#### UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

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FORM 8-K

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### CURRENT REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

DATE OF REPORT (DATE OF EARLIEST EVENT REPORTED): JANUARY 7, 2005

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

DELAWARE000-3011176-0474169(STATE OR OTHER JURISDICTION OF<br/>INCORPORATION OR ORGANIZATION)(COMMISSION FILE NUMBER)(I.R.S. EMPLOYER<br/>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

Based on preliminary, unaudited financial data, Lexicon Genetics Incorporated expects that its revenues for the year ended December 31, 2004 will exceed \$60 million, representing an increase of more than 40% from 2003. Lexicon expects to achieve revenues for 2005 in the range of \$70 million to \$75 million. This includes approximately \$48 million of revenues expected under existing alliance, collaboration and technology license agreements. Lexicon had unrestricted cash and investments of approximately \$87 million (unaudited) at December 31, 2004. Lexicon believes that its unrestricted cash and investments, coupled with the revenues it expects to derive from alliances, collaborations and technology licenses, will be sufficient to fund its operations at least through the next two years.

Lexicon will release its fourth quarter and year-end 2004 financial results on a conference call currently scheduled for Thursday, February 24, 2005.

The information in 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.

#### Safe Harbor Statement

This Form 8-K contains "forward-looking statements," which 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 achieve its financial and operational objectives and establish new alliance, collaboration and technology license agreements, 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" in Lexicon's annual report on Form 10-K for the year ended December 31, 2003, 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.

# 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.

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## LEXICON GENETICS INCORPORATED

Date: January 7, 2005

By: /s/ JEFFREY L. WADE

Jeffrey L. Wade Executive Vice President and General Counsel