

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934  
or Section 30(h) of the Investment Company Act of 1940

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

Check this box to indicate that a  
transaction was made pursuant to a  
contract, instruction or written plan  
for the purchase or sale of equity  
securities of the issuer that is  
intended to satisfy the affirmative  
defense conditions of Rule 10b5-  
1(c). See Instruction 10.

|                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Name and Address of Reporting Person*<br><u>KENNEY CHRISTOPHER JOHN</u><br><br>(Last) (First) (Middle)<br><u>3650 GILMORE WAY</u><br><br>(Street)<br><u>BURNABY</u> <u>V5G 4W8</u><br><br>(City) (State) (Zip)<br><u>BRITISH COLUMBIA, CANADA</u><br><br>(Country) | 2. Issuer Name and Ticker or Trading Symbol<br><u>Xenon Pharmaceuticals Inc.</u> [ <u>XENE</u> ]<br>Foreign Trading Symbol<br><br>3. Date of Earliest Transaction (Month/Day/Year)<br><u>08/28/2026</u><br><br>4. If Amendment, Date of Original Filed (Month/Day/Year) | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br>Director 10% Owner<br><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)<br><u>Chief Medical Officer</u><br><br>6. Individual or Joint/Group Filing (Check Applicable Line)<br><input checked="" type="checkbox"/> Form filed by One Reporting Person<br>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 Shares                   | 08/28/2026                           |                                                    | S <sup>(1)</sup>               |   | 6,368                                                             | D          | \$60.1673 <sup>(2)</sup> | 702                                                                                           | D                                                        |                                                       |
| Common Shares                   | 08/28/2026                           |                                                    | S <sup>(1)</sup>               |   | 700                                                               | D          | \$60.9766 <sup>(3)</sup> | 2 <sup>(4)</sup>                                                                              | D                                                        |                                                       |

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) |
|--------------------------------------------|--------------------------------------------------------|--------------------------------------|----------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------|
|                                            |                                                        |                                      |                                                    |                                |                                                                                        | Date Exercisable                                         | Expiration Date |                                                                                   |                                            |                                                                                                    |                                                           |                                                        |
|                                            |                                                        |                                      |                                                    | Code                           | V                                                                                      | (A)                                                      | (D)             | Title                                                                             | Amount or Number of Shares                 |                                                                                                    |                                                           |                                                        |

Explanation of Responses:

1. The sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on May 29, 2026.
2. The "Amount" and "Price" reported in this Column 4 reflect the aggregate number and weighted-average price (rounded to two decimal places), respectively, of shares sold. These share were sold in multiple transactions at prices ranging from \$59.79 to \$60.68, 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 sold at each separate price within the range set forth herein.
3. The "Amount" and "Price" reported in this Column 4 reflect the aggregate number and weighted-average price (rounded to two decimal places), respectively, of shares sold. These share were sold in multiple transactions at prices ranging from \$60.81 to \$61.12, 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 sold at each separate price within the range set forth herein.
4. The number of shares beneficially owned following the reported transactions reflects an upward adjustment of one share from the reporting person's previous Form 4 filed on March 13, 2026, based on updated tax withholding calculations for the transactions described on the previously filed Form 4.

/s/ Nathaniel Adams,  
Attorney-in-fact

08/31/2026

\*\* 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.