FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB APPR | OVAL |
|-----------------------|-----------|
| OMB Number: | 3235-0287 |
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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. [| | | | | | | (Ch | Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner | | | | | |
|--|--|--|---|--|---|------------|--|---------------------|--|------------------|---|---|---|---|--|---|---------------------------------------|
| (Loot) | // | -irot) | (Middle) | [| DRA | J | | | | | | | _ | (give title | | Other (s | - |
| (Last) (First) (Middle) C/O IDERA PHARMACEUTICALS, INC. 167 SIDNEY STREET | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 01/03/2018 | | | | | | | President & CEO | | | | | |
| (Street) CAMBRIDGE MA 02139 | | | | [| I. If Am | endment, [| Date o | of Original Fi | led (| Month/Da | y/Year) | Line | X Form fil | led by One led by More | Repo | (Check App rting Persor One Repor | ı |
| (City) | (2) | State) | (Zip) | | Person | | | | | | | | | | | | |
| | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | |
| Date | | | | 2. Transact Date (Month/Day | Execution Date, | | Transaction Disposed Of (E Code (Instr. | | ties Acquired (A) or I Of (D) (Instr. 3, 4 and 5 | | 5. Amount of Securities Beneficially Owned Following Reported | | Form: Direct (D) or Indirect (I) (Instr. 4) | | 7. Nature of Indirect Beneficial Ownership | | |
| | | | | | | | Code | Code V | | (A) (D) | Price | Transacti | Transaction(s) (Instr. 3 and 4) | | | instr. 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) | Code | Transaction Code (Instr. | | 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) | | of Securi Underlyir | g e Security | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(| s lly | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership (Instr. 4) |
| | | | | Code | v | (A) | (D) | Date Exercisable | | kpiration ate | Title | Amount or Number of Shares | | (Instr. 4) | | | |
| Stock Option | \$2.24 | 01/03/2018 | | A | | 600,000 | | (1) | 01 | 1/03/2028 | Common Stock | 600,000 | \$2.24 | 600,00 | 0 | D | |

Explanation of Responses:

1. This option was granted under the Company's 2013 Stock Incentive Plan. The options vest with respect to 25% of the underlying shares on the first anniversary of the date of grant and the balance of the underlying shares vest in twelve equal quarterly installments following the first anniversary of the date of grant.

/s/ Vincent J Milano

01/05/2018

** 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.