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): FEBRUARY 22, 2006

LEXICON GENETICS INCORPORATED (EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE 000-30111 76-0474169 (STATE OR OTHER JURISDICTION OF (COMMISSION FILE NUMBER) (I.R.S. EMPLOYER INCORPORATION OR ORGANIZATION) 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 February 22, 2006, we issued a press release to report our financial results for the quarter and year ended December 31, 2005. 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

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99.1 -- Press Release of Lexicon Genetics Incorporated dated February 22, 2006

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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 GENETICS INCORPORATED

Date: February 22, 2006

By: /s/ JEFFREY L. WADE

Jeffrey L. Wade Executive Vice President and General Counsel

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EXHIBIT NO.

DESCRIPTION

99.1 -- Press Release of Lexicon Genetics Incorporated dated February 22, 2006

LEXICON GENETICS REPORTS 2005 FOURTH QUARTER AND FULL YEAR FINANCIAL RESULTS

LEXICON ACHIEVES 23% ANNUAL REVENUE GROWTH

THE WOODLANDS, TEXAS, FEBRUARY 22, 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 months and year ended December 31, 2005.

"In 2005, we made significant progress toward our goal of entering clinical development with our internal programs," said Arthur T. Sands, M.D., Ph.D., president and chief executive officer. "We continue to be encouraged by the results of preclinical safety testing for our lead programs - LG617 for Alzheimer's and cognitive disorders and LG103 for irritable bowel syndrome."

REVENUES: Lexicon's revenues for the three months ended December 31, 2005 increased 30 percent to \$33.9 million from \$26.0 million for the corresponding period in 2004. The increase was primarily attributable to Lexicon's completion of two performance milestones related to work it is doing in collaboration with Genentech, Inc. that resulted in payments from Genentech totaling \$20 million. Revenue recognized under Lexicon's alliance with Organon and its award from the Texas Enterprise Fund also contributed to the increase in revenue. Revenue in the fourth quarter of 2004 included performance milestone payments from Genentech and Takeda Pharmaceutical Company Limited. For the year ended December 31, 2005, revenues increased 23 percent to \$75.7 million from \$61.7 million in 2004.

RESEARCH AND DEVELOPMENT EXPENSES: Research and development expenses for the three months ended December 31, 2005 increased three percent to \$23.9 million from \$23.1 million for the corresponding period in 2004. For the year ended December 31, 2005, research and development expenses increased three percent to \$93.6 million from \$90.6 million in 2004.

GENERAL AND ADMINISTRATIVE EXPENSES: General and administrative expenses for the three months ended December 31, 2005 were \$4.3 million, substantially unchanged from the corresponding period in 2004. For the year ended December 31, 2005, general and administrative expenses decreased two percent to \$18.2 million from \$18.6 million in 2004.

NET INCOME (LOSS): Net income for the three months ended December 31, 2005 was \$5.9 million, or \$0.09 per share, principally as a result of the performance milestone payments received in the fourth quarter of 2005. This compares favorably to a net loss of \$0.5 million, or \$0.01 per share, for the corresponding period in 2004. The net loss for the year ended December 31, 2005 decreased to \$36.3 million, or \$0.57 per share, from a net loss of \$47.2 million, or \$0.74 per share in 2004.

CASH AND INVESTMENTS: As of December 31, 2005, Lexicon had \$99.7 million in cash and investments, including restricted cash and investments, as compared to \$90.2 million as of September 30, 2005 and \$87.6 million as of December 31, 2004. Cash and investments at December 31, 2005 reflected the receipt in December 2005 of an up-front payment, performance milestones and research funding pursuant to Lexicon's alliance with Genentech.

"Our financial and business development efforts were highly successful in 2005," said Julia P. Gregory, Lexicon's executive vice president, corporate development and chief financial officer. "We continue to create long-term value through our alliances, with immediate positive impact on our revenues and cash

position. Strategic collaborations and technology contracts and licenses brought in more than \$120 million in cash to Lexicon in 2005, thereby providing a strong source of funding during the year."

YEAR 2005 HIGHLIGHTS

EXPANSION OF ALLIANCE WITH GENENTECH: In December 2005, Lexicon announced the expansion of its drug discovery alliance with Genentech to include the advanced research, development and commercialization of new biologic drugs. Lexicon will receive a total of \$25 million in upfront and milestone payments and research funding during the three-year advanced research portion of the expanded alliance. In this period, Lexicon will conduct advanced research on a broad subset of targets included in Genentech's Secreted Protein Discovery Initiative (SPDI) program and validated using Lexicon's proprietary gene knockout technology.

Lexicon may develop and commercialize drugs for up to six of the targets included in the alliance. Genentech retains an option on the potential development and commercialization of these drugs under a cost and profit sharing arrangement, with Lexicon having certain conditional rights to co-promote drugs on a worldwide basis. Genentech is entitled to receive milestone payments in the event of regulatory approval and royalties on net sales of products commercialized by Lexicon outside of a cost and profit sharing arrangement. Lexicon will receive payments from Genentech upon achievement of milestones related to the development and regulatory approval of certain drugs resulting from the alliance that are developed and commercialized by Genentech. Lexicon is also entitled to receive royalties on net sales of these products, provided they are not included in a cost and profit sharing arrangement.

COMPLETION OF TWO PERFORMANCE MILESTONES IN GENENTECH COLLABORATION: Lexicon completed two performance milestones related to work it is doing in collaboration with Genentech and received corresponding payments totaling \$20 million. The first of these milestones related to the completion by Lexicon of the analysis of the physiological and behavioral functions of the final set of targets selected from Genentech's SPDI program under the companies' initial collaboration. The second related to the delivery of data from advanced research already conducted by Lexicon under the expanded alliance.

ALLIANCE WITH ORGANON TO DEVELOP BIOTHERAPEUTIC DRUGS: In May 2005, Lexicon and Organon, the human healthcare business of Akzo Nobel, announced the formation of a collaboration to jointly discover, develop and commercialize novel biotherapeutics. The alliance encompasses up to 300 genes encoding secreted proteins or potential antibody targets that were jointly selected for the collaboration, including two of Lexicon's existing biotherapeutics discovery programs. Organon and Lexicon will share costs and responsibility for research, preclinical and clinical activities and will equally benefit from collaboration product revenue. Lexicon received an upfront payment of \$22.5 million from Organon in exchange for access to Lexicon's drug target discovery capabilities and the exclusive right to co-develop biotherapeutic products that modulate the 300 genes selected for the collaboration. Organon will also provide research funding totaling up to \$50 million to Lexicon for Organon's 50% share of the collaboration's costs during the four-year target function discovery portion of the alliance.

ALLIANCE WITH XOMA FOR ANTIBODY DRUG DEVELOPMENT AND COMMERCIALIZATION: In June 2005, Lexicon established an alliance with XOMA Ltd. to jointly develop and commercialize antibody drugs for certain targets discovered by Lexicon. During the three-year initial term of the alliance, Lexicon will select at least three targets for submission to the collaboration and XOMA will generate or engineer antibodies that modulate the collaboration's targets using phage display libraries and its proprietary Human Engineering(TM) technology. Lexicon and XOMA will jointly develop and commercialize novel antibodies directed at these targets and will share the responsibility and costs for research, preclinical, clinical and commercialization activities. Costs and profits will be allocated 65% to Lexicon and 35% to XOMA.

AWARD FROM TEXAS ENTERPRISE FUND: In July 2005, Lexicon announced it was awarded \$35 million from the Texas Enterprise Fund for the creation of a knockout mouse embryonic stem cell library containing 350,000 cell lines. Lexicon is creating this new library using its proprietary gene trapping technology for the Texas Institute for Genomic Medicine, a newly formed non-profit institute. In addition, Lexicon will equip the institute with the bioinformatics software required for the management and analysis of data relating to the library.

CONTRACT WITH NATIONAL INSTITUTES OF HEALTH: In September 2005, Lexicon entered into a three-year contract to provide selected knockout mouse lines and related phenotypic data to the United States National Institutes of Health (NIH). These materials are related to genes that have already been knocked out and analyzed by Lexicon. Lexicon will receive payment from NIH of approximately \$4.9 million for NIH's initial order of knockout mouse lines. Lexicon retains the sole right to provide these materials to commercial entities.

HARVESTED NOVEL DISCOVERIES FROM GENOME5000(TM) PROGRAM: Lexicon's Genome5000 program continued to yield new biologically-validated targets for drug discovery. In this program, Lexicon is analyzing 5,000 genes using its proprietary gene knockout technologies and its extensive physiological and behavioral analyses to discover new drug targets from the human genome. To date, Lexicon has completed the analysis of more than sixty percent of these genes and has harvested more than 90 promising targets related to major medical needs.

LEXICON CONFERENCE CALL:

Dr. Arthur T. Sands and Julia P. Gregory will host a conference call at 11:00 a.m. Eastern Time on Wednesday, February 22, 2006 to review Lexicon's operating highlights and its financial results for the year ended December 31, 2005 and to discuss the company's guidance for 2006.

The dial-in number for the conference call is 800-946-0741 (within the United States) or 719-457-2649 (international). The pass code for all callers is 7195604. 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 February 27, 2006.

ABOUT LEXICON GENETICS

Lexicon Genetics is a biopharmaceutical company focused on the discovery and development of 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 directed against novel targets. The Company 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 strategic collaborations and 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 about 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. These 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 development of its drug candidates and advance such candidates into clinical development, achieve its operational objectives, obtain patent protection for its discoveries and establish strategic alliances, as well as those relating to manufacturing, the regulatory process, 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, 2004, 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 GENETICS: Bobbie Faulkner Manager, Investor Relations (281) 863-3503 bfaulkner@lexgen.com

SELECTED FINANCIAL DATA

CONSOLIDATED STATEMENTS OF OPERATIONS DATA (In thousands, except per share data)	THREE MONTHS ENDED DECEMBER 31,		YEAR ENDED DECEMBER 31,	
	2005	2004	2005	2004
	(UNAUDITED)		(UNAUDITED)	
Revenues: Collaborative research Subscription and license fees	\$ 33,393 501	\$ 21,739 4,272	\$ 69,567 6,113	\$ 49,736 12,004
Total revenues Operating expenses:	33,894	26,011	75,680	61,740
Research and development General and administrative	23,854 4,318	23,120 4,349	93,625 18,174	90,586 18,608
Total operating expenses	28,172	27,469	111,799	109,194
Income (loss) from operations Interest income Interest expense Other income, net	5,722 881 (815) 245	(1,458) 440 (831) 1,308	(36,119) 2,645 (3,280) 558	(47,454) 1,638 (2,660) 1,304
Income (loss) before taxes Income tax provision	6,033 119	(541)	36,196 119	47,172
Net income (loss)	\$ 5,914 =======	\$ (541) ======	\$ (36,315) =======	\$ (47,172) ========
Net income (loss) per common share, basic and diluted	\$ 0.09 ======	\$ (0.01) ======	\$ (0.57) =======	\$ (0.74) =======
Shares used in computing net income (loss) per common share, basicShares used in computing net income (loss) per common share,	64,539	63,449	63,962	63,327
diluted	67,317	63,449	63,962	63,327

CONSOLIDATED BALANCE SHEET DATA (In thousands)	AS OF DECEMBER 31, 2005	AS OF DECEMBER 31, 2004
	(UNAUDITED)	
Cash and investments, including restricted cash and investments of \$430	\$ 99,695	\$ 87,558
Property and equipment, net	85,265	84,573
Goodwill	25,798	25,798
Intangible assets other than goodwill, net	640	1,840
Total assets	218,714	211,980
Deferred revenue	81,582	37, 592
Current and long-term debt	36,940	37,631
Accumulated deficit	(297,430)	(261,115)
Total stockholders' equity	85,802	121, 594