## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| A / I- ' I  |      | 00540 |  |
|-------------|------|-------|--|
| Washington, | D.C. | 20549 |  |

| STATEMENT | OF | CHANGES | IN BE | NEFICIAL | OWNERSHIP |
|-----------|----|---------|-------|----------|-----------|
|           |    |         |       |          |           |

| OMB APPROVAL             |     |  |  |  |  |  |  |  |  |  |
|--------------------------|-----|--|--|--|--|--|--|--|--|--|
| OMB Number: 3235-028     |     |  |  |  |  |  |  |  |  |  |
| 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*  Klee Justin B.   |           |   |                               |        | 2. Issuer Name and Ticker or Trading Symbol Amylyx Pharmaceuticals, Inc. [ AMLX ]                 |  |                                    |   |                               |   |                          | (Che                      | Relationship of Reporting Person(s) to Issuer (Check all applicable)     X Director 10% Owner |   |                |  |  |            |  |
|--|-----------|---|-------------------------------|--------|---|--|------------------------------------|---|-------------------------------|---|--------------------------|---------------------------|---|---|----------------|--|--|------------|--|
| (Last)   | ,         | (First) (Middle) YX PHARMACEUTICALS, INC.   |                               |        |   | 3. Date of Earliest Transaction (Month/Day/Year) 03/16/2023  |                                    |   |                               |   |                          |                           | 2   | Officer (below)   | give title     | ecutiv   | Other (s<br>below)<br>ve Officer                                   | ·          |  |
| 43 THO   | RNDIKE S' | ΓREET                                       |                               |        | 4.  | 4. If Amendment, Date of Original Filed (Month/Day/Year)   |                                    |   |                               |   |                          |                           |   | 6. Individual or Joint/Group Filing (Check Applicable Line)   |                |  |  |            |  |
| (Street)   | IDGE M    | MA 02141                                    |                               |        |   | X Form filed by One Reporting Person Form filed by More than One Reporting Person  |                                    |   |                               |   |                          |                           |   |   |                |  |  |            |  |
| (City)   | (S        | tate)                                       | (Zip)                         |        | F   | Rule 10b5-1(c) Transaction Indication  |                                    |   |                               |   |                          |                           |   |   |                |  |  |            |  |
|  |           |   |                               |        |   | Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10. |                                    |   |                               |   |                          |                           |   |   |                |  |  |            |  |
|  |           | Та  | ble I - N                     | lon-De | rivati  | ve S   | ecuritie                           | s A                                     | cquire                        | ed, D   | isposed o                | of, or Be                 | eneficially   | Owned   |                |  |  |            |  |
| Date   |           |   | 2. Transa<br>Date<br>(Month/D |        | Exe<br>r) if a  | . Deemed<br>ecution Date,<br>iny<br>onth/Day/Year)   |                                    | 3.<br>Transaction<br>Code (Instr.<br>8) |                               | 4. Securities Acquired (A) or<br>Disposed Of (D) (Instr. 3, 4 and |                          |                           | 5. Amou<br>Securitie<br>Benefici<br>Owned F<br>Reported                                       | s Fo<br>ally (D<br>ollowing (I)   | Form<br>(D) o  | rm: Direct<br>or Indirect<br>(Instr. 4)                                  | 7. Nature of Indirect Beneficial Ownership                         |            |  |
|  |           |   |                               |        |   |  |                                    |   | Code                          | v   | Amount                   | (A) or<br>(D)             | Price   | Transact<br>(Instr. 3   | ion(s)         |  |  | (Instr. 4) |  |
| Common   | Stock     |   |                               | 03/16  | /2023   | 23   |                                    |   | <b>S</b> <sup>(1)</sup>       |   | 96,555                   | D                         | \$31.8405   | (2) 2,79  | 6,062          |  | D  |            |  |
| Common Stock 03/16/20  |           |   |                               |        | /2023   | 23   |                                    |   | <b>S</b> <sup>(1)</sup>       |   | 3,445                    | D                         | \$32.4751   | (3) 2,79  | 2,617          |  | D  |            |  |
| Common Stock 03/16/20  |           |   |                               |        | /2023   | )23  |                                    |   | A 50,000 <sup>(4)</sup> A \$( |   | \$0.00                   | 0.00 2,842,617 D          |   |   |                |  |  |            |  |
|  |           |   | Table I                       |        |   |  |                                    |   |                               |   | sposed of,<br>, converti |                           |   | Owned   |                |  |  |            |  |
| 1. Title of Derivative Conversion or Exercise (Instr. 3)  2. Conversion or Exercise Price of Derivative Security  3. Transaction Date (Month/Day/Year) |           | 3A. Deer<br>Execution<br>if any<br>(Month/E | on Date, Tra                  |        | 5. Number<br>Derivative<br>Securities<br>Acquired (,<br>or Dispose<br>of (D) (Inst<br>3, 4 and 5) |  | /e<br>es<br>d (A)<br>esed<br>estr. | Expiration D<br>(Month/Day/             |                               | of Securities   |                          | ities<br>ng<br>e Security | 8. Price of<br>Derivative<br>Security<br>(Instr. 5)   | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s | e<br>s<br>illy | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |            |  |
|  |           |   |                               |        | Code  | v  | (A)                                | (D)                                     | Date<br>Exerc                 | isable  | Expiration<br>Date       | Title                     | Amount<br>or<br>Number<br>of Shares   |   | (Instr. 4)     |  |  |            |  |
| Stock<br>Option<br>(right to<br>buy)   | \$32.08   | 03/16/2023                                  |                               |        | A   |  | 225,000                            |   | (:                            | 5)  | 03/16/2033               | Common<br>Stock           | 225,000   | \$0.00  | 225,00         | 00   | D  |            |  |

## **Explanation of Responses:**

- 1. These sales were effected by the Reporting Person pursuant to a Rule 10b5-1 trading plan adopted on November 15, 2022.
- 2. The price reported in Column 4 is a weighted average price. The shares were sold in multiple transactions at prices ranging from \$31.32 to \$32.31. Full information regarding the number of shares sold at each separate price can be furnished to the SEC staff upon request.
- 3. The price reported in Column 4 is a weighted average price. The shares were sold in multiple transactions at prices ranging from \$32.33 to \$32.93. Full information regarding the number of shares sold at each separate price can be furnished to the SEC staff upon request.
- 4. The reported transaction involves the Reporting Person's receipt of a restricted stock unit award (a "RSU"). The RSU shall vest in 4 equal annual installments, with the first installment vesting on the first day of the month of the one year anniversary of the date of grant, subject to the Reporting Person's continued service to the Issuer through such vesting date.
- 5. 1/4 of the shares subject to the option shall vest and become exercisable on the first day of the month of the one year anniversary of the date of grant, and the remaining shares shall vest monthly over the remaining 36 months, subject to the Reporting Person's continuous service to the Issuer through such vesting date.

## Remarks:

/s/ Joshua B. Cohen, as 03/20/2023 Attorney in 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.