FORM 4

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

| Washington,   | D.C. | 20549 |  |
|---------------|------|-------|--|
| vvaoriington, | D.O. | -00.0 |  |

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

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB APPROVAL             |        |  |  |  |  |  |  |  |  |
|--------------------------|--------|--|--|--|--|--|--|--|--|
| OMB Number: 3235-0287    |        |  |  |  |  |  |  |  |  |
| Estimated average burden |        |  |  |  |  |  |  |  |  |
| hours per response       | e: 0.5 |  |  |  |  |  |  |  |  |

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-

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

| Name and Address of Reporting Person*     MOULDER LEON O JR  |       |                 |          | 2. Issuer Name <b>and</b> Ticker or Trading Symbol Zenas BioPharma, Inc. [ZBIO]  5. Relationship of Reporting Person(s) to Issuer (Check all applicable) |       |  |                                  |   |                               |   |   |  |  |  |  |                                |  |  |
|--|-------|-----------------|----------|--|-------|--|----------------------------------|---|-------------------------------|---|---|--|--|--|--|--------------------------------|--|--|
| (Last) (First) (Middle) C/O ZENAS BIOPHARMA, INC. 852 WINTER STREET, SUITE 250   |       |                 |          | 3. Date of Earliest Transaction (Month/Day/Year) 12/03/2024  |       |  |                                  |   |                               |   |   | ☑ Director       10% Owner         ☑ Officer (give title below)       Other (specification below)         Chief Executive Officer          |  |  |  |                                |  |  |
| (Street) WALTHA  | AM M. | A 0             | 2451<br> |  | 4. If | 4. If Amendment, Date of Original Filed (Month/Day/Year) |                                  |   |                               |   |   | Individual or Joint/Group Filing (Check Applicable ine)  Form filed by One Reporting Person  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/)  |       | Execution Date, |          | 3. Transaction Code (Instr. 8)  4. Securities Ac Disposed Of (D)   |       | Acquire<br>(D) (Inst                                     | d (A) or<br>r. 3, 4 and          | 5. Amount of<br>Securities<br>Beneficially<br>Owned Following<br>Reported |                               | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4) |   | 7. Nature of Indirect Beneficial Ownership (Instr. 4)  |  |  |  |                                |  |  |
|  |       |                 |          |  |       | Cod  | de V                             | 1   | Amount                        | (A) or<br>(D)   | Price   | Transac<br>(Instr. 3   | tion(s)                                |  |  | (111511. 4)                    |  |  |
| Common Stock 12/03/202   |       |                 | 24       |  |       | P  |                                  |   | 25,000                        | A   | \$10.76   | (1) 196  | 5,155                                  |  | D  |                                |  |  |
| Common Stock 12/04/202-  |       |                 | !4       |  | P     |  |                                  | 45,000  | A                             | \$9.98  | 24  | ,155   |  | D  |  |                                |  |  |
| Common Stock   |       |                 |          |  |       |  |                                  |   |                               |   |   | 1,67   | 2,039                                  |  | I  | See<br>Footnote <sup>(3)</sup> |  |  |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)   |       |                 |          |  |       |  |                                  |   |                               |   |   |  |  |  |  |                                |  |  |
| 1. Title of Derivative Conversion or Exercise Price of Derivative Security  (Instr. 3)  1. Title of Date Execution Date (Month/Day/Year)  2. Conversion Date Execution Date, if any (Month/Day/Year) |       |                 |          | Transaction of Code (Instr. Derivative   |       | ve (les d  | Expiration Date (Month/Day/Year) |   | Amou<br>Secu<br>Unde<br>Deriv | rlying<br>ative<br>rity (Instr.                                   | 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)<br>(Instr. 4)                 |  | 10.<br>Ownersh<br>Form:<br>Direct (D<br>or Indire<br>(I) (Instr. | Beneficial<br>Ownership<br>ct (Instr. 4) |                                |  |  |
|  |       |                 |          |  | Code  | v  | (A) (D                           |   | Date<br>Exercis               | sable   | Expiration<br>Date                                  | Title  | Amount<br>or<br>Number<br>of<br>Shares |  |  |                                |  |  |

- 1. The price reported is a weighted average price. These shares were purchased in multiple transactions ranging from \$10.73 to \$10.88, 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 purchased at each separate price within the range.
- 2. The price reported is a weighted average price. These shares were purchased in multiple transactions ranging from \$9.81 to \$10.26, 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 purchased at each separate price within the range.
- 3. Leon O. Moulder, Jr. is the Managing Member of Tellus BioVentures LLC ("Tellus") and may be deemed to have sole voting and dispositive power over the shares held by Tellus. Mr. Moulder is the Issuer's chief executive officer and Chairman of its board of directors. Mr. Moulder disclaims beneficial ownership of such securities except to the extent of his pecuniary interest therein.

By: /s/ Chase Jayasekera, Attorney-in-Fact

\*\* Signature of Reporting Person

12/04/2024

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.