

| OMB APPROVAL | |
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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

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

| | | |
|---|---|--|
| 1. Name and Address of Reporting Person* <u>van der Horst Edward</u> (Last) (First) (Middle) C/O SENSEI BIOTHERAPEUTICS, INC. 1405 RESEARCH BLVD, SUITE 125 (Street) ROCKVILLE MD 20850 (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>Sensei Biotherapeutics, Inc. [SNSE]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>CHIEF SCIENTIFIC OFFICER</u> |
| | 3. Date of Earliest Transaction (Month/Day/Year) 02/15/2024 | |
| | 4. If Amendment, Date of Original Filed (Month/Day/Year) | |

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

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|--------|---|--|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |
| Common Stock | 02/15/2024 | | F ⁽¹⁾ | | 2,843 | D | \$0.79 | 56,070 ⁽²⁾ | 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 Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|--|--|--------------------------------------|--|--------------------------------|---|--|-----|--|-----------------|---|--|--|---|--|-------|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | | | | | | Title |
| Stock Option (Right to Buy) | \$0.79 | 02/15/2024 | | A | | 125,000 | | (3) | 02/14/2034 | Common Stock | 125,000 | \$0 | 125,000 | D | |
| Stock Option (Right to Buy) | \$0.79 | 02/15/2024 | | A | | 90,102 | | (4) | 02/14/2034 | Common Stock | 90,102 | \$0 | 90,102 | D | |

Explanation of Responses:

- Represents shares withheld to satisfy withholding tax obligations upon the vesting of restricted stock units.
- Includes an aggregate of 6,000 shares purchased by the Reporting Person since May 16, 2023 pursuant to the Issuer's 2021 Employee Stock Purchase Plan.
- The option shall vest over a period of four years as follows: 25% of the total number of shares subject to the option shall vest on February 15, 2025, and the remainder will vest 1/48th of total number of shares subject to the option monthly thereafter over the remaining three years, subject to the Reporting Person's continuous service with the Issuer as of each such date.
- Represents one-third of the Reporting Person's 2023 annual bonus, which the Compensation Committee of the Issuer determined to pay in the form of a stock option in lieu of cash. 100% of the shares are fully vested as of the date of grant.

/s/ Mark Ballantyne, Attorney-in-Fact 02/16/2024

** 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.