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

FORM 10-Q

(MARK ONE)

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE QUARTERLY PERIOD ENDED MARCH 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)

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 whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act.

Yes [X] No [ ]

As of May 3, 2005, 63,568,464 shares of the registrant's common stock, par value $0.001 per share, were outstanding.

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LEXICON GENETICS INCORPORATED

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FACTORS AFFECTING FORWARD LOOKING STATEMENTS

This quarterly report on Form 10-Q 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 2. Management's Discussion and Analysis of Financial Condition and Results of Operations - 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 or 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 quarterly report on Form 10-Q to conform these statements to actual results, unless required by law.

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

LEXICON GENETICS INCORPORATED

CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS, EXCEPT PAR VALUE)

	AS OF MARCH 31, 2005	AS OF DECEMBER 31, 2004
ASSETS	(UNAUDITED)	
Current assets:		
Cash and cash equivalents	$ 12,809	$ 14,612
Short-term investments, including restricted investments of $430	57,930	72,946
Accounts receivable, net of allowance for doubtful accounts of $75	1,747	5,345
Other receivables	-	1,052
Prepaid expenses and other current assets	3,084	4,793
Total current assets	75,570	98,748
Property and equipment, net of accumulated depreciation of $42,596 and $41,892, respectively	85,026	84,573
Goodwill	25,798	25,798
Intangible assets, net of amortization of $4,460 and $4,160, respectively	1,540	1,840
Other assets	974	1,021
Total assets	$ 188,908	$ 211,980
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 3,495	$ 7,574
Accrued liabilities	5,682	6,945
Current portion of deferred revenue	19,066	19,500
Current portion of long-term debt	4,705	4,691
Total current liabilities	32,948	38,710
Deferred revenue, net of current portion	14,136	18,092
Long-term debt	32,748	32,940
Other long-term liabilities	677	644
Total liabilities	80,509	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; 63,552 and 63,491 shares issued and outstanding	63	63
Additional paid-in capital	382,757	382,666
Deferred stock compensation	(7)	(20)
Accumulated deficit	(274,381)	(261,115)
Accumulated other comprehensive loss	(33)	-
Total stockholders' equity	108,399	121,594
Total liabilities and stockholders' equity	$ 188,908	$ 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)
(UNAUDITED)

	THREE MONTHS ENDED MARCH 31,	
	2005	2004
Revenues:		
Subscription and license fees	$ 5,042	$ 3,548
Collaborative research	8,883	8,294
Total revenues	13,925	11,842
Operating expenses:		
Research and development	22,760	22,401
General and administrative	4,432	5,044
Total operating expenses	27,192	27,445
Loss from operations	(13,267)	(15,603)
Interest income	491	432
Interest expense	(805)	(291)
Other income, net	315	(4)
Net loss	$ (13,266)	$ (15,466)
Net loss per common share, basic and diluted	$ (0.21)	$ (0.25)
Shares used in computing net loss per common share, basic and diluted	63,525	63,065

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

LEXICON GENETICS INCORPORATED

CONSOLIDATED STATEMENTS OF CASH FLOWS
(IN THOUSANDS)
(UNAUDITED)

	THREE MONTHS ENDED MARCH 31,	
	2005	2004
Cash flows from operating activities:		
Net loss	$ (13,266)	$ (15,466)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	2,585	2,821
Amortization of intangible assets, other than goodwill	300	300
Amortization of deferred stock compensation	(11)	830
Loss on disposal of property and equipment	10	-
Changes in operating assets and liabilities:		
Decrease in accounts receivable	4,650	3,390
Decrease in prepaid expenses and other current assets	1,709	489
(Increase) decrease in other assets	47	(22)
Decrease in accounts payable and other liabilities	(5,309)	(2,890)
Decrease in deferred revenue	(4,390)	(4,939)
Net cash used in operating activities	(13,675)	(15,487)
Cash flows from investing activities:		
Purchases of property and equipment	(3,133)	(1,291)
Proceeds from disposal of property and equipment	85	-
Increase in restricted cash	-	(147)
Purchases of investments	(29,226)	(46,633)
Maturities of investments	44,208	34,061
Net cash provided by investing activities	11,934	14,010
Cash flows from financing activities:		
Proceeds from issuance of common stock	116	1,202
Repayment of debt borrowings	(178)	-
Net cash provided by (used in) financing activities	(62)	1,202
Net decrease in cash and cash equivalents	(1,803)	(28,295)
Cash and cash equivalents at beginning of period	14,612	35,856
Cash and cash equivalents at end of period	$ 12,809	$ 7,561
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 692	$ 206
Supplemental disclosure of non-cash investing and financing activities:		
Unrealized loss on investments	$ (33)	$ -
Reversal of deferred stock compensation, in connection with stock options	$ 24	$ 7
Retirement of property and equipment	$ 1,976	$ 30

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

LEXICON GENETICS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

1. BASIS OF PRESENTATION

The accompanying unaudited consolidated financial statements of Lexicon Genetics Incorporated (Lexicon or the Company) have been prepared in accordance with generally accepted accounting principles for interim financial information and pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements.

In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation have been included. Operating results for the three-month period ended March 31, 2005 are not necessarily indicative of the results that may be expected for the year ended December 31, 2005.

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

For further information, refer to the financial statements and footnotes thereto included in Lexicon's annual report on Form 10-K for the year ended December 31, 2004, as filed with the SEC.

2. RECLASSIFICATION

As of March 31, 2004 and December 31, 2003, Lexicon reclassified auction rate securities of $43.6 million and $46.1 million, respectively, from cash equivalents to short-term investments and $42.4 million and $42.6 million, respectively, from restricted cash to short-term investments. The accompanying consolidated statement of cash flows for the three months ended March 31, 2004 has been adjusted to reflect these reclassifications.

3. NET LOSS PER SHARE

Net loss per share is computed using the weighted average number of shares of common stock outstanding during the applicable period. Shares associated with stock options and warrants are not included because they are antidilutive. There are no differences between basic and diluted net loss per share for all periods presented.

4. STOCK-BASED COMPENSATION

Lexicon's stock-based compensation plans are accounted for under the recognition and measurement provisions of Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees, and Related Interpretations." Under the intrinsic value method described in APB Opinion No. 25, no compensation expense is recognized if the exercise price of the employee stock option equals the market price of the underlying stock on the date of grant. Lexicon recognized no stock-based compensation expense during the three-month period ended March 31, 2005 and $0.8 million during the three-month period ended March 31, 2004, which expenses were 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 Financial Accounting Standards Board

(FASB) Statement of Financial Accounting Standards (SFAS) No. 123 "Accounting for Stock Based Compensation," had been applied to all outstanding and unvested awards in each period:

	THREE MONTHS ENDED MARCH 31,	
	2005	2004
Net loss, as reported:	$ (13,266)	$(15,466)
Add: Stock-based employee compensation expense included in reported net loss	(11)	830
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards	(3,130)	(4,882)
Pro forma net loss	$ (16,407)	$(19,518)
Net loss per common share, basic and diluted		
As reported	$ (0.21)	$ (0.25)
Pro forma	$ (0.26)	$ (0.31)

5. DEBT OBLIGATIONS

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

Mortgage Loan: In April 2004, Lexicon purchased its facilities in The Woodlands, Texas that were previously subject to a synthetic lease. The Company 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.

6. COMMITMENTS AND CONTINGENCIES

In May 2002, Lexicon's subsidiary Lexicon Pharmaceuticals (New Jersey), Inc. leased a 76,000 square-foot laboratory and office space in Hopewell, New Jersey under an agreement which expires in June 2013. The lease provides for an escalating yearly 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. Lexicon is the guarantor of the obligations of its subsidiary under the lease. The Company is required to maintain restricted investments to collateralize the Hopewell lease. As of March 31, 2005, the Company had $430,000 in restricted investments to collateralize a standby letter of credit for this lease.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

We are a biopharmaceutical company focused on discovering and developing 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 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 many 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 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 research collaborations and technology licenses, expirations of our research collaborations, the success rate of our discovery efforts leading to opportunities for new research collaborations and licenses, as well as milestone payments and royalties, the timing and willingness of collaborators to commercialize products which may result in royalties, and general and industry-specific economic conditions which may affect research and development expenditures. Our future revenues from collaborations and alliances 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 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 March 31, 2005, we had an accumulated deficit of $274.4 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 and Genome5000(TM) programs, the development and analysis of knockout mice and our other target validation research efforts, and the development of compound libraries. General and administrative expenses consist primarily of salaries and related expenses for executive, finance and other administrative personnel, professional fees and other corporate expenses, including 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.

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 and annual research funding under our drug discovery alliances are recognized as revenue on a straight-line basis over the estimated period of service, generally the contractual research term, to the extent they are non-refundable. 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 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.

Prior to preclinical development work, we are unable to segregate the costs related to research performed on drug candidates because the drug candidate is often not specifically identified until the later stages of our research. With the commencement of formal preclinical development in 2005, we will account on a program-by-program basis for the costs related to the development of the identified drug products.

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.

RESULTS OF OPERATIONS

Three Months Ended March 31, 2005 and 2004

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

	THREE MONTHS ENDED MARCH 31,	
	2005	2004
Total revenues	$ 13.9	$ 11.8
Dollar increase	$ 2.1	
Percentage increase	18%	

- Subscription and license fees - Revenue from subscriptions and license fees increased 42% to $5.0 million primarily due to technology license fees received from Deltagen, Inc. in connection with the settlement of Lexicon's claim in Deltagen's bankruptcy proceedings. This was offset in part by decreased subscription fees as a result of the termination of Incyte Corporation's and Bristol-Myers Squibb's subscriptions to our LexVision(R) database in June 2004 and December 2004, respectively.

- Collaborative research - Revenue from collaborative research increased 7% to $8.9 million primarily due to our recognition of revenues under our hypertension drug discovery alliance with Takeda, which was entered into in July 2004. This was offset in part by a decrease in revenues from the termination of our therapeutic protein discovery alliance with Incyte Corporation in June 2004.

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

	THREE MONTHS ENDED MARCH 31,	
	2005	2004
Total research and development expense....	$ 22.8	$ 22.4
Dollar increase.....	$ 0.4	
Percentage increase.....	2%	

Research and development expenses consist primarily of salaries and other personnel-related expenses, stock-based compensation expenses, laboratory supplies, facility and equipment costs, consulting and other services. The change in the three months ended March 31, 2005 as compared to the corresponding period in 2004 resulted primarily from the following costs:

- Personnel - Personnel costs increased 12% to $11.7 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.

- Stock-based compensation - We had no stock-based compensation expenses for the three months ended March 31, 2005, as compared to $0.4 million for the corresponding period in 2004, primarily relating to option grants made prior to our April 2000 initial public offering. All deferred stock compensation relating to these options was fully amortized as of January 31, 2004 when these options became fully vested.

- Laboratory supplies - Laboratory supplies expense decreased 9% to $3.1 million due primarily to the bulk purchase of certain supplies in the prior year quarter.

- Facilities and equipment - Facilities and equipment costs were unchanged at $5.1 million in both of the three-month periods ended March 31, 2005 and 2004.

- Third-party services - Costs associated with third-party services decreased 18% to $1.4 million primarily due to the termination in June 2004 of our LifeSeq(R) Gold database subscription, offset in part by an increase in third-party research costs. Costs associated with third-party services include third-party research, subscriptions to third-party databases, technology licenses, legal and patent fees.

- Other - Other costs increased by 11% to $1.3 million primarily related to increased information technology costs.

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

	THREE MONTHS ENDED MARCH 31,	
	2005	2004
Total general and administrative expense.....	$ 4.4	$ 5.0
Dollar decrease.....	$ 0.6	
Percentage decrease.....	12%	

General and administrative expenses consist primarily of personnel costs to support our research activities, stock-based compensation expense, facility and equipment costs and professional fees, such as legal fees. The change in the three months ended March 31, 2005 as compared to the corresponding period in 2004 resulted primarily from the following costs:

- Personnel - Personnel costs decreased 6% to $2.7 million. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.

- Stock-based compensation - Stock-based compensation expense, primarily relating to option grants made prior to our April 2000 initial public offering, decreased 100%. All deferred stock compensation relating to these options was fully amortized as of January 31, 2004 when these options became fully vested.

- Facilities and equipment - Facilities and equipment costs decreased 6% to $0.8 million.

- Professional fees - Professional fees increased 23% to $0.4 million primarily due to increased consulting fees.

- Other - Other costs decreased 8% to $0.6 million.

Interest Income. Interest income increased 14% to $0.5 million in the three months ended March 31, 2005 from $0.4 million in the corresponding period in 2004.

Interest Expense. Interest expense increased to $0.8 million in the three months ended March 31, 2005 from $0.3 million in the corresponding period in 2004. The increase was attributable to the interest expense on the $34.0 million mortgage loan on our facilities in The Woodlands, Texas.

Net Loss and Net Loss Per Common Share. Net loss decreased 14% to $13.3 million in the three months ended March 31, 2005 from $15.5 million in the corresponding period in 2004. Net loss per common share decreased to $0.21 in the three months ended March 31, 2005 from $0.25 in the corresponding period in 2004. Net loss includes stock-based compensation expense of $0.8 million in the three months ended March 31, 2004.

Our quarterly operating results have fluctuated in the past and are likely to do so in the future, and we believe that quarter-to-quarter comparisons of our operating results are not a good indication of our future performance.

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, equipment financing arrangements and leasing arrangements. From our inception through March 31, 2005, we had received net proceeds of

$294.9 million from issuances of common and preferred stock, including $203.2 million of net proceeds from the initial public offering of our common stock in April 2000 and $50.1 million from our July 2003 common stock offering. In addition, from our inception through March 31, 2005, we received $238.1 million in cash payments from drug discovery alliances, target validation collaborations, database subscription and technology license fees, sales of compound libraries and reagents, and government grants, of which $207.0 million had been recognized as revenues through March 31, 2005.

As of March 31, 2005, we had $70.7 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 investments) as of December 31, 2004. We used cash of $13.7 million in operations in the three months ended March 31, 2005. This consisted primarily of the net loss for the period of $13.3 million offset by non-cash charges of $2.6 million related to depreciation expense and $0.3 million related to amortization of intangible assets other than goodwill; a $4.4 million decrease in deferred revenue; and changes in other operating assets and liabilities of $1.1 million. Investing activities provided cash of $11.9 million in the three months ended March 31, 2005, primarily due to net maturities of short-term investments of $15.0 million. This was offset by purchases of property and equipment of $3.1 million. We used cash of $0.1 million in financing activities.

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.

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

In December 2002, we borrowed $4.0 million under a note agreement with Genentech. The proceeds of the loan are to be used to fund research efforts under our alliance with Genentech for the discovery of therapeutic proteins and antibody targets. The note matures on or before December 31, 2005, but we may prepay it at any time. We may repay the note, at our option, in cash, in shares of our common stock valued at the then-current market value, or in a combination of cash and shares, subject to certain limitations. The note accrues interest at an annual rate of 8%, compounded quarterly.

Our future capital requirements will be substantial and will depend on many factors, including our ability to obtain alliance, collaboration and technology license agreements, the amount and timing of payments under such agreements, the level and timing of our research and development expenditures, market acceptance of our products, the resources we devote to developing and supporting our products and other factors. Our capital requirements will also be affected by any expenditures we make in connection with license agreements and acquisitions of and investments in complementary technologies and businesses. We expect to devote substantial capital resources to continue our research and development efforts, to expand our support and product development activities, and for other general corporate activities. We believe that our current unrestricted cash and investment balances and revenues we expect to derive from drug discovery alliances, target validation collaborations and technology licenses will be sufficient to fund our operations at least through the next two years. During or after this period, if cash generated by operations is insufficient to satisfy our liquidity requirements, we will need to

sell additional equity or debt securities or obtain additional credit arrangements. Additional financing may not be available on terms acceptable to us or at all. The sale of additional equity or convertible debt securities may result in additional dilution to our stockholders.

DISCLOSURE ABOUT MARKET RISK

We are exposed to limited market and credit risk on our cash equivalents, which have maturities of three months or less at the time of purchase. We maintain a short-term investment portfolio which consists of U.S. government agency debt obligations, investment grade commercial paper, corporate debt securities and certificates of deposit that mature within twelve months 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.

RISK FACTORS

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

Risks Related to Our Company and Business

- we have a history of net losses, and we expect to continue to incur net losses and may not achieve or maintain profitability
- we will need additional capital in the future and, if it is not available, we will have to curtail or cease operations
- any sale of additional equity securities in the future may be dilutive to our stockholders
- we are an early-stage company, and we may not successfully develop or commercialize any therapeutics or drug targets that we have identified
- we face substantial competition in the discovery of the DNA sequences of genes and their functions and in our drug discovery and product development efforts
- we rely heavily on our collaborators to develop and commercialize pharmaceutical products based on genes that we identify as promising candidates for development as drug targets, and our collaborators' efforts may fail to yield pharmaceutical products on a timely basis, if at all
- we rely on several key collaborators for a significant portion of our revenues, the loss of any of which would negatively impact our business to the extent such losses are not offset by additional collaborators
- cancellations by or conflicts with our collaborators could harm our business
- we may be unsuccessful in developing and commercializing pharmaceutical products on our own
- 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 may engage in future acquisitions, which may be expensive and time consuming and from which we may not realize anticipated benefits

- if we lose our key personnel or are unable to attract and retain additional personnel, we may be unable to pursue collaborations or develop our own products

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

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

- 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

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

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

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

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

- 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, and we may not prevail in any such litigation or other dispute or be able to obtain required licenses

- we use intellectual property that we license from third parties, and if we do not comply with these licenses, we could lose our rights under them

- 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, and as a result, our international competitors could be granted foreign patent protection with respect to our discoveries

- we may be unable to protect our trade secrets

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

- our industry is subject to extensive and uncertain government regulatory requirements, which could significantly hinder our ability, or the ability of our collaborators, to obtain, in a timely

manner or at all, government approval of products based on genes that we identify, or to commercialize such products

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

- 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

- 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

- we may be sued for product liability

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

For additional discussion of the risks and uncertainties that affect our business, see "Item 1. Business - Risk Factors" included in our annual report on Form 10-K for the year ended December 31, 2004, as filed with the Securities and Exchange Commission.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

See "Disclosure about Market Risk" under "Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations" for quantitative and qualitative disclosures about market risk.

ITEM 4. 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 (the "Exchange Act")) are sufficiently effective to ensure that the information required to be disclosed by us in the reports we file under the 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.

PART II OTHER INFORMATION

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

(a) Exhibits

EXHIBIT NO.	DESCRIPTION
10.1	-- Consulting Agreement with C. Thomas Caskey, M.D. dated March 28, 2005 (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K dated March 28, 2005 and incorporated by reference herein)
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

(b) Reports on Form 8-K:

On January 7, 2005, we filed a Current Report on Form 8-K dated January 7, 2005 related to our financial results for the year ended December 31, 2004 and our expectations with respect to our financial results for the year ending December 31, 2005.

On February 24, 2005, we filed a Current Report on Form 8-K dated February 24, 2005 related to our issuance of a press release reporting our financial results for the year and quarter ended December 31, 2004, which press release included our consolidated balance sheet data and consolidated statements of operations data for the periods.

SIGNATURES

Pursuant to the requirements 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: May 5, 2005 By: /s/ Arthur T. Sands

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

Date: May 5, 2005 By: /s/ Julia P. Gregory

Julia P. Gregory
Executive Vice President, Corporate Development
and Chief Financial Officer

INDEX TO EXHIBITS

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32.1	-- Certification of CEO and CFO Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

EXHIBIT 31.1

CERTIFICATIONS

I, Arthur T. Sands, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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 the registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: May 5, 2005

/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 Quarterly Report on Form 10-Q 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 the registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: May 5, 2005

/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 Quarterly Report on Form 10-Q for the period ended March 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 5th day of May, 2005.

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