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): October 30, 2007

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:

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o 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 October 30, 2007, we issued a press release to report our financial results for the quarter ended September 30, 2007. 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

Exhibit No.	Description
99.1 —	Press Release of Lexicon Pharmaceuticals, Inc. dated October 30, 2007
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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: October 30, 2007

By: <u>/s/ JEFFREY L. WADE</u> Jeffrey L. Wade Executive Vice President and General Counsel

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Exhibit No. 99.1 — Description Press Release of Lexicon Pharmaceuticals, Inc. dated October 30, 2007

LEXICON PHARMACEUTICALS REPORTS 2007 THIRD QUARTER FINANCIAL RESULTS

Live Conference Call and Webcast at 5:00 p.m. Eastern Time

The Woodlands, Texas, October 30, 2007 – Lexicon Pharmaceuticals, Inc. (Nasdaq: LXRX), a biopharmaceutical company focused on discovering and developing breakthrough treatments for human disease, today reported financial results for the three and nine months ended September 30, 2007.

"We continued to make progress in our 10 TO10 initiative in the third quarter, completing the Phase 1b clinical trial of LX1031, our drug candidate for the treatment of irritable bowel syndrome," said Arthur T. Sands, M.D., Ph.D., Lexicon's president and chief executive officer. "The studies demonstrated that LX1031 was well-tolerated at all dose levels and we look forward to advancing it into Phase 2 clinical trials in 2008."

Highlights of the Third Quarter

- § Lexicon scientists presented data revealing the target of a new class of internally-developed compounds that includes LX1031 and other compounds under evaluation by the company as potential treatments for irritable bowel syndrome (IBS) and other gastrointestinal disorders. The compounds inhibit tryptophan hydroxylase 1 (TPH1), the key enzyme responsible for producing serotonin in the gastrointestinal tract. In preclinical studies with these molecules, serotonin levels could be reduced in the intestine without affecting levels of the neurotransmitter in the brain, where it mediates mood and other behaviors.
- § Lexicon received stockholder approval for and completed a financing transaction with Invus, L.P., under which Invus made an initial common stock investment of \$205 million, with the potential of up to an additional \$345 million over the next four years, to help fund the Company's transition into an integrated biopharmaceutical company. Upon the closing of the transaction, Raymond Debbane, president and chief executive officer of The Invus Group, LLC, and Christopher Sobecki and Philippe Amouyal, both managing directors of The Invus Group, joined the Lexicon board of directors.
- § Judith L. Swain, M.D., was appointed to Lexicon's board of directors. Dr. Swain is currently executive director of the Singapore Institute for Clinical Sciences within the Singapore Agency for Science, Technology, and Research (A*STAR) and the Lien Chow Professor of Medicine at the National University of Singapore. Dr. Swain also maintains an appointment as an adjunct professor of medicine at the University of California, San Diego and has previously served as chair of the Department of Medicine at Stanford University, and on the medical faculties of the University of Pennsylvania and Duke University.

"We were pleased to complete our strategically-important investment from Invus in August," added Julia P. Gregory, Lexicon's executive vice president and chief financial officer. "Lexicon is on solid financial footing to execute our 10TO10 drug discovery and development initiative."

Financial Results

Revenues: Lexicon's revenues for the three months ended September 30, 2007 decreased 48 percent to \$10.2 million from \$19.6 million for the corresponding period in 2006. The decrease was primarily attributable to the recognition of revenue in the year-earlier period under a contract with the National

Institutes of Health as well as reduced revenue under Lexicon's neuroscience alliance with Bristol-Myers Squibb Company resulting from the conclusion of the revenue recognition period for the upfront payment received under the alliance. For the nine months ended September 30, 2007, revenues decreased 36 percent to \$36.3 million from \$56.7 million for the corresponding period in 2006.

Research and Development Expenses: Research and development expenses for the three months ended September 30, 2007 decreased nine percent to \$24.5 million from \$27.0 million for the corresponding period in 2006. The decrease was primarily due to the Company's early 2007 strategic realignment reallocating resources from genetics research efforts to drug development. Lexicon's realignment was made possible by the scheduled completion of its Genome5000[™] program. This decrease was offset in part by higher external preclinical and clinical costs related to the advancement of Lexicon's drug development programs. For the nine months ended September 30, 2007, research and development expenses decreased five percent to \$77.4 million from \$81.1 million for the corresponding period in 2006.

General and Administrative Expenses: General and administrative expenses for the three months ended September 30, 2007 decreased four percent to \$5.1 million from \$5.3 million for the corresponding period in 2006. The decrease was primarily attributable to lower personnel costs as a result of the Company's personnel reductions in early 2007, offset by higher professional, legal and consulting fees. For the nine months ended September 30, 2007, general and administrative expenses decreased five percent to \$15.4 million for the corresponding period in 2006.

Net Loss: Net loss for the three months ended September 30, 2007 was \$14.1 million, or \$0.14 per share, compared to a net loss of \$12.8 million, or \$0.20 per share, for the corresponding period in 2006. Net loss for the nine months ended September 30, 2007 was \$46.6 million, or \$0.53 per share, compared to a net loss of \$40.5 million, or \$0.63 per share, for the corresponding period in 2006. The net loss for the three and nine months ended September 30, 2007 included a benefit of \$3.9 million and \$8.2 million, respectively, attributable to the loss from noncontrolling interest in Symphony lcon, resulting from Lexicon's consolidation of Symphony lcon. For the three and nine months ended September 30, 2007, net loss included non-cash, stock-based compensation expense of \$1.6 million and \$4.8 million, respectively.

Cash and Investments: As of September 30, 2007, Lexicon had \$273.9 million in cash and investments, including \$39.6 million in cash and investments held by Symphony Icon, as compared to \$95.2 million as of June 30, 2007 and \$80.0 million as of December 31, 2006."

Lexicon Conference Call:

Lexicon management will hold a conference call to discuss the company's results and provide financial guidance for the third quarter at 5:00 p.m. Eastern Time on October 30, 2007. Investors can access a webcast of the call, on a live, non-archived basis only, at <u>www.lexpharma.com</u>. Alternatively, to listen to the conference call live, the dial-in number is 877-874-1569 (within the United States) or 719-325-4796 (international). The pass code for all callers is 1913448.

About Lexicon

Lexicon is a biopharmaceutical company focused on the discovery and development of breakthrough treatments for human disease. Lexicon currently has clinical programs underway for such areas of major unmet medical need as irritable bowel syndrome and cognitive disorders. 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 diabetes and obesity,

cardiovascular disease, psychiatric and neurological disorders, cancer, immune system disorders and ophthalmic disease. 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 <u>www.lexpharma.com.</u>

Safe Harbor Statement

This press release contains "forward-looking statements," including statements relating to Lexicon's research and development of LX1031 and other tryptophan hydroxylase inhibitors. 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 preclinical and clinical development of its 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, 2006, 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.

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Contact for Lexicon: Chas Schultz Director of Financial Analysis 281/863-3421 cschultz@lexpharma.com

Lexicon Pharmaceuticals, Inc.

Selected Financial Data

	Three Months Ended September 30,		Nine Months Ended September 30,	
Consolidated Statements of Operations Data	2007	2006	2007	2006
(In thousands, except per share data)	(unaudited)		(unaudited)	
Revenues:				
Collaborative research	\$ 9,712	\$ 18,770	\$ 34,460	\$ 53,427
Subscription and license fees	455	843	1,850	3,305
Total revenues	10,167	19,613	36,310	56,732
Operating expenses:				
Research and development, including stock-based compensation of \$965, \$1,101, \$3,000, and \$3,355, respectively	24,518	27,010	77,402	81,115
General and administrative, including stock-based compensation of \$635, \$660, \$1,830, and \$2,011, respectively	5,091	5,309	15,395	16,276
Total operating expenses	29,609	32,319	92,797	97,391
Loss from operations	(19,442)	(12,706)	(56,487)	(40,659)
Interest income	2,166	774	3,811	2,677
Interest expense	(694)	(817)	(2,077)	(2,437)
Other expense, net	(8)	(6)	(34)	(69)
Loss before noncontrolling interest in Symphony Icon, Inc.	(17,978)	(12,755)	(54,787)	(40,488)
Loss attributable to noncontrolling interest in Symphony Icon, Inc.	3,867	(12,1.00)	8,170	(10,100)
Net loss	\$ (14,111)	\$(12,755)	\$(46,617)	\$(40,488)
Net loss per common share, basic and diluted	<u>\$ (0.14)</u>	<u>\$ (0.20</u>)	<u>\$ (0.53</u>)	<u>\$ (0.63</u>)
Shares used in computing net loss per common share	104,196	64,832	87,331	64,676
Consolidated Balance Sheet Data (In thousands)		As of September 30, 2007 (unaudited)	As of December 31, 2006	
Cash and investments, including cash and investments held by Symphony Icon		\$ 273,915	\$	79,999
Property and equipment, net		72,350		78,192
Goodwill		25,798		25,798
Total assets		378,192		190,266
Deferred revenue		40,979		58,000
Current and long-term debt		31,584		32,188
Noncontrolling interest in Symphony Icon, Inc.		25,980		_
Accumulated deficit		(398,358)		(351,741)
Total stockholders' equity		265,389		85,501