FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB Number: Estimated average burden 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*  AZAB MOHAMMAD                          |  |  |   |    |   | 2. Issuer Name <b>and</b> Ticker or Trading Symbol Xenon Pharmaceuticals Inc. [XENE] |   |     |   |       |                    |   |  | (Check all ap  |   | olicable)<br>ctor   | g Persoi                                      | erson(s) to Issuer<br>10% Owner                  |  |
|--|--|--|---|----|---|--|---|-----|---|-------|--------------------|---|--|--|---|---|---|--|--|
| (Last) (First) (Middle) C/O XENON PHARMACEUTICALS INC                            |  |  |   |    |   | 3. Date of Earliest Transaction (Month/Day/Year) 08/17/2017                          |   |     |   |       |                    |   |  |  | Office<br>below   | er (give title<br>w)  |   | Other below)                                     | specify  |
| 200 - 3650 GILMORE WAY   |  |  |   |    | 4. If                                   | 4. If Amendment, Date of Original Filed (Month/Day/Year)                             |   |     |   |       |                    |   |  | 6. Individual or Joint/Group Filing (Check Applicable Line)            |   |   |   |  |  |
| (Street) BURNABY A1 V5G 4W8  |  |  |   | V8 |   |  |   |     |   |       |                    |   |  | X  | Form filed by One Reporting Person  Form filed by More than One Reporting  Person |   |   |  |  |
| (City)   | (St  | (State) (Zip)                              |   |    |   |  |   |     |   |       |                    |   |  |  |   |   |   |  |  |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned |  |  |   |    |   |  |   |     |   |       |                    |   |  |  |   |   |   |  |  |
| 1. Title of Security (Instr. 3)  2. Transaction Date (Month/Day/                 |  |  |   |    |   | Execution Date,  |   |     | 3. Transaction Code (Instr. 8) 4. Securities Disposed O |       |                    |   |  | 5. Amount of<br>Securities<br>Beneficially<br>Owned Follor<br>Reported |   | ities<br>icially<br>d Following   | 6. Owner<br>Form: I<br>(D) or In<br>(I) (Inst | Direct<br>ndirect                                | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4)  |
|  |  |  |   |    |   |  |   |     | Code  | v     | Amount             | (A) or<br>(D)   | Price                                  |  | Transaction(s)<br>(Instr. 3 and 4)  |   |   |  | (111511.4)   |
| Common Shares 08/17/20   |  |  |   |    | 017                                     | 17   |   | P   |   | 23    | A                  | \$2   | .65                                    | 1  | 12,898  |   | )   |  |  |
| Common Shares 08/18/20   |  |  |   |    | 017                                     | 17   |   | P   |   | 6,312 | A                  | \$2.89  | 995(1)                                 | 1  | 19,210  |   | )   |  |  |
|  | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |  |   |    |   |  |   |     |   |       |                    |   |  |  |   |   |   |  |  |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)                              | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security  | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) |    | 4.<br>Transaction<br>Code (Instr.<br>8) |  | 5. Number<br>of<br>Derivative<br>Securities<br>Acquired<br>(A) or<br>Disposed<br>of (D)<br>(Instr. 3, 4<br>and 5) |     | 6. Date Exerci<br>Expiration Da<br>(Month/Day/Y         |       | ate                | 7. Title and<br>Amount of<br>Securities<br>Underlying<br>Derivative<br>Security (Instr.<br>and 4) |  | Deriv<br>Secu<br>(Inst   | rative<br>rity<br>r. 5)   | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Owi<br>Fori<br>Dire<br>or li<br>(I) (I        | nership<br>m:<br>ect (D)<br>ndirect<br>Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|  |  |  |   |    | Code                                    | v  | (A)   | (D) | Date<br>Exercis   | sable | Expiration<br>Date | Title   | Amount<br>or<br>Number<br>of<br>Shares |  |   |   |   |  |  |

## **Explanation of Responses:**

1. The "Amount" and "Price" reported in this Column 4 reflect the aggregate number and weighted-average price, respectively, of shares purchased. These shares were purchased in multiple transactions at prices ranging from \$2.6899 to \$2.95, inclusive. The reporting person undertakes to provide to the issuer, any security holder of the issuer, or the SEC staff, upon request, full information regarding the number of shares purchased at each separate price within the ranges set forth herein.

/s/ Joanne Smartt, Attorney-in-

\*\* Signature of Reporting Person

08/21/2017

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.