FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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).

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

| 1. Name and Address of Reporting Person [*] ZEIN YOUSSEF EL | | | | | | 2. Issuer Name and Ticker or Trading Symbol <u>IDERA PHARMACEUTICALS, INC.</u> [IDRA] | | | | | | | | | ck all appl | icable) or | • | erson(s) to I X 10% C | wner |
|--|---|--|---|--|---|--|--------|---|--|------|--|---|--------------------------------|-----------------------|---|--|---|---|--|
| (Last) C/O IDE | ast) (First) (Middle) /O IDERA PHARMACEUTICALS, INC. | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 08/16/2013 | | | | | | | | | Office below | officer (give title elow) | | Other below) | specify |
| 167 SIDNEY STREET | | | | | 4. If A | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable Line) | | | | |
| (Street) CAMBRIDGE MA 0213 | | | 02139 | | | | | | | | | | | Х | | filed by Mor | | oorting Pers an One Rep | |
| (City) (State) (Zip) | | | | | | | | | | | | | | | | | | | |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transact Date (Month/Day | | | | | Exec if an | Deemed ecution Date, any onth/Day/Year) | | Transaction Dispos Code (Instr. and 5) | | | rities Acquired (ed Of (D) (Instr. 3 | | | | ties F cially (I | | ownership m: Direct or irect (I) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | | | | | Code | v | Amoun | it (A (D |) ^{or} P | rice | Report Transa | eported ransaction(s) nstr. 3 and 4) | | .tr. 4) | (IIISU: 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) | | of | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 0 [[[(| 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 | | piration te | Title | Amo or Num of Shar | ber | | | | | |
| Stock | ¢1 5 | 08/16/2012 | | | | | 40.000 | | (1) | 0.00 | 16/2022 | Commo | 140.0 | | ¢0.00 | 40,000 | | D | 1 |

(1)

08/16/2023

Explanation of Responses:

\$1.5

1. The option vests in twelve equal quarterly installments over three years from the date of grant, with the first installment vesting on November 16, 2013.

A

40,000

Remarks:

Option

/s/ Youssef El Zein

40,000

Stock

\$0.00

40,000

08/16/2013

Date

D

** Signature of Reporting Person

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).

08/16/2013

** 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.