FORM 4

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

## 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 |  |  |  |  |  |  |  |  |

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*     Verni Christopher |  |  |  | 2. Issuer Name and Ticker or Trading Symbol Vigil Neuroscience, Inc. [ VIGL ] |  |  |      |                                |           | (Ch                             |   | cable)<br>or<br>(give title            | g Pers  | 10% Ow<br>Other (s  | ner      |  |                                       |
|---|--|--|--|---|--|--|------|--------------------------------|-----------|---------------------------------|---|--|---|---|----------|--|---------------------------------------|
|   | (Last) (First) (Middle) VIGIL NEUROSCIENCE, INC. 100 FORGE ROAD, SUITE 700   |  |  |   |  | 3. Date of Earliest Transaction (Month/Day/Year) 03/01/2023                        |      |                                |           |                                 |   |  | below)  | General Co  |          | below)   |                                       |
| (Street) WATER  | TOWN M   | 1A<br>State)                               | 02472<br>(Zip)                                       |   | 4. If Amendment, Date of Original Filed (Month/Day/Year) |  |      |                                |           | Line                            | X 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. Transac Date (Month/Da  |  |  |  | Execution Date,   |  | Code (Instr. 5)  |      |                                | Beneficia | ities<br>icially<br>d Following |   | : Direct<br>r Indirect<br>str. 4)      | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |   |          |  |                                       |
|   |  |  |  |   |  |  | Code | v                              | Amount    | (A) or<br>(D)                   | Price   | Transact<br>(Instr. 3 a                | ion(s)  |   |          |  |                                       |
|   | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |  |  |   |  |  |      |                                |           |                                 |   |  |   |   |          |  |                                       |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)         | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security  | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Da<br>if any<br>(Month/Day/\ | Date, Trans   |  | saction of Derivative Securities Acquired (A) or Disposed of (D) (Inst 3, 4 and 5) |      | Expiration Da<br>(Month/Day/Yo |           | ite of Securities               |   | ies<br>g<br>Security                   | 8. Price of<br>Derivative<br>Security<br>(Instr. 5)               | 9. Number<br>derivative<br>Securities<br>Beneficial<br>Owned<br>Following<br>Reported<br>Transactio<br>(Instr. 4) | i<br>lly | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | Beneficial<br>Ownership<br>(Instr. 4) |
|   |  |  |  | Co  | ode V  | (A)  | (D)  | Date<br>Exercisal              |           | Expiration<br>Date              | Title   | Amount<br>or<br>Number<br>of<br>Shares |   |   |          |  |                                       |
| Stock<br>Option<br>Grant<br>(Right to<br>Buy)               | \$11.87  | 03/01/2023                                 |  | ,   | A  | 85,00  |      | (1)                            | C         | 03/01/2033                      | Common<br>Stock   | 85,000                                 | \$0.00  | 85,000  | )        | D  |                                       |

## **Explanation of Responses:**

1. The shares subject to this option shall vest and become exercisable in forty-eight (48) equal monthly installments, with the first installment vesting on April 1, 2023.

## Remarks:

/s/ Christopher Verni

03/03/2023

\*\* 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.