FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| OMB APPROVAL | | | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | | | |
| Estimated average burden | | | | | | | | |
| houre por rocponeo. | 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* WYNGAARDEN JAMES B | | | | | | 2. Issuer Name and Ticker or Trading Symbol IDERA PHARMACEUTICALS, INC. [IDRA] | | | | | | | | (Ch | eck all appl | icable) or | ng Person(s) to Is 10% Ov Other (s | | wner |
|---|--|------------|---------------|-------------------|--------------------------------|--|-----------|--------------------------------|--|----------|--|--|----------------|--|--|--|---|---|------|
| (Last) (First) (Middle) 3504 STONEYBROOK DRIVE | | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 03/13/2008 | | | | | | | | | below | r (give title | | below) | |
| (Street) DURHA (City) | | | 27705 Zip) | | 4. If <i>F</i> | ∖mer | ndme | nt, Date | of Original | File | d (Month/ | ndividual or Joint/Group Filing (Check Applicable) K Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | | | |
| | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transacti Date (Month/Day | | | | | | 2A. Deemed Execution Date, if any (Month/Day/Year) | | Transaction Di Code (Instr. an | | | . Securities Acquired (A hisposed Of (D) (Instr. 3 nd 5) | | | 5. Amo Securit Benefic Owned | ies cially | 6. Ownership Form: Direct (D) or Indirect (I) | | 7. Nature of Indirect Beneficial Ownership | |
| | | | | | | | | Code | v | Amount | (A (D |) or) | Price | | ing (In | | tr. 4) | (Instr. 4) | |
| Common Stock | | | | 03/13/2 | 03/13/2008 | | | | M | | 9,70 | 4 | A \$4 | | 46 | 46,389 | | D | |
| Common Stock 03/1 | | | | 03/13/2 | 2008 | | | | S | | 9,70 | 4 | D | \$10 | 36 | 36,685 | | D | |
| Common Stock 03/14 | | | | 03/14/2 | 2008 | | | | M | | 10,30 |)6 | A | \$4 | 46 | 5,991 | D | | |
| Common Stock 03/14/2 | | | 008 | | | S | | 10,306 | | D | \$10.0 | 36,685 | | | D | | | | |
| | 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) | . Title of 2. 3. Transaction 3A. Deemed Execution Date, idecurity or Exercise (Month/Day/Year) if any | | | emed ion Date, | 4. Transactio Code (Inst | | 5. Number | | 6. Date Exe Expiration (Month/Da | able and | ole and 7. Title and Amount of | | | 8. Price of Derivative Security (Instr. 5) | 9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4) | у | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership | |
| | | | | | Code | v | (A) | (D) | Date Exercisabl | | xpiration ate | Title | or Nu of | umber | | | | | |
| Stock Options | \$4 | 03/13/2008 | | | M | | | 6,250 | 07/21/1998 | 0 | 7/21/2008 | Commo | ⁿ 6 | ,250 | \$0.00 | 0 | | D | |
| Stock Options | \$4 | 03/13/2008 | | | M | | | 3,454 | 03/01/2001 | 0: | 5/17/2009 | Commo | ⁿ 3 | ,454 | \$0.00 | 15,296 | | D | |
| Stock Options | \$4 | 03/14/2008 | | | M | | | 10,306 | 03/01/2001 | 0: | 5/17/2009 | Commo | n 10 | 0,306 | \$0.00 | 4,990 | | D | |

Explanation of Responses:

Remarks:

James B. Wyngaarden

03/17/2008

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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.

^{*} 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).