FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

OMB APPROVAL

| OMB Number:            | 3235-0287 |
|------------------------|-----------|
| Estimated average burd | den       |
| 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).

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

### 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

| affirmative defense<br>10b5-1(c). See Inst |                      |          |                                                                               |                                                                                                 |                                                              |                       |  |
|--------------------------------------------|----------------------|----------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------------|--|
| 1. Name and Address<br>Silverstein Ch      | of Reporting Person* |          | 2. Issuer Name and Ticker or Trading Symbol ABEONA THERAPEUTICS INC. [ ABEO ] |                                                                                                 | ionship of Reporting Person(s<br>all applicable)<br>Director | ) to Issuer           |  |
| (Last)                                     | (First)              | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) 07/09/2025                   |                                                                                                 | Officer (give title below)                                   | Other (specify below) |  |
| 6555 CARNEGIE                              | AVE., 4TH FLOOI      |          | 4. If Amendment, Date of Original Filed (Month/Day/Year)                      | 6. Individual or Joint/Group Filing (Check Applicable Lin  X Form filed by One Reporting Person |                                                              |                       |  |
| (Street)                                   |                      |          |                                                                               | ^                                                                                               | Form filed by More than One Reporting Pers                   |                       |  |
| CLEVELAND                                  | ОН                   | 44103    |                                                                               |                                                                                                 | Tom med by word than on                                      | o reporting recom     |  |
| (City)                                     | (State)              | (Zip)    |                                                                               |                                                                                                 |                                                              |                       |  |

### Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | Date       | 2A. Deemed 3. Transaction Code (Instr. (Month/Day/Year) 8) |                  |   | 4. Securities Ad<br>Of (D) (Instr. 3, |               | ) or Disposed | Securities<br>Beneficially Owned<br>Following Reported | 6. Ownership<br>Form: Direct (D)<br>or Indirect (I)<br>(Instr. 4) | Beneficial<br>Ownership |
|---------------------------------|------------|------------------------------------------------------------|------------------|---|---------------------------------------|---------------|---------------|--------------------------------------------------------|-------------------------------------------------------------------|-------------------------|
|                                 |            |                                                            | Code             | v | Amount                                | (A) or<br>(D) | Price         | Transaction(s)<br>(Instr. 3 and 4)                     |                                                                   | (Instr. 4)              |
| Common Stock                    | 07/09/2025 |                                                            | S <sup>(1)</sup> |   | 13,093                                | D             | \$5.8557(2)   | 120,479                                                | D                                                                 |                         |

# Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| -1 | 1. Title of         | 2.          | 3. Transaction   | 3A. Deemed       | 4.               |                 |                        |        | 6. Date Exercisable and |                  | 7. Title and Amount of |            | 8. Price of  | 9. Number of   | 10.        | 11. Nature  | ı |
|----|---------------------|-------------|------------------|------------------|------------------|-----------------|------------------------|--------|-------------------------|------------------|------------------------|------------|--------------|----------------|------------|-------------|---|
| -1 | Derivative          | Conversion  | Date             | Execution Date,  | Transaction      |                 | Derivative             |        | Expiration Date         |                  | Securities Underlying  |            | Derivative   | derivative     | Ownership  | of Indirect | L |
| -1 | Security (Instr. 3) | or Exercise | (Month/Day/Year) | if any           | Code (Instr.     |                 | e (Instr.   Securities |        | (Month/Day/Year)        |                  | Derivative Security    |            | Security     | Securities     | Form:      | Beneficial  | L |
| -1 |                     | Price of    |                  | (Month/Day/Year) | 8)               | 8) Acquired (A) |                        | ed (A) |                         | (Instr. 3 and 4) |                        | (Instr. 5) | Beneficially | Direct (D)     | Ownership  | L           |   |
| -1 |                     | Derivative  |                  |                  | or Disposed of   |                 | or Disposed of         |        |                         | 1 1              |                        |            | Owned        | or Indirect    | (Instr. 4) | L           |   |
| -1 |                     | Security    |                  |                  | (D) (Instr. 3, 4 |                 | , 4                    |        |                         | Following        | (I) (Instr. 4)         |            | L            |                |            |             |   |
| -1 |                     |             |                  |                  | and 5)           |                 | and 5)                 |        | l                       |                  |                        | Reported   |              |                | L          |             |   |
| -1 |                     |             |                  |                  |                  |                 |                        |        |                         |                  |                        |            | 1            | Transaction(s) |            |             | L |
| -1 |                     |             |                  |                  |                  | l               |                        |        |                         |                  |                        | Amount     |              | (Instr. 4)     |            |             | L |
| -1 |                     |             |                  |                  |                  | l               |                        |        |                         |                  |                        | or         |              |                |            |             | 1 |
| -1 |                     |             |                  |                  |                  | l               |                        |        | Date                    | Expiration       |                        | Number     |              |                |            |             | 1 |
| 1  |                     |             |                  |                  | Code             | ٧               | (A)                    | (D)    | Exercisable             | Date             | Title                  | of Shares  |              |                |            |             |   |

#### **Explanation of Responses:**

- 1. The sale reported in this Form 4 was to cover tax obligations associated with the vesting of restricted stock awards.
- 2. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$5.78 to \$5.92 inclusive. The reporting person undertakes to provide the issuer, any security holder of the issuer, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the range set forth above.

/s/ Christine Silverstein 07/10/2025

\*\* Signature of Reporting Person Date

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

- $^{\star}$  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.