products for which Genentech:

(i) [**], then (A) Genentech shall pay the applicable Sale Price to Lexicon and (B) any and all rights granted to Lexicon (or, if applicable, its permitted assignee) under this Agreement with respect to such Genentech IND Opted Products and/or Genentech Phase II Opted Products shall immediately terminate, including any right of further participation in Operating Profits (Losses) as set forth in Section 8.14 or receive any other monies, whether royalties, milestones or otherwise;

(ii) [**] then: (A) Lexicon shall pay to Genentech (x) [**] for Genentech Phase II Opted Products which are neither [**] Products nor [**] Products, (y) [**] for Genentech Phase II Opted Products which are either [**] Products or [**] Products and (z) [**] for Genentech IND Opted Products; and (B) such Genentech Phase II Opted Product and Genentech IND Opted Products shall revert to Lexicon Advanced Research Products and all rights held by Genentech hereunder with respect to such Genentech Phase II Opted Products and Genentech IND Opted Products shall terminate (including the right to receive further payments from Lexicon pursuant to Article 8); and

(iii) agrees to maintain the sharing of Operating Profits (Losses), Operating Profits (Losses) shall continue to be shared as set forth in this Agreement.

(d) [**], the selling Party under this Section 15.2 shall use Commercially Reasonable Efforts to transfer to the purchasing Party (to the extent applicable), any technology, materials, data and regulatory filings so as to fully enable the purchasing Party to develop and commercialize the applicable Collaboration Products. Without limiting the generality of the foregoing, to the extent not already done so and applicable, the selling Party agrees to use Commercially Reasonable Efforts to transfer to the purchasing Party all Lexicon Pre-Existing Know-How, Project Know-How, Restricted Rights Know-How and Lexicon Product Know-How, including any preclinical data, clinical data, assays and associated materials, protocols, procedures and any other information in the selling Party's possession or control, necessary or useful to continue or initiate pre-clinical or clinical development, or in seeking Regulatory Approval, of such Genentech IND Opted Product or Genentech Phase II Opted Product. If applicable, upon the purchasing Party's request the selling Party shall assign to the purchasing Party (i) all applications and filings made with the FDA with respect to such Genentech IND Opted Product or Genentech Phase II Opted Product, including any IND and orphan drug designations, (ii) all agreements related to the conduct of any clinical trial with respect to such Genentech IND Opted Product or Genentech Phase II Opted Product, and (iii) all agreements related to the manufacture, supply or distribution of clinical supplies of such Genentech IND Opted Product or Genentech Phase II Opted Product. Upon exercise of the Sale Option, all Genentech Trademark(s) which are specifically and solely related to the Genentech IND Opted Product or Genentech Phase II Opted Product as to which the Sale Option applies, and the goodwill associated therewith, shall be assigned to Lexicon.

(e) [**].

15.3 Treatment of Intellectual Property Rights of Acquiring or Acquired Party. Notwithstanding anything in this Agreement to the contrary, Patents and Know-How (i) initially owned or controlled by a Third Person, (ii) developed independent of this Agreement and any Confidential Information, and (iii) which become owned or controlled by a Party as a result of such Party acquiring ownership or control of such Patents and Know-How in connection with the acquisition of all or substantially all of such Third Person's outstanding voting equity or assets ("Acquired Patents and Know-How"), shall not become subject to rights and obligations set forth in this Agreement; provided that, to foregoing exclusion shall not apply to Acquired Patents and Know-How that specifically relate to either a Genentech IND Opted Product or Genentech Phase II Opted Product or that would be infringed by the making, using, selling, offering for sale, or import of a Genentech IND Opted Product or Genentech Phase II Opted Product.

ARTICLE 16: GENERAL PROVISIONS

16.1 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 of identifying, acquiring, operating, and maintaining such hardware, software, and services.

16.2 Legal Compliance. Each Party will comply with all Applicable Laws in the performance of its obligations or the exercise of its rights hereunder. In addition, each party will do all other acts, as may be necessary or appropriate to assist the other party under its obligations to comply with all accounting and reporting requirements in effect at that time.

16.3 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.

16.4 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.

16.5 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 Original Agreement and First Restated Agreement, are superceded as of the Effective Date. This Agreement has been prepared jointly and will not be strictly construed against either Party.

16.6 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.

16.7 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 16.7 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.

16.8 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.

16.9 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:	To Genentech:
Lexicon Genetics Incorporated	Genentech, Inc.
8800 Technology Forest Place	1 DNA Way
Woodlands, TX 77381-1160	South San Francisco, California 94080
Fax: (281) 863-8088	Fax: (650) 467-9146
Phone: (281) 863-3000	Phone: (650) 225-1000
Attn: President, CEO	Attn: Corporate Secretary
With a copies to:	With a copy to:
General Counsel and	Vice President, Research and
Chief Financial Officer	Vice President, Business Development

Notice will be deemed to have been given when delivered if personally delivered on a business day, on [**] after dispatch if sent by a professional courier, and on [**] 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.

16.10 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 16.10, of any provision or requirement hereunder will neither be deemed nor operate as a future waiver of such or any other provision or requirement.

16.11 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.

16.12 Interpretation. All headings and captions used in this Agreement are for convenience only, and are not intended to have any substantive effect. This Agreement has been prepared jointly and no rule of strict construction shall be applied against either Party. In this Agreement, the singular shall include the plural and vice versa and the word "including" shall be deemed to be followed by the phrase "without limitation." In the event of any conflict between this Agreement and any Exhibits, Schedules or other attachments hereto,, the terms and conditions of this Agreement shall control.

16.13 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.

16.14 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.

16.15 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.

16.16 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.

16.17 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
By: David Ebersman	By: Arthur T. Sands
Title: SVP & CFO	Title: President and CEO

EXHIBIT A

Comprehensive Therapeutic Protein Discovery & Validation Program

First Pass Phenotypic Analysis of Project Genes

[**]

EXHIBIT B

SUBLICENSE AGREEMENT

THIS SUBLICENSE AGREEMENT (this "Agreement") is made and entered into this seventeenth (17th) day of December, 2002 (the "Effective Date") by and between LEXICON GENETICS INCORPORATED, a Delaware corporation ("Lexicon"), and GENENTECH, INC., a Delaware corporation ("Genentech").

RECITALS:

WHEREAS, Lexicon holds a license from GenPharm International Inc. ("GenPharm") under certain Patent Rights (as defined herein) relating to the use of "isogenic DNA constructs" in gene targeting for the generation of transgenic and knock-out mice, and has the right to grant sublicenses under said Patent Rights; and

WHEREAS, Genentech desires to obtain from Lexicon, and Lexicon desires to grant to Genentech, a sublicense under the Patent Rights in the Field of Use upon the terms and conditions hereinafter set forth;

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

1. DEFINITIONS. For the purposes of this Agreement, the following words and phrases shall have the following meanings:

1.1 "Academic Collaborator" shall mean a principal investigator, employed by a university or other not-for-profit academic research institution, who is performing collaborative research with or sponsored research for Genentech involving use of a Mutant Mouse or Progeny.

1.2 "Contract Service Provider" shall mean any Third Party that enters into an agreement with Genentech providing for the performance of services for Genentech, on a fee-for-service basis, relating to [**] of Mutant Mice or Progeny.

1.3 "Field of Use" shall mean (i) the generation and development of Mutant Mice by Genentech at its internal research facilities and (ii) the use of Mutant Mice and Progeny, including the breeding thereof, by Genentech and, subject to the terms and conditions of Sections 2.2 and 2.3, by Genentech's Academic Collaborators and Contract Service Providers, at the internal research facilities of Genentech, such Academic Collaborators or Contract Service Providers, in each case for research purposes only, including research directed toward the discovery, development and commercialization of human therapeutic and diagnostic products. The Field of Use shall specifically exclude (i) the development of a library of mouse embryonic stem cells, (ii) the sale, lease or other transfer for consideration of any Mutant Mouse or Progeny, (iii) the use of any Mutant Mouse or Progeny for consideration (including, without limitation, use of any Mutant

Mouse or Progeny in contract testing services) and (iv) the generation, development, manufacture or importation of any Mutant Mouse or Progeny for any of the foregoing. The Field of Use shall further exclude the generation, development and use of (i) any transgenic mouse containing unrearranged human immunoglobulin DNA or inactivated murine immunoglobulin DNA, (ii) any mouse as a model for Alzheimer's disease based upon (beta)-amyloid precursor protein coded for by the App gene or mutated forms thereof, (iii) any immunomodified mouse model for the study of transplanted human cells or (iv) any transgenic immunomodified mouse for use in studies of human allergenicity of non-therapeutic proteins or peptides and in research directed toward the development of non-therapeutic proteins or peptides that demonstrate a reduction in human allergenicity (for purposes of which, "non-therapeutic proteins or peptides" shall mean proteins or peptides for use in cosmetic, cleaning and other non-therapeutic consumer products).

1.4 "Mutant Mouse" shall mean any mouse cell or mouse generated or developed by Genentech through use of any product or process covered by a Valid Claim of the Patent Rights. As used herein, a "line of Mutant Mice" shall mean all mouse cells and mice with a mutation in the same gene.

1.5 "Patent Rights" shall mean all of Lexicon's rights and interests in and to [**] (i) the United States patents and patent applications listed in Exhibit A, (ii) any patents issuing from such patent applications, (iii) any continuations, continuations-in-part, divisionals, reissues, reexaminations or extensions of any of the foregoing, and (iv) all foreign counterparts of any of the foregoing.

1.6 "Progeny" shall mean any mouse cells or mice, including successive generations thereof, that are produced or developed by Genentech, its Academic Collaborators or Contract Service Providers by breeding a Mutant Mouse with any other mouse (including, without limitation, any other Mutant Mouse); provided, however, that Progeny shall not include, and the rights and licenses granted under this Agreement shall not extend to, any mouse cell or mouse that is produced or developed by breeding a Mutant Mouse with any mouse, other than another Mutant Mouse, that contains a mutation in its genome which was generated or developed, or whose progenitors include a mouse containing such mutation which was generated or developed, through use of any product or process covered by a Valid Claim of the Patent Rights.

1.7 [**] shall mean any [**]; provided, however, that [**] specifically excludes [**].

1.8 "Third Party" shall mean any person or entity other than Lexicon and Genentech.

1.9 "Valid Claim" shall mean 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.

2. GRANT OF SUBLICENSE AND RELEASE.

2.1 Subject to the terms and conditions of this Agreement, Lexicon hereby grants to Genentech, during the term of this Agreement, a worldwide, royalty-free, non-exclusive right and sublicense under the Patent Rights in the Field of Use, to the extent not prohibited by other patents, (i) to make (but not have made) up to a total of [**] lines of Mutant Mice per calendar year during the term of this Agreement, and (ii) to breed and use such Mutant Mice and Progeny. Nothing in this Agreement shall be construed to confer upon Genentech any rights under the Patent Rights outside the Field of Use.

2.2 Genentech shall have the right to transfer Mutant Mice and Progeny to Academic Collaborators subject to the terms and conditions of this Section 2.2. Any such transfer shall be made pursuant to a material transfer agreement or other agreement containing terms relating to the transfer of such material that expressly (i) prohibit the use of such Mutant Mice and Progeny thereof for any purpose other than such Academic Collaborator's collaborative research with Genentech in the Field of Use and (ii) prohibit the transfer of such Mutant Mice or Progeny thereof by such Academic Collaborator to any Third Party.

2.3 Genentech shall have the right to transfer Mutant Mice and Progeny to Contract Service Providers subject to the terms and conditions of this Section 2.3. Any such transfer shall be made pursuant to a material transfer agreement or other agreement containing terms relating to the transfer of such material that expressly (i) prohibits the use of such Mutant Mice and Progeny thereof for any purpose other than such Contract Service Provider's performance of services for Genentech, on a fee-for-service basis, relating to [**] of Mutant Mice or Progeny, (ii) prohibits the transfer of such Mutant Mice or Progeny thereof by such Contract Service Provider to any Third Party, and (iii) obligates such Contract Service Provider to return or destroy such Mutant Mice or Progeny upon the completion of its services for Genentech.

2.4 Genentech shall not assert or enforce against Lexicon any claims of an issued patent arising from the use by Genentech, its Academic Collaborators or Contract Service Providers of a Mutant Mouse or Progeny, to the extent, but only to the extent, any such assertion or enforcement would, absent a license from Genentech, prevent Lexicon from using or permitting others to use, [**] for research purposes directed towards the discovery, identification, selection or characterization of [**], any transgenic or knockout mouse or phenotypic data derived therefrom.

2.5 Nothing in this Agreement shall be construed to confer upon Genentech any rights, by implication, estoppel or otherwise, to any patent, technology or intellectual property of Lexicon or any other entity other than the Patent Rights, regardless of whether such intellectual property rights shall be dominant or subordinate to any Patent Rights.

2.6 Genentech shall be responsible for all development activities related to the generation of Mutant Mice and use of the Patent Rights, including the compliance with Third Party patent rights.

3. LICENSE FEE.

3.1 For the rights, privileges and sublicense granted hereunder, Genentech shall pay Lexicon a license fee of [**], payable within [**] of the Effective Date.

3.2 All payments due hereunder shall be paid in full, without deduction of taxes or other fees that may be imposed by any government.

3.3 Any payments by Genentech to Lexicon that are not paid on or before [**] the date such payments are due under this Agreement shall bear interest, to the extent permitted by applicable law, at one and one half percent (1.5%) per month, calculated on the total number of days payment is delinquent.

3.4 Payments to be made by Genentech to Lexicon under this Agreement shall be payable in United States dollars and shall be paid by check delivered to Lexicon at its principal office at The Woodlands, Texas or bank wire transfer in immediately available funds to such bank account in the State of Texas as is designated in writing by Lexicon from time to time.

4. REPORTS AND RECORDS. Within thirty (30) days after the end of each calendar year, Genentech shall deliver to Lexicon a true and accurate written report listing the number of lines of Mutant Mice made by Genentech during such year, and certifying that Genentech has complied with its obligations under this Agreement.

5. INFRINGEMENT OF PATENT RIGHTS. Lexicon shall have the exclusive right, but shall not be obligated, to prosecute any infringements of the Patent Rights. The total cost of any such infringement action commenced or defended by Lexicon shall be borne by Lexicon, and Lexicon shall keep any recovery or damages for past infringement derived therefrom.

6. INDEMNIFICATION AND LIMITATION OF LIABILITY.

6.1 Genentech shall at all times during the term of this Agreement and thereafter, indemnify, defend and hold Lexicon and its directors, officers, employees and affiliates harmless from and against all claims, proceedings, demands, liabilities and losses of any kind whatsoever that are brought by a Third Party, including legal expenses and reasonable attorneys' fees, arising out of, based upon or resulting from the use of the Patent Rights hereunder [**] or the use, testing, marketing or sale of human therapeutic or diagnostic products by Genentech, its Academic Collaborators or Contract Service Providers, except to the extent that such claims, proceedings, demands, liabilities and losses result from Lexicon's gross negligence or willful misconduct.

6.2 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 twenty (20) days 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.

6.3 Lexicon warrants to Genentech that it has the lawful right to grant the rights and licenses set forth in this Agreement. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, LEXICON AND ITS DIRECTORS, OFFICERS, EMPLOYEES, AND AFFILIATES MAKE NO REPRESENTATIONS AND EXTEND NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, VALIDITY OF PATENT RIGHTS CLAIMS, ISSUED OR PENDING, AND THE ABSENCE OF LATENT OR OTHER DEFECTS, WHETHER OR NOT DISCOVERABLE. NOTHING IN THIS AGREEMENT SHALL BE CONSTRUED AS A REPRESENTATION MADE OR WARRANTY GIVEN BY LEXICON THAT THE PRACTICE BY GENENTECH OF THE SUBLICENSE RIGHTS GRANTED HEREUNDER SHALL NOT INFRINGE THE PATENT RIGHTS OF ANY THIRD PARTY. IN NO EVENT SHALL EITHER PARTY OR ITS DIRECTORS, OFFICERS, EMPLOYEES AND AFFILIATES BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING ECONOMIC DAMAGE OR INJURY TO PROPERTY AND LOST PROFITS, REGARDLESS OF WHETHER THEY SHALL BE ADVISED, SHALL HAVE OTHER REASON TO KNOW, OR IN FACT SHALL KNOW OF THE POSSIBILITY OF THE FOREGOING.

7. TERM AND TERMINATION.

7.1 This Agreement shall become effective on the Effective Date and shall remain in effect until the expiration of the last-to-expire patent included within the Patent Rights.

7.2 Upon any material breach or default of this Agreement by Genentech (including, but not limited to, breach or default under Section 2.1 or use of the Patent Rights outside of the Field of Use), Lexicon shall have the right to terminate this Agreement and the rights, privileges and sublicense granted hereunder, effective on [**] written notice, unless Genentech shall have cured any such material breach or default prior to the expiration of such [**] period.

7.3 If Genentech shall liquidate, dissolve, file a voluntary petition in bankruptcy, be adjudicated a bankrupt, make a general assignment for the benefit of creditors, admit in writing that it is insolvent or fail to discharge within [**] an involuntary petition in bankruptcy filed against it, this Agreement shall terminate upon written notice by Lexicon.

7.4 No termination of this Agreement shall be construed to release either party from any obligation that matured prior to the effective date of such termination. The provisions of Sections 2.4, 2.5, 4, 5, 6, 7.4, 9, 11, 12 and 13 shall survive any termination of this Agreement.

8. EXPORT CONTROLS. Genentech acknowledges that it is subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended and the United States Department of Commerce Export Administration Regulations). The transfer of such items may require a license from the relevant agency of the United States Government and/or written assurances by Genentech that Genentech shall not export data or commodities to certain foreign countries without prior approval of such agency. Lexicon does not represent that a license shall not be required nor that, if required, it shall be issued.

9. CONFIDENTIALITY OF TERMS; PUBLICITY. The terms of this Agreement shall be treated as confidential and shall not be disclosed to anyone except for the parties' respective employees, consultants, agents and attorneys assisting in the review and negotiation of this Agreement who have a need to know the terms of this Agreement and have an obligation to keep such terms confidential, or such other attorneys or agents who are performing due diligence on either party and who are under an implied obligation of confidentiality, without the written permission of the other party; provided that each party may disclose that Genentech has obtained a sublicense under the Patent Rights hereunder. If either party desires to release a public announcement relating to this Agreement, it shall first allow the other party to approve in writing such proposed announcement; provided that such approval shall not be unreasonably withheld or delayed.

10. ASSIGNMENT. This Agreement may not be assigned or otherwise transferred by either party without the written consent of the other party; provided, however, that Lexicon may, without such consent, assign its rights and obligations under this Agreement (i) to any affiliate or (ii) in connection with a merger, consolidation or sale of its assets to a Third Party; provided, however, that Lexicon's rights and obligations under this Agreement shall be assumed by its successor in interest in any such merger, consolidation or sale of assets 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.

11. DISPUTE RESOLUTION. If any controversy or claim should arise under this Agreement, the matter shall be referred to an individual designated by the Chief Executive Officer (or equivalent position) of Lexicon and an individual designated by the Chief Executive Officer (or equivalent position) of Genentech (the "Representatives"), who will attempt in good faith to resolve such controversy or claim promptly by negotiations. If the matter has not been resolved within [**] 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.

12. PAYMENTS, NOTICES AND OTHER COMMUNICATIONS. Any payments, notice or other communication pursuant to this Agreement shall be sufficiently made or given on the date of mailing if sent to such party by certified first class mail, return receipt requested, postage prepaid, addressed to it at its address below or as it shall designate by written notice given to the other party:

In the case of Genentech:

Genentech, Inc.
1 DNA Way
South San Francisco, California 94080
Attention: Corporate Secretary
cc: Vice President of Research

In the case of Lexicon:

Lexicon Genetics Incorporated
8800 Technology Forest Place
The Woodlands, Texas 77381
Attention: President
cc: Vice President, Intellectual Property

13. MISCELLANEOUS.

13.1 Entire Agreement. The parties hereto acknowledge that this Agreement sets forth the entire Agreement and understanding of the parties hereto as to the subject matter hereof, and shall not be subject to any change or modification except by the execution of a written instrument signed by the parties.

13.2 Severability. The provisions of this Agreement are severable, and in the event that any provisions of this Agreement shall be determined to be invalid or unenforceable under any controlling body of the law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof.

The parties shall thereafter in good faith amend this Agreement to provide for an acceptable provision to replace such invalid or unenforceable provision.

13.3 No Waiver. The failure of either party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other party.

13.4 Governing Law. All disputes arising out of or related to this Agreement, or the performance, enforcement, breach or termination hereof, and any remedies relating thereto, shall be construed, governed, interpreted and applied in accordance with the laws of the State of Delaware, U.S.A., except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent shall have been granted.

13.5 No Trademark Rights. Except as otherwise provided herein or agreed to in advance in writing, no right, express or implied, is granted by this Agreement to a party to use in any manner the names "Lexicon" or "Genentech," or any other trade name or trademark of a party or the names of any employees thereof, for any purpose.

13.6 Captions. The captions to this Agreement are for convenience only, and are to be of no force or effect in construing or interpreting any of the provisions of this Agreement.

13.7 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.

13.8 Independent Contractors. The relationship between Lexicon and Genentech is that of independent contractors. Lexicon and Genentech are not joint venturers, partners, principal and agent, master and servant, employer or employee, and have no other relationship other than independent contracting parties. Lexicon shall have no power to bind or obligate Genentech in any manner, other than as is expressly set forth in this Agreement. Likewise, Genentech shall have no power to bind or obligate Lexicon in any manner other than is expressly set forth in this Agreement.

IN WITNESS WHEREOF, the parties have duly executed this Agreement as of the Effective Date.

"GENENTECH"

GENENTECH, INC.

By:

Arthur D. Levinson
Chief Executive Officer

"LEXICON"

LEXICON GENETICS INCORPORATED

By:

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

APPENDIX A

PATENT RIGHTS

ISOGENIC DNA

U.S. Patent No. 5,789,215 issued August 4, 1998 entitled "Gene Targeting in Animal Cells Using Isogenic DNA Constructs"

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.(1)) 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: Thomas T. Thomas	Name: _____
Title: Treasurer	Title: _____
Wire Transfer Instructions:	Wire Transfer Instructions:

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 D

ADVANCED PHENOTYPIC PANELS

[**]

EXHIBIT E

EXCLUDED GENES

[**]

EXHIBIT F

FINANCIAL APPENDIX

1. SCOPE

As described in Section 8.14(b) of the Agreement, this Financial Appendix addresses the terms related to calculating Operating Profits (Losses) and the principles of reporting and communication between the Parties for Genentech IND Opted Products and Genentech Phase II Opted Products.

Defined terms are capitalized and may be used in the singular or plural. Capitalized terms used in this Financial Appendix and without definition herein shall be defined as in the Agreement.

2. PRINCIPLES OF REPORTING

Determination of Operating Profits (Losses), for a Genentech IND Opted Product or Genentech Phase II Opted Product will be based on each Party's respective financial information. A Party may choose to provide a consolidated worldwide pro-forma financial statement for itself and its respective Genentech Product Licensees or Lexicon Product Licensees, rather than separate financial statements for itself and its respective Genentech Product Licensees or Lexicon Product Licensees, in the following reporting format. The interpretation of the defined terms in such report shall be in accordance with GAAP (with the exception of certain Stock Based Compensation as described below) and this Agreement.

Gross Sales
less Sales Returns and Allowances
= Net Sales
less Cost of Sales
= Gross Profits
less Marketing Costs
less Sales Costs
less Research Costs
less Development Costs
less Other Operating Income/Expense
less Distribution Costs
less General and Administrative Costs
= Operating Profits (Losses)

If necessary, a Party will make the appropriate adjustments to the financial information it supplies under the Agreement to conform to the above format of reporting results of operations. Without limiting the foregoing, prior to the time that Gross Sales are obtained and if there are no incurred costs related to marketing, sales or sales support, the Parties may eliminate the above line items related thereto, and the costs thereof, and use only those terms relevant to the sharing of Research Costs and Development Costs. The Parties shall calculate Operating Profits (Losses) without duplication of any item in the categories set forth above.

3. FREQUENCY OF REPORTING

The fiscal year for the Agreement will be a Calendar Year.

Reporting will be at the times set forth in the following Report Table, with submissions due on the date indicated or the next business day if such date is a weekend or U.S. holiday:

[**]

The Parties may agree to modify the foregoing reporting cycles and deadlines. In the event that a Party substantially or materially changes its internal reporting cycles and deadlines generally, then the Parties shall discuss, in good faith, appropriate revisions to the foregoing reporting cycles and deadlines to reasonably accommodate such change.

Unless otherwise agreed by the Parties consistent with their responsibilities for sales and marketing, Genentech shall record all sales. [**].

Each Party will make available a financial representative to discuss the following, at the request of the other Party:

- Development Costs
- Research Costs
- Actual Results
- Forecasts
- Budgets
- Long Range Plans
- Gross Sales
- Sales Returns and Allowances
- Inventory Levels
- Sales and Marketing Costs
- other financial matters as appropriate, including methodologies for determining costs, actual amounts, forecasts, budgets and long range plans and the results of applying such methodologies

4. PAYMENTS BETWEEN THE PARTIES FOR OPERATING PROFITS (LOSSES)

Settlement payments based upon the agreed upon percentages of Operating Profits (Losses) per Section 8.14 will be made to the appropriate Party by the other Party via wire transfer of immediately available funds to an account designated by the receiving Party in writing within [**] of the time specified for the Final Consolidation & Variance report in the Report Table. A statement specifying how each payment was calculated shall also be submitted with each payment to the non-paying Party.

Sharing of Operating Profits (Losses) shall be based on actual amounts.

5. BUDGETS

Genentech shall prepare [**] budget for each Genentech IND Opted Product and Genentech Phase II Opted Product that describes the projected activities and related amounts pertaining to each line item of the calculation of Operating Profits (Losses) by Calendar Quarter. Lexicon will provide Genentech with its budget information for the foregoing products (by Calendar Quarter) to the extent that Lexicon is directly responsible for activities that impact the calculation of Operating Profits (Losses).

From time to time, Genentech may supplement the budgets under this Exhibit F with additional detail describing the projected activities and related amounts for U.S. (or ex-U.S., as appropriate) clinical trials and applications for Regulatory Approval.

[**]

6. RESPONSIBILITY FOR REPORTING

Genentech is responsible for generating consolidated reports. Lexicon will provide Genentech with financial statements within [**] for its activities, prepared in accordance with the terms contained in this Exhibit F in order for Genentech to prepare the consolidated reports. Genentech shall provide Lexicon with a copy of the consolidated reporting and other calculations that form the basis of determining payments between the Parties for Operating Profits (Losses) for Genentech IND Opted Products and Genentech Phase II Opted Products.

7. STOCK BASED COMPENSATION

For each of Allocable Overhead, Research Costs, Development Costs, Sales Costs, Cost of Sales, Distribution Costs, Marketing Costs, and General and Administrative Costs, the Parties will not include any costs associated with those components of stock based compensation that are required, under Statement of Financial Accounting Standards #123(R) (SFAS 123R) or successor thereto, to be recorded as an expense under GAAP.

8. DEFINITIONS

"Allocable Overhead" means fully-burdened costs incurred by a Party that are attributable to that Party's supervisory, shared services (e.g., dedicated sales and commercial support, market development, managed care, or the equivalent of the foregoing), occupancy, facility and equipment (excluding idle capacity charges for facilities and equipment), corporate bonus (to the extent not directly charged) and to its payroll, information systems, human relations and purchasing functions, and, in each case, which are reasonably allocated to company departments based on space occupied or headcount or other activity-based methods consistently applied by a Party. Allocable Overhead shall not include [**], and shall not duplicate General & Administrative Expenses hereunder.

"Cost of Sales" means the sum of: (a) Fully Burdened Manufacturing Cost (as defined below) of a Genentech IND Opted Product or Genentech Phase II Opted Product (in whatever form); (b) freight, insurance, customs charges, duty, temporary storage and other costs of shipping Genentech IND Opted Products and Genentech Phase II Opted Products to customers (to the extent actually incurred by the shipping Party and not reimbursed by the customer); and (c) any payments due to third parties with respect to the research, development, manufacture, use, sale,

offer for sale or import of Genentech IND Opted Products or Genentech Phase II Opted Products and incurred in accordance with Article 9, excluding any royalties already accounted for in Fully Burdened Manufacturing Cost.

"Development Costs" shall include, but are not limited to, costs of studies using cGMP materials in accordance with current Good Laboratory Practices and/or current Good Clinical Practices on the toxicological, pharmacokinetic, metabolic or clinical aspects of (i) a Lexicon Advanced Research Protein Candidate and associated Lexicon Advanced Research Product(s), (ii) a Genentech IND Opted Product or (iii) a Genentech Phase II Opted Product, as applicable, which studies are conducted internally or by individual investigators or consultants in each case as necessary for obtaining, maintaining and/or expanding marketing approval of such Genentech IND Opted Product and/or Genentech Phase II Opted Product, process development, process improvement, and recovery costs, failed clinical lots, qualification lots, and costs for preparing, submitting, reviewing or developing data or information for the purpose of submission to a governmental authority to obtain, maintain and/or expand marketing approval of a Genentech IND Opted Product and/or Genentech Phase II Opted Product. Such costs will include internal costs (e.g., salaries, benefits, travel, supplies and materials), applicable Allocable Overhead, and outside services and expenses. In determining "Development Costs" chargeable under this Agreement, each Party will use its respective project accounting systems, as consistently applied across all its projects.

"Distribution Costs" means the costs, including applicable Allocable Overhead, specifically identifiable to the distribution of a Genentech IND Opted Product or Genentech Phase II Opted Product by a Party, including customer services, collection of data about sales to hospitals and other end users, order entry, billing, shipping, logistics, credit and collection and other such activities.

"FTE" means the equivalent of one employee working on a dedicated full time basis for one year (consisting of at least a total of [**] per year of dedicated effort) performing scientific, technical or managerial work on or directly related to the research of a Lexicon Advanced Research Candidate and associated Lexicon Advanced Research Product(s), Genentech IND Opted Product or Genentech Phase II Opted Product, as applicable. Any given employee performing such scientific, technical or managerial work will be [**] for the purposes of calculating FTE costs. For the purposes of calculating FTEs for a given period, Lexicon shall divide the cumulative hours charged to the foregoing program(s) based on its project accounting system (and subject to the foregoing annual hour limits for each employee) by [**] for a calendar year (or the appropriate fraction thereof). For purposes of clarity the denominator of the foregoing calculation for [**].

"FTE Costs" means the amounts (which amounts include salaries, fringe benefits, overtime, travel, supplies and Allocable Overhead) determined by multiplying (i) the number of FTEs allocated by a Party during the relevant time period, subject to any limitations set forth in the applicable Clinical Development Plan, by (ii) the applicable FTE Rate(s).

"FTE Rate" means [**], to be adjusted annually (beginning in [**]) for inflation using the latest available [**] as a simple percentage. Such adjustments shall be the responsibility of the Steering Committee.

"Fully Burdened Manufacturing Cost" or "FBMC" means [**] of a Party's manufacturing cost (as defined in the Party's accounting policies consistently applied), which shall comprise the sum of:

(a) the actual cost of goods produced, as determined by a Party manufacturing or contracting with a Third Party for each stage of the manufacturing process, in accordance with GAAP (as used in this definition of FBMC, the "Cost of Goods"), including product quality assurance/control costs, plus applicable Allocable Overhead; and

(b) all royalties payable under license(s) taken by a Party under a Third Person's patents or patent applications in accordance with Article 9 that, but for such license(s), would be infringed by the manufacture of a Genentech IND Opted Product or Genentech Phase II Opted Product by such Party.

[**].

"General and Administrative Costs" or "G&A Costs" means costs equal to [**].

"Gross Sales" has the meaning in Section 1.44 of the Agreement.

"Interest Rate" has the meaning in Section 1.48 of the Agreement.

"Marketing Costs" means the specific direct costs incurred by a Party directly on account of a Collaboration Product for marketing, promotion, advertising, promotional materials, professional education, product related public relations, relationships with opinion leaders and professional societies, market research (before and after product approval), healthcare economics studies, post-marketing studies not required to maintain product approvals (e.g., investigator sponsored trials, product registries and medical information), and other similar activities. Such costs will include both internal costs (e.g., salaries, benefits, travel, supplies and materials), applicable Allocable Overhead, and outside services and expenses (e.g., consultants, agency fees, meeting costs), in all cases as directly applicable to a specific Genentech IND Opted Product or Genentech Phase II Opted Product. "Marketing Costs" shall also include activities related to obtaining reimbursement from payers and costs of sales and marketing data, in all cases only as directly applicable to a specific Genentech IND Opted Product or Genentech Phase II Opted Product. "Marketing Costs" will specifically exclude the costs of activities that promote either Party's business as a whole without being product specific (e.g., corporate image advertising).

"Operating Profits (Losses)" means Gross Sales of all Genentech IND Opted Products or Genentech Phase II Opted Products less the following items with respect to each Genentech IND Opted Product or Genentech Phase II Opted Product Collaboration Product, all for a given period: Sales Returns and Allowances, Cost of Sales, Marketing Costs, Sales Costs, Research Costs, Development Costs, Other Operating Income/Expense, Distribution Costs, and General and Administrative Costs, all of which as properly chargeable and allocable on a product-by-product basis. All calculations will be made using, and all defined and undefined terms will be construed in accordance with GAAP and consistent with generally accepted costing methods (including appropriate Allocable Overhead) for similar products in the pharmaceutical industry.

"Other Operating Income/Expense" means any of the following:

- actual inventory write-offs of any Genentech IND Opted Product or Genentech Phase II Opted Product, to the extent not previously captured

- third party indemnification expenses

- Patent and Trademark costs

- product liability insurance

Other Operating Income/Expense shall not include any costs that are already included in Cost of Sales, Research Costs, Development Costs, Marketing Costs, Sales Costs, Distribution Costs, General and Administrative Costs, Sales Returns and Allowances, and Allocable Overhead for any of the foregoing cost categories, and in every case shall only include costs directly allocable to a Genentech IND Opted Product or Genentech Phase II Opted Product in accordance with GAAP.

"Patent and Trademark Costs" means the fees and expenses paid to outside legal counsel and experts, and filing and maintenance expenses, incurred after the date on which Genentech exercises its IND Opt-In or Phase II Opt-In (as applicable) in connection with the establishment and maintenance of (i) Project Patents related to Genentech IND Opted Products and Genentech Phase II Opted Products and (ii) Genentech Trademarks, in each case including the costs of any interference, reexamination, reissue, opposition and revocation proceedings.

"Report Table" means the table set forth in paragraph 3 of this Exhibit F that specifies the frequency and timing of submissions for specific reporting events.

"Research Costs" means the costs other than Development Costs incurred for screening, lead optimization, in vitro and in vivo testing of (i) a Lexicon Advanced Research Candidate and associated Lexicon Advanced Research Product(s), (ii) a Genentech IND Opted Product or (iii) a Genentech Phase II Opted Product, as applicable, including the costs of studies on the toxicological, pharmacokinetic and metabolic aspects of the foregoing. Research Costs will include internal costs (e.g., salaries, benefits, travel, supplies and materials), applicable Allocable Overhead, and outside services and expenses. Research Costs shall not duplicate Development Costs or costs incurred by Lexicon in conducting Advanced Research Phenotypic Panels. The parties agree and understand that, except for out-of-pocket costs incurred for Third Person contracts and services, Research Costs incurred by Lexicon shall be calculated on the basis of FTE Costs. In determining "Research Costs" chargeable under this Agreement, Lexicon will use its project accounting system, as consistently applied across all its projects.

"Sales Costs" means costs, including Allocable Overhead, approved as a part of the budget incorporated in the then-current commercialization plan for a Genentech IND Opted Product or Genentech Phase II Opted Product, incurred by a Party or for its account and specifically identifiable to the sales efforts of Genentech IND Opted Products or Genentech Phase II Opted Products to all markets, including the managed care market. "Sales Costs" shall include costs associated with sales representatives for Genentech IND Opted Products and Genentech Phase II Opted Products, including compensation, benefits and travel, supervision and training of the sales representatives, sales meetings, and other sales expenses. "Sales Costs" will not include the start-up costs associated with a Party's sales force, including recruiting, relocation and other

similar costs. Sales Costs shall not include any costs that are already included in Cost of Sales, Development Costs, Marketing Costs, Distribution Costs, Other Operating Income/Expense, Sales Returns and Allowances, General and Administrative Costs, and Allocable Overhead for any of the foregoing cost categories, and in every case shall only include costs directly allocable to a Genentech IND Opted Product or Genentech Phase II Opted Product in accordance with GAAP.

"Sales Returns and Allowances" has the meaning in Section 1.98 of the Agreement.

EXHIBIT G

GENENTECH EXCLUDED IP

[**]

EXHIBIT H

[**]

EXHIBIT I

[**]

Exhibit J

Press Release

(LEXICON LOGO)

NEWS RELEASE

FOR IMMEDIATE RELEASE

LEXICON GENETICS EXPANDS ALLIANCE WITH GENENTECH TO DISCOVER AND DEVELOP BIOTHERAPEUTIC DRUGS

Broad alliance to accelerate the development and commercialization of drugs from Genentech's SPDI program

THE WOODLANDS, TEXAS, DECEMBER 1, 2005 - Lexicon Genetics Incorporated (Nasdaq: LEXG) announced the expansion of its drug discovery alliance with Genentech, Inc. (NYSE: DNA) to include the advanced research, development and commercialization of new biologic drugs. Under the expanded alliance, Lexicon will conduct advanced research on a broad subset of targets included in Genentech's Secreted Protein Discovery Initiative (SPDI) program and validated using Lexicon's proprietary gene knockout technology. Lexicon may develop and commercialize drugs modulating up to six of these targets. Genentech retains an option on the potential development and commercialization of these drugs under a cost and profit sharing arrangement, with Lexicon having certain conditional rights to co-promote drugs on a worldwide basis.

Lexicon will receive a total of $25 million in upfront and milestone payments and research funding during the three-year advanced research portion of the expanded alliance. Lexicon will also receive payments from Genentech upon achievement of milestones related to the development and regulatory approval of certain drugs resulting from the alliance that are developed and commercialized by Genentech. Lexicon is entitled to receive royalties on net sales of these products, provided they are not included in a cost and profit sharing arrangement. Genentech is entitled to receive milestone payments in the event of regulatory approval and royalties on net sales of products commercialized by Lexicon outside of a cost and profit sharing arrangement.

The expanded alliance is designed to combine Lexicon's novel target validation capabilities with Genentech's expertise in research, clinical development, biologics manufacturing and commercialization to advance the development of targets within Genentech's SPDI program. Lexicon will conduct advanced preclinical research to further elucidate the functions of certain potential therapeutic proteins and antibody targets identified in the companies' initial alliance. Genentech has granted Lexicon the exclusive right to develop and commercialize drugs modulating up to six of these targets. Two targets for metabolic disease have already been designated as Lexicon targets and are currently in preclinical research at Lexicon. Lexicon retains non-exclusive rights for the development and commercialization of small molecule drugs addressing the targets included in the alliance.

"The expansion of our alliance with Genentech reflects the success of our initial collaboration and is a validation of our gene knockout approach to defining gene function for drug discovery," said Arthur T. Sands, M.D., Ph.D., president and chief executive officer of Lexicon. "The next phase of the alliance entails further advancing Genentech's SPDI program and is a signal of our progress in biologic drug development. We look forward to working closely with a proven leader like Genentech in an effort to develop new drugs for patients in need."

LEXICON ANALYST AND INVESTOR EVENT:

Lexicon will discuss its expanded alliance with Genentech at its analyst and investor luncheon in New York City at noon today, Thursday, December 1, 2005, at the New York Palace Hotel. Dr. Arthur T. Sands, president and chief executive officer of Lexicon, will host the event. Materials from the presentation will be posted on Lexicon's corporate website, www.lexicon-genetics.com.

ABOUT LEXICON GENETICS

Lexicon Genetics is a biopharmaceutical company focused on the discovery and development of breakthrough treatments for human disease. Lexicon is systematically discovering the physiological and behavioral functions of genes to identify potential points of therapeutic intervention, or drug targets. Lexicon makes these discoveries using its proprietary gene knockout technology to model the physiological effects that could be expected from prospective drugs directed against novel targets. The Company has advanced knockout-validated targets into drug discovery programs in six therapeutic areas: diabetes and obesity, cardiovascular disease, psychiatric and neurological disorders, cancer, immune system disorders and ophthalmic disease. Lexicon is working both independently and through strategic collaborations and alliances to accelerate the development and commercialization of its discoveries. Additional information about Lexicon is available through its corporate website, www.lexicon-genetics.com.

SAFE HARBOR STATEMENT

This press release contains "forward-looking statements," including statements about Lexicon's growth and future operating results, discovery and development of products, strategic alliances and intellectual property, as well as other matters that are not historical facts or information. These forward-looking statements are based on management's current assumptions and expectations and involve risks, uncertainties and other important factors, specifically including those relating to Lexicon's ability to successfully conduct preclinical development of its drug candidates and advance such candidates into clinical development, achieve its operational objectives, obtain patent protection for its discoveries and establish strategic alliances, as well as those relating to manufacturing, the regulatory process, intellectual property rights, and the therapeutic or commercial value of its drug candidates, that may cause Lexicon's actual results to be materially different from any future results expressed or implied by such forward-looking statements. Information identifying such important factors is contained under "Factors Affecting Forward-Looking Statements" and "Business - Risk Factors" in Lexicon's annual report on Form 10-K for the year ended December 31, 2004, as filed with the Securities and Exchange Commission. Lexicon undertakes no obligation to update or revise any such forward-looking statements, whether as a result of new information, future events or otherwise.

# # #

CONTACT FOR LEXICON GENETICS:
Bobbie Faulkner
Manager, Investor Relations
281/863-3503
bfaulkner@lexgen.com

EXHIBIT K

[**] OVEREXPRESSION ANALYSIS

[**]

EXHIBIT L

AMENDMENT NO. 1 TO NOTE AGREEMENT

THIS AMENDMENT NO. 1 TO NOTE AGREEMENT is entered into as of November 30, 2005 (this "Amendment"), by and between LEXICON GENETICS INCORPORATED, a Delaware corporation (herein called "Borrower"), and GENENTECH, INC., a Delaware corporation (herein called "Lender"). Capitalized terms not otherwise defined herein shall have their respective meanings in the Note Agreement (as defined below).

WHEREAS, Borrower and Lender are parties to that certain Note Agreement, dated as of December 17, 2002 (the "Note Agreement"), pursuant to which Lender loaned to Borrower a principal amount equal to $4,000,000.00; and

WHEREAS, Borrower and Lender are parties to that certain Second Amended and Restated Collaboration and License Agreement of even date herewith (the "Collaboration Agreement"); and

WHEREAS, in connection with the Collaboration Agreement and in consideration of two non-SPDI mouse knock-outs to be provided to Lender by Borrower, the parties wish to amend the Note Agreement as set forth below.

NOW, THEREFORE, Borrower and Lender hereby agree as follows:

1. In Section 1 of the Note Agreement, "Section 8.25" shall replace "Article 7.14".

2. Section 2(A) of the Note Agreement shall be amended and restated in its entirety to read as follows:

"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, 2006, (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."

3. Section 4(A) of the Note Agreement shall be amended to include this Amendment in the definition of "Loan Documents."

4. Borrower hereby confirms that the representations in Section 4 of the Note Agreement are true and correct as of the date of this Amendment. Any references to "Note Agreement" in this Section 4 shall mean the Amendment.

5. Lender hereby confirms that the representations in Section 5 of the Note Agreement are true and correct as of the date of this Amendment. Any references to "Note Agreement" in this Section 5 shall mean the Amendment.

6. No other changes. Except as expressly modified by this Amendment, all of the terms and conditions of the Note Agreement shall remain in full force and effect. This Amendment constitutes the entire understanding of the parties with respect to the subject matter hereof and supersedes any prior understanding, oral or written, between the parties with respect thereto.

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.	LEXICON GENETICS INCORPORATED
By: _____	By: _____
Name: David A. Ebersman	Name: _____
Title: Senior Vice President and Chief Financial Officer	Title: _____

EXHIBIT M

CERTAIN PROJECT GENES

[**]

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements on Form S-8 (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 (Nos. 333-67294, 333-101549, 333-108855, 333-111821 and 333-122214) of our reports dated February 27, 2006, with respect to the consolidated financial statements of Lexicon Genetics Incorporated, Lexicon Genetics Incorporated management's assessment of the effectiveness of internal control over financial reporting, and the effectiveness of internal control over financial reporting of Lexicon Genetics Incorporated, included in the Annual Report (Form 10-K) for the year ended December 31, 2005.

/s/ ERNST & YOUNG LLP

Houston, Texas

February 27, 2006

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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

5. The registrant's other certifying 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 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 3, 2006

/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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

5. The registrant's other certifying 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 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 3, 2006

/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, 2005, 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 3rd day of March, 2006.

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