FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

	OMB APPROVAL										
	OMB Number:	3235-0287									
- 1	Estimated average	hurden									

0.5

hours per response:

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 S	Section	on 30(h)	of the	Inves	stment (	Com	ipany Act o	of 194	40							
Name and Address of Reporting Person*     Tessmer James F					LE	2. Issuer Name <b>and</b> Ticker or Trading Symbol  LEXICON PHARMACEUTICALS,  INC./DE [ LXRX ]										Check al	II app Direct Office	etor er (give title	ng Pe	10% O	wner (specify
(Last) (First) (Middle) 8800 TECHNOLOGY FOREST PLACE					3. Date of Earliest Transaction (Month/Day/Year) 08/12/2009											VP, Finance & Acctg					
(Street) THE WOODLANDS TX 773811160  (City) (State) (Zip)					4. If	4. If Amendment, Date of Original Filed (Month/Day/Year)										. Individual or Joint/Group Filing (Check Applicable ine)  X Form filed by One Reporting Person  Form filed by More than One Reporting  Person					
		Tabl	e I - Nor	-Deriv	ative	Sec	curitie	s Ac	quir	red, D	isp	osed o	f, or	Bene	eficia	ally O	wne	ed			
1. Title of Security (Instr. 3)  2. Transa Date (Month/D					ar)   i	2A. Deemed Execution Date, if any (Month/Day/Year)		,   T	Transaction Code (Instr. 5		4. Securities Acquired (A Disposed Of (D) (Instr. 3, 5)			4 and Secu Bene		cially I Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership (Instr. 4)		
									c	Code	V	Amount		(A) or (D)	Price	、  Tr	ransa	ction(s) 3 and 4)			(msu. 4)
Common Stock 08/12					2/2009	/2009				F <sup>(1)</sup>		3,187	' D		\$1	.3 22,613		2,613		D	
		Та	able II - D									sed of, onvertib				y Owr	ned				
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution E if any (Month/Day	Date,		ransaction ode (Instr.		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		Date Exe Diration   Dirath/Day	Date		7. Title and Amount of Securities Underlying Derivative Security (Instrand 4)			8. Price Derivat Securit (Instr. 5	ivative urity	9. Number of derivative Securities Beneficially Owned Following Reported Transaction ((Instr. 4)	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	v	(A) (D)					xpiration ate	Title	or Number of								

## **Explanation of Responses:**

1. Withholding of a portion of vested shares by the Company in satisfaction of shareholder's tax withholding obligations with respect thereto.

## Remarks:

/s/ Tessmer, James F.

08/14/2009

\*\* Signature of Reporting Person

Date

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

- $^{\star}$  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.