FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| IL | OMB APPROVAL | | | | | | | | | | |
|---------|--------------------------|-----|--|--|--|--|--|--|--|--|--|
| $\ \ $ | OMB Number: 3235-0 | | | | | | | | | | |
| | Estimated average burden | | | | | | | | | | |
| Ш | hours nor roomanas: | 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

| 1. Name and Address of Reporting Person* MILANO VINCENT | | | | | 2. Issuer Name and Ticker or Trading Symbol IDERA PHARMACEUTICALS, INC. [| | | | | | | (Che | Relationship of Reporting Person(s) to Issuer (Check all applicable) Compared to the | | | | | |
|---|--|--|---|---|--|--|---------|---|----|-------------------|--|------------------------|---|---|--|----------------------|--|--|
| | | | | II | IDRA] | | | | | | | | Officer (| give title | | 10% Ow Other (sp | · | |
| (Last) (First) (Middle) | | | | 3. | Date of Earliest Transaction (Month/Day/Year) | | | | | | | ┤ " | below) below) PRESIDENT AND CEO | | | | | |
| C/O IDERA PHARMACEUTICALS, INC. | | | | | 07/06/2022 | | | | | | | ГK | ESIDENI | AINI | CEO | | | |
| 505 EAGLEVIEW BOULEVARD, SUITE 212 | | | | | | | | | | | | | | | | | | |
| (Street) | | | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable Line) | | | | | |
| EXTON | PA | A | 19341 | | | | | | | | | | X | Form file | ed by One I | Report | ing 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. Transa | | | | | action 2A. Deemed Execution Date, | | | 3. 4. Securities Acquired (A) of Transaction Disposed Of (D) (Instr. 3, 4 | | | | 5. Amoun Securities | | | | 7. Nature of ndirect | | |
| (Month/Da | | | | onth/Day/ | ay/Year) if any (Month/Day/Yea | | ay/Year | Code (Insa ar) 8) | | tr. | | | Owned Fo | | | str. 4) C | Beneficial Ownership | |
| | | | | | | | | Code | v | Amount (A) or (D) | | Price | Transaction | | | (1 | nstr. 4) | |
| 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 Amour of Securities Underlying Derivative Security (Instr. 3 and 4) | | curity | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) | y G | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | Code | v | (A) | | Date Exercisable | | xpiration ate | Title | or Nu | nount mber Shares | | (Instr. 4) | | | |
| Stock Option (Right to Buy) | \$0.4327 | 07/06/2022 | | Α | | 124,000 | | (1) | 0. | 7/06/2032 | Common Stock | 1 12 | 4,000 | \$0 | 124,000 |) | D | |

Explanation of Responses:

1. The stock option award was granted under the Issuer's 2013 Stock Incentive Plan. The stock option will vest and become exercisable in full on July 6, 2026, with 25% vesting on July 6, 2023, and the remainder vesting in twelve equal quarterly installments over the remaining three years, subject to continued service with the Issuer.

/s/ Vincent J. Milano

07/07/2022

** 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.