FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| Washington, | D.C. | 20549 |
|-------------|------|-------|
|-------------|------|-------|

STATEMENT OF CHANGES IN BENEFICIAL 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

| Name and Address of Reporting Person* Chakraborty Tirtha | | | | | | 2. Issuer Name and Ticker or Trading Symbol Vor Biopharma Inc. [VOR] | | | | | | | | | | ck all applic Directo Officer | , | | 10% Ov | vner |
|---|--|--|---|---------|-------------------------------|--|--|---|--------------|-----------------------------------|----------|------------------|---|----------------|--|--|---|----------------|--|---------------------------------------|
| | R BIOPHA | RMA INC. | (Middle) | | | 3. Date of Earliest Transaction (Month/Day/Year) 08/17/2021 | | | | | | | | | below) | elow) Chief Scientif | | below) Officer | | |
| 100 CAMBRIDGEPARK DRIVE, SUITE 400 | | | | | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable | | | | | | | | | | | plicable | | |
| (Street) CAMBRIDGE MA 02140 | | | | | | | | | | | | | | Line) | Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | |
| (City) | (S | tate) | (Zip) | | | | | | | | | | | | | | | | | |
| | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transac Date (Month/Date) | | | | | Execution Date, | | , T | 3. Transaction Code (Instr. 8) 4. Securities Acqu Disposed Of (D) (Instr. 8) 5) | | | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | | Form (D) o | n: Direct r Indirect nstr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | | |
| | | | | | | | | | c | Code | / | Amount | | | ount (A) or (D) | | Price | | | (111341. 4) |
| Common Stock 08/17/ | | | | | | 7/2021 | | | M | | 17,446 A | | \$1.36 | 20,980 | | | 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 I if any (Month/Day | Date, T | 1. Fransa Code (I 3) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | Expi | ate Exer iration D nth/Day/ | ate | | 7. Title and Am of Securities Underlying Derivative Sec (Instr. 3 and 4) | | curity | 3. Price of Derivative Security Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | e S Illy | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership (Instr. 4) |
| | | | | | Code | v | (A) | (D) | Date Exer | e rcisable | | xpiration ate | Title | or Nu of | umber | | | | | |
| Employee Stock Option (right to | \$1.36 | 08/17/2021 | | | М | | | 17,446 | | (1) | 09 | 9/24/2029 | Common Stock | 17 | 7,446 | \$0.00 | 28,80 | 0 | D | |

Explanation of Responses:

1. 1/4th of the shares underlying the option vested on September 23, 2020, with the remainder vesting in equal monthly installments over 3 years, provided that the Reporting Person remains continuously engaged by the Issuer on each such vesting date.

Remarks:

/s/ Tirtha Chakraborty

08/19/2021

** 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.