

**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

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

|  |   |  |
|--|---|--|
| 1. Name and Address of Reporting Person*<br><u>Ulys, LLC</u><br><br>(Last) (First) (Middle)<br>750 LEXINGTON AVENUE<br>30TH FLOOR<br><br>(Street)<br>NEW YORK NY 10022<br><br>(City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol<br><u>LEXICON PHARMACEUTICALS, INC./DE [ LXRX ]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)<br><br>Director <input checked="" type="checkbox"/> 10% Owner<br><br>Officer (give title below) Other (specify below)                      |
|  | 3. Date of Earliest Transaction (Month/Day/Year)<br>03/19/2010                                  |  |
|  | 4. If Amendment, Date of Original Filed (Month/Day/Year)  | 6. Individual or Joint/Group Filing (Check Applicable Line)<br><br><input checked="" type="checkbox"/> Form filed by One Reporting Person<br><input type="checkbox"/> Form filed by More than One Reporting Person |

**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                    | 03/19/2010                           |  | p <sup>(1)</sup>               |   | 59,296,749  | A          | \$1.15 | 130,137,040   | I  | See Footnote <sup>(2)</sup>                           |
| Common Stock                    | 03/19/2010                           |  | p <sup>(3)</sup>               |   | 5,190,848   | A          | \$1.15 | 135,327,888   | I  | See Footnote <sup>(2)</sup>                           |
| Common Stock                    | 03/19/2010                           |  | p <sup>(4)</sup>               |   | 29,021,739  | A          | \$1.15 | 29,021,739  | I  | See Footnote <sup>(5)</sup>                           |
| Common Stock                    | 03/19/2010                           |  | p <sup>(6)</sup>               |   | 760,870   | A          | \$1.15 | 29,782,609  | I  | See Footnote <sup>(5)</sup>                           |

**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 |   |  |  |   |  |

1. Name and Address of Reporting Person\*  
Ulys, LLC  
 (Last) (First) (Middle)  
 750 LEXINGTON AVENUE  
 30TH FLOOR  
 (Street)  
 NEW YORK NY 10022  
 (City) (State) (Zip)

1. Name and Address of Reporting Person\*  
Invus, L.P.  
 (Last) (First) (Middle)  
 750 LEXINGTON AVENUE  
 30TH FLOOR  
 (Street)  
 NEW YORK NY 10022  
 (City) (State) (Zip)

|  |         |          |
|--|---------|----------|
| (City)   | (State) | (Zip)    |
| 1. Name and Address of Reporting Person*                     |         |          |
| <a href="#">Invus Advisors, L.L.C.</a>                       |         |          |
| (Last)   | (First) | (Middle) |
| 750 LEXINGTON AVENUE<br>30TH FLOOR                           |         |          |
| (Street)   |         |          |
| NEW YORK   | NY      | 10022    |
| (City)   | (State) | (Zip)    |
| 1. Name and Address of Reporting Person*                     |         |          |
| <a href="#">Invus, CV</a>                                    |         |          |
| (Last)   | (First) | (Middle) |
| MARTEN MEESWEG 25  |         |          |
| (Street)   |         |          |
| ROTTERDAM  | P7      |          |
| 3068 AV  |         |          |
| (City)   | (State) | (Zip)    |
| 1. Name and Address of Reporting Person*                     |         |          |
| <a href="#">DEBBANE RAYMOND</a>                              |         |          |
| (Last)   | (First) | (Middle) |
| C/O THE INVUS GROUP, LLC<br>750 LEXINGTON AVENUE, 30TH FLOOR |         |          |
| (Street)   |         |          |
| NEW YORK   | NY      | 10022    |
| (City)   | (State) | (Zip)    |

**Explanation of Responses:**

- On March 19, 2010, Invus, L.P. agreed to purchase 59,296,749 shares of common stock of Lexicon Pharmaceuticals, Inc. (the "Issuer") from the Issuer. The purchase closed on March 19, 2010.
- 131,346,780 of the reported shares are owned directly by Invus, L.P. and 3,891,108 of the reported shares are owned directly by Invus Public Equities, L.P. and subject to a voting agreement pursuant to which Invus Public Equities, L.P. agreed to vote its shares of common stock of the Issuer at the sole direction of Invus, L.P. Invus Advisors, L.L.C. is the general partner of Invus, L.P. Ulys, L.L.C. is the managing member of Invus Advisors, L.L.C. Raymond Debbane is the sole member of Ulys, L.L.C. Accordingly, each of Invus Advisors, L.L.C, Ulys, L.L.C. and Raymond Debbane may be deemed to be indirect beneficial owners of the reported securities. Each of Invus Advisors, L.L.C., Ulys, L.L.C and Raymond Debbane disclaims beneficial ownership of such securities, except to the extent of its or his pecuniary interest therein.
- On March 19, 2010, Invus, L.P. agreed to purchase 5,190,848 shares of common stock of the Issuer from the Issuer. The purchase closed on March 19, 2010.
- On March 19, 2010, Invus C.V. agreed to purchase 29,021,739 shares of common stock from the underwriters in a public offering of common stock of the Issuer. The purchase closed on March 19, 2010.
- The reported shares are owned directly by Invus C.V. Ulys, L.L.C. is the general partner of Invus C.V. Raymond Debbane is the sole member of Ulys, L.L.C. Accordingly, each of Ulys, L.L.C. and Raymond Debbane may be deemed to be indirect beneficial owners of the reported securities. Each of Ulys, L.L.C and Raymond Debbane disclaims beneficial ownership of such securities, except to the extent of its or his pecuniary interest therein.
- On March 19, 2010, Invus C.V. agreed to purchase 760,870 shares of common stock of the Issuer from the Issuer. The purchase closed on March 19, 2010.

|   |                            |
|---|----------------------------|
| <a href="#">/s/ Raymond Debbane,<br/>President, INVUS<br/>ADVISORS, L.L.C., its<br/>general partner for INVUS,<br/>L.P.</a> | <a href="#">03/19/2009</a> |
| <a href="#">/s/ Raymond Debbane,<br/>President for INVUS<br/>ADVISORS, L.L.C.</a>   | <a href="#">03/19/2009</a> |
| <a href="#">/s/ Raymond Debbane,<br/>President, ULYS, L.L.C., its<br/>general partner for INVUS<br/>C.V.</a>                | <a href="#">03/19/2009</a> |
| <a href="#">/s/ Raymond Debbane,<br/>President for ULYS, L.L.C.</a>   | <a href="#">03/19/2009</a> |
| <a href="#">/s/ Raymond Debbane</a>   | <a href="#">03/19/2009</a> |

\*\* 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.