
**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 31, 2006

Lexicon Genetics Incorporated

(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))
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Item 2.02 Results of Operations and Financial Condition

On October 31, 2006, we issued a press release to report our financial results for the quarter ended September 30, 2006. 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

(c) Exhibits

Exhibit No.	Description
99.1	— Press Release of Lexicon Genetics Incorporated dated October 31, 2006

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: October 31, 2006

By: /s/ JEFFREY L. WADE

Jeffrey L. Wade

Executive Vice President and General Counsel

Index to Exhibits

Exhibit No.	Description
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99.1

— Press Release of Lexicon Genetics Incorporated dated October 31, 2006

LEXICON GENETICS REPORTS 2006
THIRD QUARTER FINANCIAL RESULTS

The Woodlands, Texas, October 31, 2006 — Lexicon Genetics Incorporated (Nasdaq: LEXG), 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, 2006.

“The advancement of our pipeline of novel drug discovery and development programs reflects the productivity of our target and drug discovery system,” said Arthur T. Sands, M.D., Ph.D., Lexicon’s president and chief executive officer. “Phase 1 clinical trials are underway for LX6171 for cognitive disorders, LX1031 for irritable bowel syndrome is on track for an IND filing this year and we are initiating IND-enabling studies for LX2931 for autoimmune disease. We also have multiple programs at earlier stages that are making significant progress in preclinical research.”

Revenues: Lexicon’s revenues for the three months ended September 30, 2006 increased 40 percent to \$19.6 million from \$14.0 million for the corresponding period in 2005. The increase was primarily attributable to revenue recognized under Lexicon’s contract with the National Institutes of Health, expanded biotherapeutics drug discovery and development alliance with Genentech, Inc. and research grant from the United States Army related to spinal muscular atrophy. For the nine months ended September 30, 2006, revenues increased 36 percent to \$56.7 million from \$41.8 million for the corresponding period of 2005.

Research and Development Expenses: Research and development expenses for the three months ended September 30, 2006 increased 16 percent to \$27.0 million from \$23.3 million for the corresponding period in 2005. This was primarily due to increased personnel, external research costs related to Lexicon’s drug development programs and non-cash, stock-based compensation expense of \$1.1 million resulting from Lexicon’s adoption of SFAS No. 123(R) on January 1, 2006. For the nine months ended September 30, 2006, research and development expenses increased 16 percent to \$81.1 million, including \$3.4 million in non-cash, stock-based compensation expense, from \$69.8 million for the corresponding period in 2005.

General and Administrative Expenses: General and administrative expenses for the three months ended September 30, 2006 increased 14 percent to \$5.3 million from \$4.7 million for the corresponding period in 2005. This increase was almost entirely due to non-cash, stock-based compensation expense of \$0.7 million resulting from Lexicon’s adoption of SFAS No. 123(R) on January 1, 2006. For the nine months ended September 30, 2006, general and administrative expenses increased 17 percent to \$16.3 million, including \$2.0 million in non-cash, stock-based compensation expense, from \$13.9 million for the corresponding period in 2005.

Net Loss: Net loss for the three months ended September 30, 2006 decreased to \$12.8 million from a net loss of \$14.1 million in the corresponding period in 2005. Net loss per share for the three months ended September 30, 2006 was \$0.20, as compared to \$0.22 for the corresponding period in 2005. For the three months ended September 30, 2006, net loss included non-cash, stock-based compensation expense of \$1.8 million, or \$0.03 per share. Net loss for the nine months ended September 30, 2006 decreased to \$40.5 million, or \$0.63 per share, from a net loss of \$42.2 million, or \$0.66 per share, in the corresponding period in 2005. For the nine months ended September 30, 2006, net loss included non-cash, stock-based compensation expense of \$5.4 million, or \$0.08 per share.

Cash and Investments: As of September 30, 2006, Lexicon had \$53.0 million in cash and investments, including restricted cash and investments, as compared to \$65.3 million as of June 30, 2006 and \$99.7 million as of December 31, 2005.

Subsequent Event: On October 23, 2006, Lexicon announced that it raised \$37.5 million in net proceeds through the sale of 10,582,011 shares of its common stock in a direct equity placement.

“We have successfully completed a financing to increase our flexibility in allocating resources to the advancement of our internal drug pipeline,” said Julia P. Gregory, Lexicon’s executive vice president, corporate development and chief financial officer.

Third Quarter 2006 Highlights

Initiated phase 1 clinical trial of LX6171 for cognitive disorders: Lexicon initiated a Phase 1 clinical trial for LX6171, a novel, orally administered small molecule compound for cognitive disorders. The Phase 1 clinical trial of LX6171 is being conducted to evaluate LX6171’s safety, tolerability and pharmacokinetics in normal healthy volunteers. The trial was designed as a randomized, double-blind, ascending single dose study and expected to include approximately 40 subjects. It will be followed by a randomized, double-blind, ascending multiple dose study of similar size. Lexicon is developing LX6171 for potential application in the treatment of cognitive disorders such as Alzheimer’s disease, schizophrenia and vascular dementia.

Awarded funding from DARPA: Lexicon announced it was awarded funding from the United States Defense Advanced Research Projects Agency (DARPA) for the identification of targets that may be important in the development of drugs to enhance the restorative benefits derived from sleep and offset problems associated with sleep deprivation. Under the award, Lexicon will be investigating the molecular and cellular basis of sleep, sleep pathways and the correlation between sleep architecture and performance, including under conditions of sleep deprivation.

Lexicon Conference Call:

Lexicon management will hold a conference call to discuss the company’s results and provide financial guidance for the fourth quarter at 11:00 a.m. Eastern Time on October 31, 2006. The dial-in number for the conference call is 800-500-0177 (within the United States) or 719-457-2679 (international). The pass code for all callers is 6325154. Investors can access www.lexicon-genetics.com to listen to a live webcast of the call. The webcast will be archived and available for review through November 3, 2006.

About Lexicon Genetics

Lexicon Genetics is a biopharmaceutical company focused on discovering and developing breakthrough treatments for human disease. Lexicon is systematically discovering the physiological and behavioral functions of genes to identify potential points of therapeutic intervention, or drug targets. Lexicon makes these discoveries using its proprietary gene knockout technology to model the physiological effects that could be expected from prospective drugs addressing these targets. For targets that the company believes have high pharmaceutical value, it engages in programs for the discovery and development of small molecule, antibody and protein drugs. Lexicon has advanced knockout-validated targets into drug discovery programs in six therapeutic areas: diabetes and obesity, cardiovascular disease, psychiatric and neurological disorders, cancer, immune system disorders and ophthalmic disease. Lexicon is working

both independently and through collaborations and strategic alliances to accelerate the development and commercialization of its discoveries. Additional information about Lexicon is available through its corporate website, www.lexicon-genetics.com.

Safe Harbor Statement

This press release contains “forward-looking statements,” including statements relating to Lexicon’s regulatory filings and clinical development program for LX6171 and the potential therapeutic and commercial potential of LX6171 and other potential drug candidates in Lexicon’s preclinical pipeline. 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 and preclinical development of 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 “Business — Risk Factors” in Lexicon’s annual report on Form 10-K for the year ended December 31, 2005, 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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Lexicon Genetics Incorporated

Selected Financial Data

Consolidated Statements of Operations Data (In thousands, except per share data)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2006	2005	2006	2005
	(unaudited)		(unaudited)	
Revenues:				
Collaborative research	\$ 18,770	\$ 13,520	\$ 53,427	\$ 36,174
Subscription and license fees	843	443	3,305	5,612
Total revenues	19,613	13,963	56,732	41,786
Operating expenses:				
Research and development, including stock-based compensation of \$1,101, \$0, \$3,355 and (\$20), respectively	27,010	23,344	81,115	69,771
General and administrative, including stock-based compensation of \$660, \$0, \$2,011 and \$0, respectively	5,309	4,674	16,276	13,856
Total operating expenses	32,319	28,018	97,391	83,627
Loss from operations	(12,706)	(14,055)	(40,659)	(41,841)
Interest income	774	767	2,677	1,764
Interest expense	(817)	(833)	(2,437)	(2,465)
Other income, net	(6)	—	(69)	313
Net loss	<u>\$ (12,755)</u>	<u>\$ (14,121)</u>	<u>\$ (40,488)</u>	<u>\$ (42,229)</u>
Net loss per common share, basic and diluted	<u>\$ (0.20)</u>	<u>\$ (0.22)</u>	<u>\$ (0.63)</u>	<u>\$ (0.66)</u>
Shares used in computing net loss per common share	64,832	64,134	64,676	63,767

Consolidated Balance Sheet Data (In thousands)	As of September 30,	As of December 31,
	2006	2005
	(unaudited)	
Cash and investments, including restricted cash and investments of \$430	\$ 53,023	\$ 99,695
Property and equipment, net	80,351	85,265
Goodwill	25,798	25,798
Intangible assets other than goodwill, net	—	640
Total assets	165,348	218,714
Deferred revenue	59,785	81,582
Current and long-term debt	36,384	36,940
Accumulated deficit	(337,918)	(297,430)
Total stockholders' equity	54,650	85,802