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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM 10-Q**

**(Mark One)**

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

**For the Quarterly Period Ended March 31, 2007**

**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 Pharmaceuticals, Inc.**

**(Exact Name of Registrant as Specified in its Charter)**

**Delaware**  
**(State or Other Jurisdiction of  
Incorporation or Organization)**

**76-0474169**  
**(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  No

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 Exchange Act. (Check one)

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes  No

As of May 8, 2007, 78,310,627 shares of the registrant's common stock, par value \$0.001 per share, were outstanding.

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# Lexicon Pharmaceuticals, Inc.

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The Lexicon name and logo, LexVision<sup>®</sup> and OmniBank<sup>®</sup> are registered trademarks and Genome5000<sup>™</sup>, e-Biology<sup>™</sup> and 10<sub>TO</sub>10<sup>™</sup> are trademarks of Lexicon Pharmaceuticals, Inc.

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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 “Part II, Item 1A. – 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 Pharmaceuticals, Inc.

#### Consolidated Balance Sheets (In thousands, except par value)

	As of March 31, 2007 (unaudited)	As of December 31, 2006
<b><u>Assets</u></b>		
Current assets:		
Cash and cash equivalents.....	\$ 19,608	\$ 30,226
Short-term investments, including restricted investments of \$430 .....	39,910	49,773
Accounts receivable, net of allowance for doubtful accounts of \$35 .....	1,722	1,186
Prepaid expenses and other current assets.....	3,537	4,367
Total current assets .....	64,777	85,552
Property and equipment, net of accumulated depreciation and amortization of \$59,155 and \$56,905, respectively.....	76,041	78,192
Goodwill.....	25,798	25,798
Other assets .....	752	724
Total assets .....	\$ 167,368	\$ 190,266
<b><u>Liabilities and Stockholders' Equity</u></b>		
Current liabilities:		
Accounts payable .....	\$ 4,366	\$ 6,513
Accrued liabilities .....	6,772	7,325
Current portion of deferred revenue.....	31,198	31,312
Current portion of long-term debt.....	826	816
Total current liabilities.....	43,162	45,966
Deferred revenue, net of current portion .....	23,302	26,688
Long-term debt.....	31,156	31,372
Other long-term liabilities .....	744	739
Total liabilities.....	98,364	104,765
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; 78,292 and 77,804 shares issued and outstanding .....	78	78
Additional paid-in capital.....	439,589	437,180
Accumulated deficit .....	(370,656)	(351,741)
Accumulated other comprehensive loss.....	(7)	(16)
Total stockholders' equity .....	69,004	85,501
Total liabilities and stockholders' equity .....	\$ 167,368	\$ 190,266

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

**Lexicon Pharmaceuticals, Inc.**

**Consolidated Statements of Operations**

(In thousands, except per share amounts)

(Unaudited)

	<b>Three Months Ended March 31,</b>	
	<b>2007</b>	<b>2006</b>
Revenues:		
Collaborative research.....	\$ 12,271	\$ 19,306
Subscription and license fees .....	1,224	1,649
Total revenues.....	13,495	20,955
Operating expenses:		
Research and development, including stock-based compensation of \$991 and \$1,149, respectively .....	27,290	26,672
General and administrative, including stock-based compensation of \$568 and \$692, respectively .....	5,300	5,303
Total operating expenses .....	32,590	31,975
Loss from operations .....	(19,095)	(11,020)
Interest income .....	880	1,003
Interest expense .....	(688)	(807)
Other income, net .....	(12)	(7)
Net loss .....	\$ (18,915)	\$ (10,831)
Net loss per common share, basic and diluted.....	\$ (0.24)	\$ (0.17)
Shares used in computing net loss per common share, basic and diluted.....	77,938	64,566

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

**Lexicon Pharmaceuticals, Inc.**

**Consolidated Statements of Cash Flows**  
(In thousands)  
(Unaudited)

	<b>Three Months Ended March 31,</b>	
	<b>2007</b>	<b>2006</b>
Cash flows from operating activities:		
Net loss .....	\$ (18,915)	\$ (10,831)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation .....	2,468	2,682
Amortization of intangible assets, other than goodwill .....	—	300
Stock-based compensation .....	1,559	1,841
Changes in operating assets and liabilities:		
(Increase) decrease in accounts receivable .....	(536)	450
Decrease in prepaid expenses and other current assets .....	830	306
(Increase) decrease in other assets .....	(28)	156
Decrease in accounts payable and other liabilities .....	(2,695)	(3,219)
Decrease in deferred revenue .....	<u>(3,500)</u>	<u>(3,133)</u>
Net cash used in operating activities .....	(20,817)	(11,448)
Cash flows from investing activities:		
Purchases of property and equipment .....	(318)	(1,192)
Purchases of investments .....	(5,692)	(27,590)
Maturities of investments .....	<u>15,564</u>	<u>40,189</u>
Net cash provided by investing activities .....	9,554	11,407
Cash flows from financing activities:		
Proceeds from issuance of common stock .....	851	120
Repayment of debt borrowings .....	<u>(206)</u>	<u>(191)</u>
Net cash provided by (used in) financing activities .....	645	(71)
Net decrease in cash and cash equivalents .....	(10,618)	(112)
Cash and cash equivalents at beginning of period .....	<u>30,226</u>	<u>21,970</u>
Cash and cash equivalents at end of period .....	<u>\$ 19,608</u>	<u>\$ 21,858</u>
Supplemental disclosure of cash flow information:		
Cash paid for interest .....	\$ 662	\$ 679
Supplemental disclosure of non-cash investing and financing activities:		
Unrealized loss on investments .....	\$ 9	\$ —
Retirement of property and equipment .....	\$ 219	\$ 1,402

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

## **Lexicon Pharmaceuticals, Inc.**

### **Notes to Consolidated Financial Statements (Unaudited)**

#### **1. Basis of Presentation**

The accompanying unaudited consolidated financial statements of Lexicon Pharmaceuticals, Inc. (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, 2007 are not necessarily indicative of the results that may be expected for the year ended December 31, 2007.

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, 2006, as filed with the SEC.

#### **2. 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.

#### **3. Stock-Based Compensation**

On January 1, 2006, Lexicon adopted Statement of Financial Accounting Standards No. 123 (Revised), "Share-Based Payment" ("SFAS No. 123(R)"). This statement requires companies to recognize compensation expense in the statement of operations for share-based payments, including stock options issued to employees, based on their fair values on the date of the grant, with the compensation expense recognized over the period in which an employee is required to provide service in exchange for the stock award. The Company adopted this statement using the modified prospective transition method, which applies the compensation expense recognition provisions to new awards and to any awards modified, repurchased or canceled after the January 1, 2006 adoption date. Additionally, for any unvested awards outstanding at the adoption date, the Company will recognize compensation expense over the remaining vesting period. Stock-based compensation expense is recognized on a straight-line basis. The adoption of SFAS No. 123(R) resulted in stock-based compensation expense of \$1.6 million and \$1.8 million for the three months ended March 31, 2007 and 2006, respectively. There is no impact on cash flows from operating activities or financing activities. As of March 31, 2007, stock-based compensation cost for all outstanding unvested options was \$14.3 million, which is expected to be recognized over a weighted-average period of 1.4 years.

### Valuation Assumptions

The fair value of stock options is estimated at the date of grant using the Black-Scholes method. The Black-Scholes option-pricing model requires the input of subjective assumptions. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options. For purposes of determining the fair value of stock options granted subsequent to the adoption of SFAS No. 123(R), the Company segregated its options into two homogeneous groups, based on exercise and post-vesting employment termination behaviors, resulting in a change in the assumptions used for expected option lives and forfeitures. Expected volatility is based on the historical volatility in the Company's stock price. The following weighted-average assumptions were used for options granted in the three-month periods ended March 31, 2007 and 2006, respectively:

	Expected Volatility	Risk-free Interest Rate	Expected Term	Estimated Forfeitures	Dividend Rate
March 31, 2007:					
Employees .....	67%	4.5%	6	20%	0%
Officers and non-employee directors.....	67%	4.6%	9	4%	0%
March 31, 2006:					
Employees .....	69%	4.6%	7	18%	0%
Officers and non-employee directors.....	69%	4.6%	9	3%	0%

### Stock Option Activity

The following is a summary of option activity under Lexicon's stock option plans for the first quarter of 2007:

	Options (in thousands)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2006 .....	15,815	\$ 5.99		
Granted.....	2,283	3.94		
Exercised.....	(489)	1.77		
Canceled.....	(525)	5.08		
Outstanding at March 31, 2007 .....	<u>17,084</u>	5.87	5.6	\$ 4,751
Exercisable at March 31, 2007 .....	<u>11,994</u>	\$ 6.45	4.2	\$ 4,748

The weighted-average grant date fair value of options granted during the three-month periods ended March 31, 2007 and 2006 was \$2.80 and \$2.95, respectively. The total intrinsic value of options exercised during the three-month periods ended March 31, 2007 and 2006 were \$952,000 and \$146,000, respectively. As of March 31, 2007, 2,426,888 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 March 31, 2007:

Range of Exercise Price	Options Outstanding			Options Exercisable		
	Outstanding as of March 31, 2007 (In thousands)	Weighted Average Remaining Contractual Life (In Years)	Weighted Average Exercise Price	Exercisable as of March 31, 2007 (In thousands)	Weighted Average Exercise Price	
\$ 1.67 – 2.50	4,164	2.2	\$ 2.49	4,164	\$ 2.49	
3.16 – 4.72	5,874	8.4	3.98	1,936	3.98	
4.76 – 7.12	2,392	6.9	5.76	1,514	5.78	
7.15 – 10.55	2,850	5.1	8.57	2,576	8.68	
10.87 – 16.00	1,321	3.7	12.64	1,321	12.64	
16.63 – 22.06	356	3.0	19.70	356	19.70	
25.25 – 31.63	28	3.2	26.23	28	26.23	
38.00 – 38.50	99	2.5	38.49	99	38.49	
	<u>17,084</u>	5.6	\$ 5.87	<u>11,994</u>	\$ 6.45	

## 4. Recent Accounting Pronouncement

On January 1, 2007, Lexicon adopted Financial Accounting Standards Board (“FASB”) Interpretation No. 48, “Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109” (“FIN 48”). FIN 48 clarifies the accounting for income taxes by prescribing the minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. There was no effect on the Company’s consolidated financial position, results of operations or cash flows as a result of adopting FIN 48. As of January 1, 2007 and March 31, 2007, the Company did not have any unrecognized tax benefits.

The Company is primarily subject to U.S. federal and New Jersey and Texas state income taxes. The tax years 1995 to current remain open to examination by U.S. federal authorities and 2004 to current remain open to examination by state authorities. The Company’s policy is to recognize interest and penalties related to income tax matters in income tax expense. As of January 1, 2007 and March 31, 2007, the Company had no accruals for interest or penalties related to income tax matters.

At December 31, 2006, the Company had net operating loss (“NOL”) carryforwards of approximately \$267.4 million and research and development (“R&D”) credit carryforwards of approximately \$14.4 million expiring beginning in 2011. Utilization of the NOL and R&D credit carryforwards may be subject to a significant annual limitation due to ownership changes that have occurred previously or could occur in the future provided by Section 382 of the Internal Revenue Code. The Company has conducted a limited analysis to determine whether a change in control has occurred since the Company’s formation and does not believe a significant limitation, if any, would be determined upon a detailed analysis. Further, until a Section 382 study is completed and any limitation known, no amounts are being presented as an uncertain tax position under FIN 48. The Company has established a full valuation allowance for its NOL and R&D credit carryforwards.

In September 2006, the FASB issued Statement of Financial Accounting Standards No. 157, “Fair Value Measurements” (“SFAS No. 157”). The statement defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. This statement applies under other accounting pronouncements that require or permit fair value measurements, the FASB having previously concluded in those accounting pronouncements that fair value is the relevant measurement attribute. Accordingly, this statement does not require any new fair

value measurements. SFAS No. 157 is effective January 1, 2008. The Company is currently evaluating the effect, if any, of this statement on its financial condition and results of operations.

## **5. Debt Obligations**

In April 2004, Lexicon obtained a \$34.0 million mortgage on its facilities in The Woodlands, Texas. The mortgage loan has a ten-year term with a 20-year amortization and bears interest at a fixed rate of 8.23%.

## **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, 2007, 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 the discovery and development of breakthrough treatments for human disease. We use our proprietary gene knockout technology to disrupt, or knock out, the function of genes in mice and then employ an integrated platform of advanced medical technologies to systematically discover the physiological and behavioral functions and pharmaceutical utility of the genes we have knocked out and the potential drug targets encoded by the corresponding human genes. For targets that we believe have high pharmaceutical value, we engage in programs for the discovery and development of potential small molecule, antibody and protein drugs. We have advanced drug candidates from two of these programs into human clinical trials, with drug candidates from two additional programs in preclinical development and a number of additional programs in various stages of preclinical research. We believe that our systematic, target biology-driven approach to drug discovery will enable us to substantially expand our clinical pipeline and we have initiated our 10<sub>TO</sub>10 program with the goal of advancing ten drug candidates into human clinical trials by the end of 2010.

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

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

Our operating results and, in particular, our ability to generate additional revenues are dependent on many factors, including our success in establishing collaborations, alliances and technology licenses, expirations of our collaborations and alliances, the success rate of our discovery efforts leading to opportunities for new collaborations, alliances and licenses, as well as milestone payments and royalties, the timing and willingness of collaborators to commercialize products which may result in royalties, and general and industry-specific economic conditions which may affect research and development expenditures. Our future revenues from collaborations, alliances and academic, non-profit and government arrangements are uncertain because our existing agreements have fixed terms or relate to specific projects of limited duration. Our future revenues from technology licenses are uncertain because they depend, in large part, on securing new agreements. Our ability to secure future revenue-generating agreements will depend upon our ability to address the needs of our potential future collaborators, granting agencies and licensees, and to negotiate agreements that we believe are in our long-term best interests. We may determine that our interests are better served by retaining rights to our discoveries and advancing our therapeutic programs to a later stage, which could limit our near-term revenues. Because

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

Since our inception, we have incurred significant losses and, as of March 31, 2007, we had an accumulated deficit of \$370.7 million. Our losses have resulted principally from costs incurred in research and development, general and administrative costs associated with our operations, and non-cash stock-based compensation expenses associated with stock options granted to employees and consultants. Research and development expenses consist primarily of salaries and related personnel costs, material costs, facility costs, depreciation on property and equipment, legal expenses resulting from intellectual property prosecution and other expenses related to our drug discovery and development programs, the development and analysis of knockout mice and our other target validation research efforts, and the development of compound libraries. General and administrative expenses consist primarily of salaries and related expenses for executive and administrative personnel, professional fees and other corporate expenses, including information technology, facilities costs and general legal activities. In connection with our ongoing target validation research efforts and the expansion of our drug discovery and development programs, we expect to incur increasing research and development and general and administrative costs. As a result, we will need to generate significantly higher revenues to achieve profitability.

## **Critical Accounting Policies**

### *Revenue Recognition*

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

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

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

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

### *Research and Development Expenses*

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

We have initiated Phase 1b clinical trials for our most advanced drug programs, *LX6171* for disorders characterized by cognitive impairment such as Alzheimer's disease, schizophrenia and vascular dementia and *LX1031* for gastrointestinal disorders such as irritable bowel syndrome. We have advanced two other drug programs, *LX2931* for autoimmune diseases such as rheumatoid arthritis and *LX1032* for gastrointestinal disorders, into preclinical development in preparation for regulatory filings for the commencement of clinical trials and a number of additional drug programs into various stages of preclinical research. 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 drug candidate. We estimate that drug development activities are typically completed over the following periods:

<u>Phase</u>	<u>Estimated Completion Period</u>
Preclinical development	1-2 years
Phase 1 clinical trials	1-2 years
Phase 2 clinical trials	1-2 years
Phase 3 clinical trials	2-4 years

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

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

### *Stock-based Compensation Expense*

On January 1, 2006, we adopted Statement of Financial Accounting Standards No. 123 (Revised), "Share-Based Payment," or SFAS No. 123(R). This statement requires companies to recognize compensation expense in the statement of operations for share-based payments, including stock options issued to employees, based on their fair values on the date of the grant, with the compensation expense recognized over the period in which an employee is required to provide service in exchange for the stock award. We adopted this statement using the modified prospective transition method, which applies the compensation expense recognition provisions to new awards and to any awards modified, repurchased or canceled after the January 1, 2006 adoption date. Additionally, for any unvested awards outstanding at the adoption date, we will recognize compensation expense over the remaining vesting period. Stock-based compensation expense is recognized on a straight-line basis. The adoption of SFAS No. 123(R) resulted in stock-based compensation expense of \$1.6 million and \$1.8 million for the three months ended March 31, 2007 and 2006, respectively. There is no impact on cash flows from operating activities or financing activities. As of March 31, 2007, stock-based compensation cost for all outstanding unvested

options was \$14.3 million, which is expected to be recognized over a weighted-average vesting period of 1.4 years.

The fair value of stock options is estimated at the date of grant using the Black-Scholes option-pricing model. For purposes of determining the fair value of stock options granted subsequent to the adoption of SFAS No. 123(R), we segregated our options into two homogeneous groups, based on exercise and post-vesting employment termination behaviors, resulting in a change in the assumptions used for expected option lives and forfeitures. Expected volatility is based on the historical volatility in our stock price. The following weighted-average assumptions were used for options granted in the three-month periods ended March 31, 2007 and 2006, respectively:

	<u>Expected Volatility</u>	<u>Risk-free Interest Rate</u>	<u>Expected Term</u>	<u>Estimated Forfeitures</u>	<u>Dividend Rate</u>
March 31, 2007:					
Employees .....	67%	4.5%	6	20%	0%
Officers and non-employee directors.....	67%	4.6%	9	4%	0%
March 31, 2006:					
Employees .....	69%	4.6%	7	18%	0%
Officers and non-employee directors.....	69%	4.6%	9	3%	0%

### *Goodwill Impairment*

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

### **Recent Accounting Pronouncement**

On January 1, 2007, we adopted Financial Accounting Standards Board, or FASB, Interpretation No. 48, "Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109," or FIN 48. FIN 48 clarifies the accounting for income taxes by prescribing the minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. There was no effect on our consolidated financial position, results of operations or cash flows as a result of adopting FIN 48. As of January 1, 2007 and March 31, 2007, we did not have any unrecognized tax benefits.

We are primarily subject to U.S. federal and New Jersey and Texas state income taxes. The tax years 1995 to current remain open to examination by U.S. federal authorities and 2004 to current remain

open to examination by state authorities. Our policy is to recognize interest and penalties related to income tax matters in income tax expense. As of January 1, 2007 and March 31, 2007, we had no accruals for interest or penalties related to income tax matters.

At December 31, 2006, we had net operating loss carryforwards of approximately \$267.4 million and research and development credit carryforwards of approximately \$14.4 million expiring beginning in 2011. Utilization of the net operating loss and research and development credit carryforwards may be subject to a significant annual limitation due to ownership changes that have occurred previously or could occur in the future provided by Section 382 of the Internal Revenue Code. We have conducted a limited analysis to determine whether a change in control has occurred since our formation and do not believe a significant limitation, if any, would be determined upon a detailed analysis. Further, until a Section 382 study is completed and any limitation known, no amounts are being presented as an uncertain tax position under FIN 48. We have established a full valuation allowance for our net operating loss and research and development credit carryforwards.

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

## Results of Operations

### *Three Months Ended March 31, 2007 and 2006*

#### *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):

	<b>Three Months Ended March 31,</b>	
	<b>2007</b>	<b>2006</b>
Total revenues .....	\$ 13.5	\$ 21.0
Dollar decrease.....	\$ (7.5)	
Percentage decrease.....	36%	

- *Collaborative research* – Revenue from collaborative research decreased 36% to \$12.3 million, primarily due to the achievement of a performance milestone under our Takeda alliance in the 2006 period, as well as decreased revenue under our alliance with Bristol-Myers Squibb resulting from the conclusion of the revenue recognition period for the upfront payment we received under the alliance.
- *Subscription and license fees* – Revenue from subscriptions and license fees decreased 26% to \$1.2 million, primarily due to the fact that the prior-year period included a one-time technology license fee from Bristol-Myers Squibb.

#### *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):

	<u>Three Months Ended March 31,</u>	
	<u>2007</u>	<u>2006</u>
Total research and development expense .....	\$ 27.3	\$ 26.7
Dollar increase .....	\$ 0.6	
Percentage increase .....	2%	

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.

- *Personnel* – Personnel costs decreased 2% to \$12.8 million, primarily due to lower salary and benefit costs as a result of a reduction in our personnel in January 2007, offset in part by severance payments resulting from such reduction in personnel. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.
- *Facilities and equipment* – Facilities and equipment costs decreased 4% to \$5.2 million, primarily due to a decrease in depreciation expense.
- *Laboratory supplies* – Laboratory supplies expense decreased 11% to \$3.2 million, primarily due to a reduction in our personnel in January 2007.
- *Third-party and other services* – Third-party and other services increased 97% to \$4.0 million, primarily due to an increase in third-party clinical research costs.
- *Stock-based compensation* – Stock-based compensation expense decreased 14% to \$1.0 million, primarily as a result of forfeitures of unvested stock options.
- *Other* – Other costs decreased 24% to \$1.1 million, primarily due to the amortization of other intangibles in 2006.

#### ***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):

	<u>Three Months Ended March 31,</u>	
	<u>2007</u>	<u>2006</u>
Total general and administrative expense .....	\$ 5.3	\$ 5.3
Dollar increase .....	\$ 0	
Percentage increase .....	0%	

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.

- *Personnel* – Personnel costs increased 4% to \$3.1 million, primarily due to severance payments resulting from a reduction in our personnel in January 2007, offset in part by lower salary and benefit costs resulting from such reduction in personnel. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.
- *Facilities and equipment* – Facilities and equipment costs decreased 9% to \$0.7 million, primarily due to a decrease in depreciation expense.
- *Professional fees* – Professional fees increased 22% to \$0.4 million, primarily due to increased litigation costs.

- *Stock-based compensation* – Stock-based compensation expense decreased 18% to \$0.6 million, primarily as a result of forfeitures of unvested stock options.
- *Other* – Other costs were \$0.5 million, consistent with the prior year.

#### ***Interest Income, Interest Expense and Other Income, Net***

*Interest Income.* Interest income decreased 12% to \$0.9 million in the three months ended March 31, 2007 from \$1.0 million in the corresponding period in 2006, due to lower average cash balances.

*Interest Expense.* Interest expense decreased 15% to \$0.7 million in the three months ended March 31, 2007 from \$0.8 million in the corresponding period in 2006.

*Other Income, Net.* Other income, net decreased 75% to expense of \$12,000.

#### ***Net Loss and Net Loss per Common Share***

*Net Loss and Net Loss per Common Share.* Net loss increased to \$18.9 million in the three months ended March 31, 2007 from \$10.8 million in the corresponding period in 2006. Net loss per common share increased to \$0.24 in the three months ended March 31, 2007 from \$0.17 in the corresponding period in 2006.

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, government grants and contracts, and financing obtained under debt and lease arrangements. From our inception through March 31, 2007, we had received net proceeds of \$337.8 million from issuances of common and preferred stock, including \$203.2 million of net proceeds from the initial public offering of our common stock in April 2000, \$50.1 million from a July 2003 common stock offering and \$37.5 million from an October 2006 common stock offering. In addition, from our inception through March 31, 2007, we received \$411.0 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 \$355.0 million had been recognized as revenues through March 31, 2007.

As of March 31, 2007, we had \$59.5 million in cash, cash equivalents and short-term investments, as compared to \$80.0 million as of December 31, 2006. We used cash of \$20.8 million in operations in the three months ended March 31, 2007. This consisted primarily of the net loss for the period of \$18.9 million offset by non-cash charges of \$2.4 million related to depreciation expense and \$1.6 million related to stock-based compensation expense; a \$3.5 million decrease in deferred revenue; and changes in other operating assets and liabilities of \$2.4 million. Investing activities provided cash of \$9.6 million in the three months ended March 31, 2007, primarily due to net maturities of short-term investments of \$9.9 million. This was offset by purchases of property and equipment of \$0.3 million. Financing activities provided cash of \$0.7 million primarily due to proceeds of \$0.9 million from stock option exercises, offset by principal repayments of \$0.2 million on the mortgage loan.

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

In April 2004, we obtained a \$34.0 million mortgage on our facilities in The Woodlands, Texas. The mortgage loan has a ten-year term with a 20-year amortization and bears interest at a fixed rate of 8.23%. In May 2002, our subsidiary Lexicon Pharmaceuticals (New Jersey), Inc. 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 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.

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 existing and new drug discovery alliances, target validation collaborations, government grants and contracts, and technology licenses will be sufficient to fund our operations for at least the next twelve months. During or after this period, if cash generated by operations is insufficient to satisfy our liquidity requirements, we will need to sell additional equity or debt securities or obtain additional credit arrangements. Additional financing may not be available on terms acceptable to us or at all. The sale of additional equity or convertible debt securities may result in additional dilution to our stockholders.

## **Disclosure about Market Risk**

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

### **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) 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.

## **Part II      Other Information**

### **Item 1A.      Risk Factors**

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

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

- we will need substantial amounts of additional capital in the future; if it is unavailable, we will be forced to significantly curtail or cease operations and, if it is not available on reasonable terms, we may be forced to obtain funds by entering into financing agreements on unfavorable terms
- we have a history of net losses, and we expect to continue to incur net losses and may not achieve or maintain profitability
- 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 Business*

- we are an early-stage company, and we may not successfully develop or commercialize any therapeutics or drug targets that we have identified
- clinical testing of our drug candidates in humans is an inherently risky and time-consuming process that may fail to demonstrate safety and efficacy, which could result in the delay, limitation or prevention of regulatory approval
- we are dependent upon our collaborations with major pharmaceutical companies, and 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
- conflicts with our collaborators could jeopardize the success of our collaborative agreements and 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
- 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 face substantial competition in our drug discovery and product development 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 successfully develop and commercialize 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
- 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

*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
- 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
- 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
- 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
- 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 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 1A. Risk Factors” included in our annual report on Form 10-K for the year ended December 31, 2006, as filed with the Securities and Exchange Commission.

**Item 6. Exhibits**

<u>Exhibit No.</u>	<u>Description</u>
3.1	— Restated Certificate of Incorporation, as amended
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

## 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 Pharmaceuticals, Inc.**

Date: May 10, 2007

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

Date: May 10, 2007

By: /s/ Julia P. Gregory  
Julia P. Gregory  
*Executive Vice President  
and Chief Financial Officer*

## **Index to Exhibits**

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**CERTIFICATIONS**

I, Arthur T. Sands, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Lexicon Pharmaceuticals, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this 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 10, 2007

/s/ Arthur T. Sands  
\_\_\_\_\_  
Arthur T. Sands, M.D., Ph.D.  
President and Chief Executive Officer

## CERTIFICATIONS

I, Julia P. Gregory, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Lexicon Pharmaceuticals, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this 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 10, 2007

\_\_\_\_\_  
/s/ Julia P. Gregory  
Julia P. Gregory  
Executive Vice President  
and Chief Financial Officer

**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 Pharmaceuticals, Inc. (“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, 2007, 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 10<sup>th</sup> day of May, 2007.

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 and  
Chief Financial Officer*