

# FORM 4

**UNITED STATES SECURITIES AND EXCHANGE  
COMMISSION**  
Washington, D.C. 20549

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

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,  
Section 17(a) of the Public Utility Holding Company Act of 1935 or  
Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

| 1. Name and Address of Reporting Person *<br><b>LEDERMAN SETH</b>                              |                                      | 2. Issuer Name and Ticker or Trading Symbol<br>Tonix Pharmaceuticals Holding Corp. [TNXP] |                                | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br><input type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner<br><input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) |   |   |  |   |
|--|--------------------------------------|---|--------------------------------|--|---|---|--|---|
| (Last) (First) (Middle)<br>C/O TONIX PHARMACEUTICALS HOLDING CORP, 509 MADISON AVE., SUITE 306 |                                      | 3. Date of Earliest Transaction (Month/Day/Year)<br>02/12/2013                            |                                | Chief Executive Officer  |   |   |  |   |
| (Street)<br>NEW YORK, NY 10022   |                                      | 4. If Amendment, Date Original Filed (Month/Day/Year)                                     |                                | 6. Individual or Joint/Group Filing (Check Applicable Line)<br><input type="checkbox"/> Form filed by One Reporting Person<br><input type="checkbox"/> Form filed by More than One Reporting Person  |   |   |  |   |
| (City) (State) (Zip)   |                                      | <b>Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned</b>   |                                |  |   |   |  |   |
| 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  |   |   |  |   |

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

**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 control number.** SEC 1474 (9-02)

**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 Underlying Securities (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 of Derivative Security: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|--------------------------------------|--|--------------------------------|---|---|--|------------|---|-----------------|--|--|--|--|
|  |  |                                      |  | Code                           | V |   | (A)  | (D)        | Date Exercisable  | Expiration Date |  |  |  |  |
| Stock Option                               | \$ 0.51  | 02/12/2013                           |  | A                              |   | 1,350,000   | (I)  | 02/12/2023 | Common Stock  | 1,350,000       | \$ 0                                       | 0  | D  |  |

## Reporting Owners

| Reporting Owner Name / Address   | Relationships |           |                         |       |
|--|---------------|-----------|-------------------------|-------|
|  | Director      | 10% Owner | Officer                 | Other |
| LEDERMAN SETH<br>C/O TONIX PHARMACEUTICALS HOLDING CORP<br>509 MADISON AVE., SUITE 306<br>NEW YORK, NY 10022 | X             | X         | Chief Executive Officer |       |

## Signatures

|                               |            |
|-------------------------------|------------|
| /s/ Seth Lederman             | 02/19/2013 |
| Signature of Reporting Person | Date       |

## Explanation of Responses:

- \* 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).
- (1) The stock option is granted pursuant to the Issuer's Amended and Restated 2012 Incentive Stock Plan, with such option vesting 1/3rd on the first anniversary of issuance and 1/36th each month thereafter for 24 months

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

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

