FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| Washington,  | D C  | 20540 |
|--------------|------|-------|
| wasiiiigton, | D.C. | 20049 |

| STATEMENT | OF | <b>CHANGES</b> | IN | <b>BENEFICIAL</b> | OWNERSHIP |
|-----------|----|----------------|----|-------------------|-----------|
|           |    |                |    |                   |           |

| OMB APPROVAL             |           |  |  |  |  |  |  |  |  |
|--------------------------|-----------|--|--|--|--|--|--|--|--|
| OMB Number:              | 3235-0287 |  |  |  |  |  |  |  |  |
| 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

| Meisne<br>(Last)<br>C/O ACU  | <u>r Derek N</u><br>(F   | irst)      | (Middle)                       |                 | 2. Issuer Name and Ticker or Trading Symbol Acumen Pharmaceuticals, Inc. [ ABOS ]  3. Date of Earliest Transaction (Month/Day/Year) 01/17/2023 |                           |   |                            |  |  |                                | below)   | able)<br>r<br>(give title                             |            | 10% Ow<br>Other (s<br>below)<br>& Corp Sec | ner<br>pecify |  |  |  |
|--|--|------------|--------------------------------|-----------------|--|---------------------------|---|----------------------------|--|--|--------------------------------|--|---|------------|--|---------------|--|--|--|
| (Street)   | OTTESVIL   | LE VA      | 22902<br>(Zip)                 |                 | 4. If Amendment, Date of Original Filed (Month/Day/Year)   |                           |   |                            |  | Liı  | X Form fi<br>Form fi<br>Persor | ividual or Joint/Group Filing (Check Applicable  Form filed by One Reporting Person  Form filed by More than One Reporting  Person |   |            |  |               |  |  |  |
|  |  | Та         | ble I - Non                    | -Deriva         | ative S  | Securitie                 | s Ac  | quired,                    | Dis  | posed o  | of, or Be                      | neficia  | ly Owned  |            |  |               |  |  |  |
| Date   |  |            | 2. Transa<br>Date<br>(Month/Da | Execution Date, |  | Code (Instr.              |   | ed (A) or<br>str. 3, 4 and | 5. Amou<br>Securitie<br>Beneficia<br>Owned F<br>Reported | s Form<br>ally (D) o<br>ollowing (I) (Ir   |                                | : Direct I<br>Indirect I<br>str. 4)  | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |            |  |               |  |  |  |
|  |  |            |                                |                 |  | Code                      | v   | Amount (A) or (D)          |  | Price  | Transact                       | ansaction(s)<br>estr. 3 and 4)   |   |            | msu. 4)                                    |               |  |  |  |
| Common Stock 01/1  |  |            | 01/17/                         | 2023            |  | A 26,800 <sup>(1)</sup> A |   | \$0.                       | 00 26  | 26,800   |                                | D  |   |            |  |               |  |  |  |
|  | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |            |                                |                 |  |                           |   |                            |  |  |                                |  |   |            |  |               |  |  |  |
| Derivative Conversion Date Execution Date, or Exercise (Month/Day/Year) Execution Date, or C |  | Cod        | insaction Derivative           |                 | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year)   |                           | 7. Title and Amount<br>of Securities<br>Underlying<br>Derivative Security<br>(Instr. 3 and 4) |                            | 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) |                                | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4)   | Beneficial<br>Ownership<br>(Instr. 4)                 |            |  |               |  |  |  |
|  |  |            |                                | Cod             | de V   | (A)                       | (D)   | Date<br>Exercisab          |  | Expiration<br>Date   | Title                          | Amount<br>or<br>Number<br>of Share   | s   | (Instr. 4) | on(a)                                      |               |  |  |  |
| Employee<br>Stock<br>Option<br>(right to<br>buy)   | \$6.11   | 01/17/2023 |                                | A               |  | 120,800                   |   | (2)                        |  | 01/16/2033   | Common<br>Stock                | 120,80   | \$0.00  | 120,80     | 00   | D             |  |  |  |

## **Explanation of Responses:**

- 1. Represents a restricted stock unit ("RSU") award. Each RSU represents a contingent right to receive one share of the Issuer's Common Stock. The RSUs will vest in three equal annual installments commencing one year after the grant date, subject to the Reporting Person's continuous service through each such vesting date.
- 2. The shares subject to the option will vest in 48 equal monthly installments such that the option is fully vested on the fourth anniversary of the date of grant, subject to the Reporting Person's continuous service

## Remarks:

/s/ Katherine Denby, Attorney-

01/18/2023

in-Fact

\*\* 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.