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 [*] RIGBY ALISON TAUNTON | | | | | | 2. Issuer Name and Ticker or Trading Symbol IDERA PHARMACEUTICALS, INC. [IDP] | | | | | | | | | eck all appl X Directe | or | ng Pe | 10% O | wner |
|--|---|--|---------------------------|---------|--|--|--------|--|--|----|---|---|--------------------------------|--|--|---|----------|--|-------------------------|
| (Last) (First) (Middle) 8 FARRAR ROAD | | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 01/01/2006 | | | | | | | | | Office below | r (give title) | | Other (below) | specify |
| (Street) LINCOLN MA 01773 | | | | 4. If A | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | dividual or Joint/Group Filing (Check Applicable) Form filed by One Reporting Person Form filed by More than One Reporting | | | | | |
| (City) | (S | (State) (Zip) | | | | | | | | | | | | | Perso | n | | | |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transact Date (Month/Day | | | | | | Execution Date, | | | | | rities Acquired (A) ed Of (D) (Instr. 3, 4 | | | Securit Benefic Owned | ties Fo cially (D Inc | | rect (I) | 7. Nature of Indirect Beneficial Ownership | |
| | | | | | | | | | Code | v | Amoun | t (A) or (D) Pr | | Price | Report Transa | Following (In Reported Transaction(s) (Instr. 3 and 4) | | tr. 4) | (Instr. 4) |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | | | |
| | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | Execution Date, if any | | 4. Transaction Code (Instr. 8) | | n of l | | 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 (Instr. 4) | у | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership |
| | | | | | Code | v | (A) | | Date Exercisable | | piration te | Title | Amo or Num of Shar | nber | | | | | |
| Stock Option | \$0.61 | 01/01/2006 | | | A | | 10,000 | | 01/01/2007 | 01 | /01/2016 | Common stock | 10,0 | 000 | \$0.00 | 10,000 | | D | |

Explanation of Responses:

Remarks:

Alison Taunton-Rigby

** Signature of Reporting Person Date

01/03/2006

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.