FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| STATEMENT | OF CHANGES | S IN BENEFICIAL | OWNERSHIP |
|-----------|------------|-----------------|-----------|

| l | OMB APPRO | OVAL | | | | | | |
|---|--------------------------|-----------|--|--|--|--|--|--|
| | OMB Number: | 3235-0287 | | | | | | |
| l | Estimated average burden | | | | | | | |
| l | hours per response: | 0.5 | | | | | | |

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* GANNON STEVEN | | | | | 2. Issuer Name and Ticker or Trading Symbol Xenon Pharmaceuticals Inc. [XENE] | | | | | | | eck all appli | or | | 10% Ow | ner |
|--|---|------------|--|---|--|------------------------|---|--|--------------------|---|---|---|---|---|--|---------------------------------------|
| (Last) (First) (Middle) C/O XENON PHARMACEUTICALS INC. | | | | 3. Date of Earliest Transaction (Month/Day/Year) 06/04/2018 | | | | | | | Officer below) | (give title | | Other (s below) | pecify | |
| 200 - 3650 GILMORE WAY (Street) BURNABY A1 V5G 4W8 (City) (State) (Zip) | | | 4. | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | Individual or Joint/Group Filing (Check Applicable ne) X Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | |
| Date | | | Transaction ate lonth/Day/Y | Execution Date, | | Transacti Code (Ins | 3. Transaction Code (Instr. 8) 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 5) | | | Benefici | es ally Following | Form (D) or | orm: Direct 0) or Indirect) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | |
| | | | | | | Code V | Amoun | t (A) o | r Price | Transact (Instr. 3 | tion(s) | | | msu. 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) | Conversion Date Execution or Exercise (Month/Day/Year) if any | | 3A. Deemed Execution Date if any (Month/Day/Yes | Date, Transaction Code (Instr. | | n of | | 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 derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4) | lly | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership (Instr. 4) |
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | | |
| Stock Option (Right to Buy) | \$6.2 | 06/04/2018 | | A | | 15,000 | | (1) | 06/03/202 | Common Shares | 15,000 | \$0.00 | 15,000 |) | D | |

Explanation of Responses:

1. One-third of the total shares subject to the Option shall vest on the one year anniversary of the grant date, one-third of the total shares subject to the Option shall vest on the two year anniversary of the grant date, and the balance of the total shares subject to the Option shall vest on the three year anniversary of the grant date.

> /s/ Joanne Smartt, Attorney-in-06/05/2018 fact

** 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.