FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

| OMB APPROVAL             |           |  |  |  |  |  |  |  |  |
|--------------------------|-----------|--|--|--|--|--|--|--|--|
| OMB Number:              | 3235-0287 |  |  |  |  |  |  |  |  |
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|   | Check this box if no longer subject |
|---|-------------------------------------|
| П | to Section 16. Form 4 or Form 5     |
| Ш | 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 IDERA PHARMACEUTICALS, INC. [IDRA] |           |  |                                  |              |  |                 |  | ionship of<br>all applicat<br>Director   | ole)   | g Per  | 10% O  | wner                           |
|--|----------|------------|-----------|----------------------|---|--|-----------|--|----------------------------------|--------------|--|-----------------|--|--|--|--|--|--------------------------------|
| ` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '  |          |            |           |                      |   | 3. Date of Earliest Transaction (Month/Day/Year) 11/04/2011                    |           |  |                                  |              |  |                 |  | Officer (gi  | ive title  |  | Other (<br>below)  | specify                        |
| 167 SIDNEY STREET  |          |            |           |                      |   | 4. If Amendment, Date of Original Filed (Month/Day/Year) 11/08/2011            |           |  |                                  |              |  |                 | 6. Indivi<br>Line)   | Individual or Joint/Group Filing (Check Applicable Line)                       |  |  |  |                                |
| (Street) CAMBRIDG  | E MA     |            | )2139<br> |                      | _ |  |           |  |                                  |              |  |                 | X  |  | ,  |  | orting Pers  |                                |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned   |          |            |           |                      |   |  |           |  |                                  |              |  |                 |  |  |  |  |  |                                |
| 1. Title of Security (Instr. 3)  2. Transacti Date (Month/Day  |          |            |           |                      |   | Execution Date,  |           |  | 3.<br>Transact<br>Code (In<br>8) | str. and 5)  |  | str. 3, 4       | 5. Amount of<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s) |  | 6. Ownership<br>Form: Direct<br>(D) or<br>Indirect (I)<br>(Instr. 4) |  | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4)  |                                |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |          |            |           |                      |   |  |           |  |                                  |              |  |                 |  |  |  |  |  |                                |
| 1. Title of<br>Derivative Security<br>(Instr. 3)   |          |            |           | Transact<br>Code (In |   |  |           | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) |                                  |              | 7. Title and Amount of<br>Securities Underlying<br>Derivative Security (Instr. 3<br>and 4) |                 | 8. Price of<br>Derivative<br>Security<br>(Instr. 5)  | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following |  | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | 11. Nature of<br>Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |                                |
|  |          |            |           | Cod                  |   | v  | (A)       | (D)  | Date<br>Exercisable              | Expi<br>Date | iration  | Title           | Amount or<br>Number of<br>Shares   |  | Reported<br>Transaction(s)<br>(Instr. 4)                             |  |  |                                |
| Warrants   | \$1.6275 | 11/04/2011 |           |                      | A |  | 2,810,650 |  | 11/04/2011                       | 11/0         | 04/2016  | Common<br>Stock | 2,810,650  | \$0.125  | <b>0</b> <sup>(1)</sup>  |  | I <sup>(1)</sup>   | See<br>footnote <sup>(1)</sup> |
| Series D<br>Convertible<br>Preferred Stock   | (2)      | 11/04/2011 |           |                      | A |  | 1,124,260 |  | (2)                              |              | (2)  | Common<br>Stock | (2)  | \$8.1375   | <b>0</b> <sup>(2)</sup>  | )  | <b>I</b> <sup>(1)</sup>  | See<br>footnote <sup>(1)</sup> |

## **Explanation of Responses:**

- 1. On November 4, 2011, Pillar Pharmaceuticals I LP ("Pillar") acquired 1,124,260 shares of Series D Convertible Preferred Stock and warrants to purchase up to 2,810,650 shares of common stock of Idera Pharmaceuticals, Inc. The Reporting Person is a director and controlling stockholder of Pillar Invest Corporation ("Pillar GP"), which is the general partner of Pillar, and is a limited partner of Pillar. The Reporting Person disclaims beneficial ownership of the reportable securities, and this report shall not be deemed an admission that he is the beneficial owner of such securities, except to the extent of his pecuniary interest therein, if any, by virtue of his ownership interest in Pillar GP and his limited partnership interest in Pillar.
- 2. The Series D Convertible Preferred Stock is convertible at any time, at the holder's election, on a 1-for-5 basis (subject to adjustment and certain other limitations on conversion), into shares of Common Stock and does not have an expiration date.

## Remarks:

The Reporting Person's limited partnership interest in Pillar was omitted from the Reporting Person's original Form 4 filed with the Securities and Exchange Commission on November 8, 2011.

/s/ Youssef El Zein 11/15/2011

\*\* 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).
- \*\* 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.