

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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* <u>Tessmer James F</u>  (Last) (First) (Middle) 8800 TECHNOLOGY FOREST PLACE  (Street) THE WOODLANDS TX 77381  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>LEXICON PHARMACEUTICALS, INC./DE [ LXRX ]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>VP, Finance &amp; Accounting</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>02/12/2010</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	02/12/2010		F <sup>(1)</sup>		3,934	D	\$1.91	18,679	D	

**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. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	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
Stock Option (Right to Buy)	\$1.9	02/15/2010		A		100,000		(2)	02/15/2020	Common Stock	100,000	\$0	100,000	D	
Restricted Stock Units (Phantom Stock)	(3)	02/15/2010		A		13,200		(4)	(4)	Common Stock	13,200	\$0	13,200	D	

**Explanation of Responses:**

- Withholding of a portion of vested shares by the Company in satisfaction of shareholder's tax withholding obligations with respect thereto.
- Option vests with respect to 25% of the shares subject to the option on the first anniversary of grant (2/15/2011) and vests 1/48th per month for each month of service thereafter.
- Each restricted stock unit represents a contingent right to receive one share of common stock.
- Restricted stock units vest with respect to 100% of the shares subject to the restricted stock unit upon the dosing of the first patient in a pivotal human clinical trial in any country, the results of which could be used to establish safety and efficacy of a pharmaceutical product discovered or developed by the Company (whether or not licensed by the Company to a third party) as a basis for a New Drug Application with the U.S. Food and Drug Administration or that would otherwise satisfy the requirements of 21 CFR 321.21(c) or its foreign equivalent.

/s/ James F. Tessmer

02/17/2010

\*\* 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.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.