FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

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Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* BARKER SAM L						2. Issuer Name and Ticker or Trading Symbol LEXICON PHARMACEUTICALS, INC./DE [LXRX]							of Reporting cable) or	g Perso	10% Ow	ner
(Last) (First) (Middle) 8800 TECHNOLOGY FOREST PLACE					3. Date of Earliest Transaction (Month/Day/Year) 04/24/2009							Officer below)	(give title		Other (sp below)	pecify
(Street) THE WOODL	,			4.	4. If Amendment, Date of Original Filed (Month/Day/Year)							dividual or Joint/Group Filing (Check Applicable) X Form filed by One Reporting Person Form filed by More than One Reporting Person				
(City)	(S	tate)	(Zip)													
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																
Date					Execution 2A. Dea Executif any (Month)			Code (Inst	Transaction Disposed Of (D) (Instr. 3 Code (Instr. 5)		ed (A) or tr. 3, 4 and	Beneficia	Form ally (D) o following (I) (Ir		n: Direct r Indirect istr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
								Code V	Amount	(A) or (D)	Price	Transact (Instr. 3	ion(s)			(111501.4)
	Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)															
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year	4. Transa Code (8)				6. Date Exerc Expiration Da (Month/Day/Y	ite	7. Title and Amor of Securities Underlying Derivative Secur (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	ly C	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares					
Stock Option (right to buy)	\$0.99	04/24/2009		A		20,000		(1)	04/24/2019	Common Stock	20,000	\$0	20,000		D	

Explanation of Responses:

1. Option vests with respect to 1/12th of the shares subject to the option for each month of service following the date of grant.

Remarks:

/s/ Barker, Samuel L.

04/27/2009

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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