

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

---

**FORM 8-K**

---

**CURRENT REPORT**

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): April 29, 2008

**Lexicon Pharmaceuticals, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**000-30111**  
(Commission File Number)

**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)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligations of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
- 
-

## **Item 2.02 Results of Operations and Financial Condition**

On April 29, 2008, we issued a press release to report our financial results for the quarter ended March 31, 2008. A copy of the press release is attached to this current report on Form 8-K as Exhibit 99.1.

The information in this Form 8-K and the Exhibit attached to this Form 8-K shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934 (the “Exchange Act”) or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such a filing.

## **Item 9.01 Financial Statements and Exhibits**

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
99.1	— Press Release of Lexicon Pharmaceuticals, Inc. dated April 29, 2008

---

## 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: April 29, 2008

By: /s/ Jeffrey L. Wade  
Jeffrey L. Wade  
*Executive Vice President and  
General Counsel*

---

## Index to Exhibits

<b>Exhibit No.</b>	<b>Description</b>
--------------------	--------------------

99.1

—

Press Release of Lexicon Pharmaceuticals, Inc. dated April 29, 2008

**LEXICON PHARMACEUTICALS REPORTS 2008  
FIRST QUARTER FINANCIAL RESULTS***Conference Call and Webcast at 5:00 p.m. Eastern Time*

**The Woodlands, Texas, April 29, 2008** – Lexicon Pharmaceuticals, Inc. (Nasdaq: LXX), a biopharmaceutical company focused on discovering and developing breakthrough treatments for human disease, today updated its drug development progress and reported financial results for the three months ended March 31, 2008.

“We are continuing to advance our diverse target portfolio into clinical development,” said Dr. Arthur T. Sands, president and chief executive officer of Lexicon. “Our clinical programs are progressing, and recent positive results reinforce the company’s drug discovery strategy.”

**Highlights***Clinical Achievements*

- § Lexicon obtained encouraging results from its initial Phase 1 clinical trial of LX2931, the company’s oral drug candidate for autoimmune conditions, including rheumatoid arthritis. Initial results from this single ascending-dose trial in healthy volunteers demonstrated a potent, dose-dependent reduction in circulating lymphocytes, suggesting that the target of LX2931 represents a potential new mechanism of action for regulating the immune response.
- § The company reported Phase 1 results for LX6171, an internally-developed compound under evaluation by the company as a potential treatment for cognitive disorders, at the American Academy of Neurology in Chicago on April 15, 2008. Initial human studies showed that the compound achieved good systemic exposure and was well tolerated at the doses studied. The target of LX6171, identified through Lexicon’s Genome5000™ program, was disclosed as SLC6A7, a high-affinity L-proline transporter found in the brain. SLC6A7 represents a potential new mechanism of action for the treatment of cognitive disorders. LX6171 is currently in a Phase 2 study for age-associated memory impairment in elderly subjects.
- § Lexicon commenced initial Phase 1 dosing for LX1032, the company’s oral drug candidate for managing gastrointestinal symptoms associated with carcinoid syndrome. The initial Phase 1 clinical trial of LX1032 is a double-blind, randomized, placebo-controlled, ascending single-dose study in healthy volunteers.

**Financial Results**

**Revenues:** Lexicon’s revenues for the three months ended March 31, 2008 decreased 34 percent to \$8.9 million from \$13.5 million for the corresponding period in 2007. The decrease was primarily attributable to the completion in 2007 of the project funded by Lexicon’s award from the Texas Enterprise Fund, reduced revenues in the three months ended March 31, 2008 under its alliance with N.V. Organon due to its progress towards completing the target discovery portion of the alliance, and the completion in 2007 of the target discovery portion of its alliance with Takeda Pharmaceutical Company Limited.

---

**Research and Development Expenses:** Research and development expenses for the three months ended March 31, 2008 increased two percent to \$27.8 million from \$27.3 million for the corresponding period in 2007. The increase was primarily due to higher preclinical and clinical costs related to the advancement of Lexicon's drug development programs, partially offset by decreased research expenses as a result of the company's January 2007 realignment reallocating resources from genetics research efforts to drug development.

**General and Administrative Expenses:** General and administrative expenses for the three months ended March 31, 2008 increased four percent to \$5.5 million from \$5.3 million for the corresponding period in 2007.

**Net Loss:** Net loss for the three months ended March 31, 2008 was \$18.0 million, or \$0.13 per share, compared to net loss of \$18.9 million, or \$0.24 per share, in the corresponding period in 2007. Net loss included non-cash, stock-based compensation expense of \$1.8 million for the three months ended March 31, 2008 and \$1.6 million for the corresponding period in 2007.

**Cash and Investments:** As of March 31, 2008, Lexicon had \$228.8 million in cash and investments, including \$33.4 million in cash and investments held by Symphony Icon, as compared to \$258.8 million as of December 31, 2007.

**Lexicon Conference Call:**

Lexicon management will hold a conference call to discuss its clinical development progress and financial results for the first quarter of 2008 at 5:00 p.m. Eastern Time on April 29, 2008. The dial-in number for the conference call is 866-316-1364 (within the United States) or 913-312-6667 (international). The pass code for all callers is 7581545. Investors can access a live webcast of the call at [www.lexpharma.com](http://www.lexpharma.com). An archived version of the webcast will be available on the website through May 2, 2008.

**About Lexicon**

Lexicon is a biopharmaceutical company focused on discovering and developing breakthrough treatments for human disease. Through its proprietary gene knockout technology, the company is dedicated to discovering and developing breakthrough treatments for human disease. Lexicon currently has development programs underway for such areas of major unmet medical need as irritable bowel syndrome, cognitive disorders, autoimmune diseases, and carcinoid syndrome. The company has used its proprietary gene knockout technology to discover more than 100 promising drug targets and create an extensive pipeline of clinical and preclinical programs in the therapeutic areas of cardiology, gastroenterology, immunology and oncology, metabolism, neurology and ophthalmology. To focus its commitment, Lexicon initiated its 10<sub>TO</sub>10 program to advance 10 new drug candidates into human clinical trials by the end of 2010. To advance the development and commercialization of its programs, Lexicon is working both independently and through collaborators including Bristol-Myers Squibb Company, Genentech, Inc. and N.V. Organon. For additional information about Lexicon and its programs, please visit [www.lexpharma.com](http://www.lexpharma.com).

---

**Safe Harbor Statement**

*This press release contains “forward-looking statements,” including statements relating to Lexicon’s clinical development of LX6171, LX2931 and LX1032 and the potential therapeutic and commercial potential of LX6171, LX2931 and LX1032. This press release also contains forward-looking statements relating to Lexicon’s growth and future operating results, discovery and development of products, strategic alliances and intellectual property, as well as other matters that are not historical facts or information. All forward-looking statements are based on management’s current assumptions and expectations and involve risks, uncertainties and other important factors, specifically including those relating to Lexicon’s ability to successfully conduct clinical development of LX6171, LX2931 and LX1032 and preclinical and clinical development of its other potential drug candidates, advance additional candidates into preclinical and clinical development, obtain necessary regulatory approvals, achieve its operational objectives, obtain patent protection for its discoveries and establish strategic alliances, as well as additional factors relating to manufacturing, intellectual property rights, and the therapeutic or commercial value of its drug candidates, that may cause Lexicon’s actual results to be materially different from any future results expressed or implied by such forward-looking statements. Information identifying such important factors is contained under “Factors Affecting Forward-Looking Statements” and “Risk Factors” in Lexicon’s annual report on Form 10-K for the year ended December 31, 2007, as filed with the Securities and Exchange Commission. Lexicon undertakes no obligation to update or revise any such forward-looking statements, whether as a result of new information, future events or otherwise.*

# # #

**Contact for Lexicon:**

Bobbie Faulkner  
Manager, Investor and Public Relations  
281/863-3503  
[bfaulkner@lexpharma.com](mailto:bfaulkner@lexpharma.com)

---

# Lexicon Pharmaceuticals, Inc.

## Selected Financial Data

Consolidated Statements of Operations Data <i>(In thousands, except per share data)</i>	Three Months Ended	
	March 31,	
	2008	2007
	(unaudited)	
Revenues:		
Collaborative research	\$ 7,634	\$ 12,271
Subscription and license fees	1,259	1,224
Total revenues	8,893	13,495
Operating expenses:		
Research and development, including stock-based compensation of \$1,127 and \$991, respectively	27,802	27,290
General and administrative, including stock-based compensation of \$652 and \$568, respectively	5,529	5,300
Total operating expenses	33,331	32,590
Loss from operations	(24,438)	(19,095)
Interest income	2,781	880
Interest expense	(670)	(688)
Other expense, net	(547)	(12)
Loss before noncontrolling interest in Symphony Icon, Inc.	(22,874)	(18,915)
Loss attributable to noncontrolling interest in Symphony Icon, Inc.	4,924	—
Net loss	\$ (17,950)	\$ (18,915)
Net loss per common share, basic and diluted	\$ (0.13)	\$ (0.24)
Shares used in computing net loss per common share, basic and diluted	136,795	77,938

Consolidated Balance Sheet Data <i>(In thousands)</i>	As of March 31,	As of December 31,
	2008	2007
	(unaudited)	
Cash and investments, including cash and investments held by Symphony Icon, Inc.	\$ 228,796	\$ 258,775
Property and equipment, net	69,650	70,829
Goodwill	25,798	25,798
Total assets	336,573	369,296
Deferred revenue	27,860	34,156
Current and long-term debt	31,156	31,373
Noncontrolling interest in Symphony Icon, Inc.	25,347	30,271
Accumulated deficit	(428,485)	(410,535)
Total stockholders' equity	237,801	256,300