(City)

(Zip)

(State)

1. Name and Address of Reporting Person\*

## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| v if no longer subject to | STATEMENT OF CHAN |
|---------------------------|-------------------|

# STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: Estimated average burden esponse: 0.5

7. Nature of Indirect Beneficial Ownership (Instr. 4)

11. Nature of Indirect Beneficial Ownership (Instr. 4)

Check this box if no longer subject to

| obligat   | ions may conti<br>tion 1(b). |  |                        | File   |   |                              |                            |                |  |  | ties Exchan<br>Impany Act |   |   |                          |   | ll.   | per respons                                     |             | 0  |
|---|------------------------------|--|------------------------|--|---|------------------------------|----------------------------|----------------|--|--|---------------------------|---|---|--------------------------|---|---|---|-------------|--|
| ı   |                              | Reporting Person*                          | ī                      |  | 2. I:   | ssue                         | er Name                    | and Tic        | ker or Tr  | ading  | Symbol                    |   |   |                          |   | ip of Reportin  | ıg Person(s                                     | ) to Is     | suer   |
| BVF PARTNERS L P/IL   |                              |  |                        | Xenon Pharmaceuticals Inc. [ XENE ]  3. Date of Earliest Transaction (Month/Day/Year) 06/27/2017 |   |                              |                            |                |  |  |                           |   |   | ctor                     | X 1   | 0% O  | wner  |             |  |
| (Last) (First) (Middle)  1 SANSOME ST   |                              |  |                        |  |   |                              |                            |                |  |  |                           |   |   |                          | cer (give title<br>w)   |   | other (<br>elow)                                | (specify    |  |
| 30TH FI   | _                            |  |                        |  |   |                              |                            |                |  |  |                           |   |   |                          |   |   |   |             |  |
| (Street)  |                              |  |                        |  |   | endmen<br>2 <mark>017</mark> | t, Date                    | of Origina     | l File   | d (Month/Da  | 6. Inc<br>Line)           | 6. Individual or Joint/Group Filing (Check App<br>Line)  Form filed by One Reporting Person |   |                          |   |   |   |             |  |
| SAN<br>FRANCISCO CA 94104   |                              |  |                        |  |   |                              |                            |                |  |  |                           |   | X Form filed by More than One Reporting Person  |                          |   |   |   |             |  |
| (City)  | (S                           | tate)                                      | (Zip)                  |  |   |                              |                            |                |  |  |                           |   |   |                          |   |   |   |             |  |
|   |                              | Tab  | le I - No              | 1  |   | _                            |                            |                | <del>-</del>   | , Dis  | sposed o                  | f, or I   | 3enet   | ficially                 | / Own   | ed  |   |             |  |
| 1. Title of Security (Instr. 3) 2. Transac Date (Month/Da   |                              |  |                        | ar)  | 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) |                              | 3.<br>Transa<br>Code<br>8) |                | 4. Securities Acquired (A)<br>Disposed Of (D) (Instr. 3, 4 |  |                           | ) or<br>4 and 5)  | Secui<br>Benef  | ficially<br>ed Following | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4) | ect<br>rect   | 7. Nature<br>of Indired<br>Beneficia<br>Ownersh |             |  |
|   |                              |  |                        |  |   |                              |                            |                | Code   | v  | Amount                    | (A)<br>(D)  | or P  | rice                     | Trans   | action(s)<br>. 3 and 4)   |   |             | (Instr. 4)   |
| Common  | Stock, no p                  | oar value per sha                          | ire <sup>(1)</sup>     | 06/27  | 7/2017  | <u> </u>                     |                            |                | P  |  | 46,795                    | 5 1   | <b>A</b> \$   | 3.0361                   | 1,  | 635,032   | D <sup>(2)</sup>                                |             |  |
| Common Stock, no par value per share <sup>(1)</sup> 06/27/.                                       |                              |  |                        |  |   | P<br>P                       |                            | 30,170         |  |  | 3.0361                    |   |   | D <sup>(3)</sup>         |   |   |   |             |  |
| Common Stock, no par value per share <sup>(1)</sup> 06/27/201                                     |                              |  |                        |  |   |                              |                            |                | 8,496  |  |                           | 3.0361  |   |                          | D <sup>(4)</sup>  |   |   |             |  |
|   |                              | Та   | able II -              | Deriva<br>(e.g., p   | tive S<br>uts, c  | ec<br>call                   | urities<br>s, war          | Acqı<br>rants, | ıired, [<br>, optioı                                       | )ispo<br>1s, c                                       | osed of,<br>convertib     | or Be<br>le se  | nefic<br>curiti   | ially C<br>es)           | Owned   |   |   |             |  |
| 1. Title of Derivative Security (Instr. 3)  2. Conversion or Exercis Price of Derivative Security |                              | 3. Transaction<br>Date<br>(Month/Day/Year) | Execution Date, if any |  | 4.<br>Transa<br>Code<br>8)                                  |                              | ion of                     |                | Expirati   | 6. Date Exercis<br>Expiration Date<br>(Month/Day/Yea |                           | Amou<br>Secur<br>Under<br>Deriva  | 7. Title and<br>Amount of<br>Securities<br>Juderlying<br>Derivative<br>Security (Instr. 3<br>and 4) |                          | Price of<br>rivative<br>curity<br>str. 5)                         | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Owner<br>Form:<br>Direct<br>or Indi<br>(I) (Ins | (D)<br>rect | 11. Natu<br>of Indire<br>Benefici<br>Ownersh<br>(Instr. 4) |
|   |                              |  |                        |  | Code  | v                            | (A)                        | (D)            | Date<br>Exercis  | able   | Expiration<br>Date        | Title   | Amou<br>or<br>Numb<br>of<br>Share   | per                      |   |   |   |             |  |
| ı   |                              | Reporting Person*                          | ī                      |  |   |                              |                            |                |  |  |                           |   |   |                          |   |   |   |             |  |
| <u>BVF P.</u>   | ARTNER                       | . <u>S L P/IL</u>                          |                        |  |   |                              |                            |                |  |  |                           |   |   |                          |   |   |   |             |  |
| (Last)<br>1 SANS<br>30TH FI   |                              | (First)                                    | (Mid                   | ldle)  |   |                              |                            |                |  |  |                           |   |   |                          |   |   |   |             |  |
| (Street) SAN FR   | ANCISCO                      | CA   | 941                    | .04  |   |                              |                            |                |  |  |                           |   |   |                          |   |   |   |             |  |
| (City)  |                              | (State)                                    | (Zip)                  | )  |   |                              |                            |                |  |  |                           |   |   |                          |   |   |   |             |  |
|   |                              | Reporting Person*                          |                        | O L P  |   |                              |                            |                |  |  |                           |   |   |                          |   |   |   |             |  |
| (Last)<br>1 SANSO<br>30TH FI  |                              | (First)                                    | (Mid                   | ldle)  |   | _                            |                            |                |  |  |                           |   |   |                          |   |   |   |             |  |
| (Street)  | ANCISCO                      | CA   | 941                    | 04   |   |                              |                            |                |  |  |                           |   |   |                          |   |   |   |             |  |

| BIOTECHNOLOGY VALUE FUND II LP  |                    |          |  |  |  |  |  |  |
|---|--------------------|----------|--|--|--|--|--|--|
| (Last) 1 SANSOME ST 30TH FL   | (First)            | (Middle) |  |  |  |  |  |  |
| (Street) SAN FRANCISCO  | CA                 | 94104    |  |  |  |  |  |  |
| (City)  | (State)            | (Zip)    |  |  |  |  |  |  |
| Name and Address of Reporting Person* <u>Biotechnology Value Trading Fund OS LP</u> |                    |          |  |  |  |  |  |  |
| (Last)<br>P.O. BOX 309 UGL  | (First) AND HOUSE  | (Middle) |  |  |  |  |  |  |
| (Street)<br>GRAND<br>CAYMAN   | E9                 | KY1-1104 |  |  |  |  |  |  |
| (City)  | (State)            | (Zip)    |  |  |  |  |  |  |
| 1. Name and Address of Reporting Person*  BVF Partners OS Ltd.                      |                    |          |  |  |  |  |  |  |
| (Last)<br>P.O. BOX 309 UGL  | (First)  AND HOUSE | (Middle) |  |  |  |  |  |  |
| (Street)<br>GRAND<br>CAYMAN   | E9                 | KY1-1104 |  |  |  |  |  |  |
| (City)  | (State)            | (Zip)    |  |  |  |  |  |  |
| Name and Address of Reporting Person*     BVF INC/IL                                |                    |          |  |  |  |  |  |  |
| (Last) 1 SANSOME ST 30TH FL   | (First)            | (Middle) |  |  |  |  |  |  |
| (Street) SAN FRANCISCO  | CA                 | 94104    |  |  |  |  |  |  |
| (City)  | (State)            | (Zip)    |  |  |  |  |  |  |
| 1. Name and Address of Reporting Person*  LAMPERT MARK N                            |                    |          |  |  |  |  |  |  |
| (Last) 1 SANSOME ST 30TH FL   | (First)            | (Middle) |  |  |  |  |  |  |
| (Street) SAN FRANCISCO  | CA                 | 94104    |  |  |  |  |  |  |
| (City)  | (State)            | (Zip)    |  |  |  |  |  |  |

### **Explanation of Responses:**

- 1. This Form 4 is filed jointly by Biotechnology Value Fund, L.P. ("BVF"), Biotechnology Value Fund II, L.P. ("BVF2"), Biotechnology Value Trading Fund OS LP ("Trading Fund OS"), BVF Partners OS Ltd. ("Partners OS"), BVF Partners L.P. ("Partners"), BVF Inc. and Mark N. Lampert (collectively, the "Reporting Persons"). Each of the Reporting Persons is a member of a Section 13(d) group that collectively owns more than 10% of the Issuer's outstanding shares of Common Stock. Each of the Reporting Persons disclaims beneficial ownership of the shares of Common Stock reported herein except to the extent of his or its negative interest therein
- 2. Shares of Common Stock owned directly by BVF. As the general partner of BVF, Partners may be deemed to beneficially own the shares of Common Stock owned directly by BVF. As the investment adviser and general partner of Partners, BVF Inc., may be deemed to beneficially own the shares of Common Stock owned directly by BVF. As a director and officer of BVF Inc., Mr. Lampert may be deemed to beneficially own the shares of Common Stock owned directly by BVF.
- 3. Shares of Common Stock owned directly by BVF2. As the general partner of BVF2, Partners may be deemed to beneficially own the shares of Common Stock owned directly by BVF2. As the investment adviser and general partner of Partners, BVF Inc., may be deemed to beneficially own the shares of Common Stock owned directly by BVF2. As a director and officer of BVF Inc., Mr. Lampert may be deemed to beneficially own the shares of Common Stock owned directly by BVF2.
- 4. Shares of Common Stock owned directly by Trading Fund OS. As the general partner of Trading Fund OS, Partners OS may be deemed to beneficially own the shares of Common Stock owned directly by Trading Fund OS. As the investment manager of Trading Fund OS and the sole member of Partners OS, Partners may be deemed to beneficially own the shares of Common Stock owned directly by Trading Fund OS. As the investment adviser and general partner of Partners, BVF Inc. may be deemed to beneficially own the shares of Common Stock owned directly by Trading Fund OS. As a director and officer of BVF Inc., Mr. Lampert may be deemed to beneficially own the shares of Common Stock owned directly by Trading Fund OS.

#### Remarks:

This amendment corrects the share price that was inaccurately reported on the previously filed Form 4 due to a clerical error.

BVF Partners L.P., By: BVF Inc., its general partner, By: /s/ 06/30/2017 Mark N. Lampert, President Biotechnology Value Fund, L.P., By: BVF Partners L.P., its general partner, By: BVF Inc., 06/30/2017 its general partner, By: /s/ Mark N. Lampert, President Biotechnology Value Fund II, L.P., By: BVF Partners L.P., its general partner, By: BVF Inc., 06/30/2017 its general partner, By: /s/ Mark N. Lampert, President BVF Partners OS Ltd., By: BVF Partners L.P., its sole member, By: BVF Inc., its 06/30/2017 general partner, By: /s/ Mark N. Lampert, President Biotechnology Value Trading Fund OS LP, By: BVF Partners L.P., its investment manager, 06/30/2017 BVF Inc., its general partner, By: /s/ Mark N. Lampert, President BVF Inc., By: /s/ Mark N. 06/30/2017 Lampert, President /s/ Mark N. Lampert 06/30/2017 \*\* Signature of Reporting Person Date

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

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.

<sup>\*</sup> If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

<sup>\*\*</sup> Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).