FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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 [®] WYNGAARDEN JAMES B | | | | | | 2. Issuer Name and Ticker or Trading Symbol IDERA PHARMACEUTICALS, INC. [IDRA] | | | | | | | | | eckallapp X Direc | olicable) ctor | | Owner | |
|--|--|--|--------|----------|--|--|--|-------|-------------------|---|-----------------|------------------------|---|-------------------|--|---|--|--|--|
| (Last) (First) (Middle) 3504 STONEYBROOK DRIVE | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 06/10/2008 | | | | | | | | | | Offic belo | er (give title w) | Other below | r (specify /) | |
| (Street) DURHA (City) | DURHAM NC 27705 | | | | 4. If A | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | Lin | e) X Form Form | , | | | |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) Date (Month/D. | | | | | | Exe if ar | A. Deemed Execution Date, f any Month/Day/Year) | | Code | Transaction Dispo Code (Instr. and 5 | | urities A sed Of (D | | | Secur Benef Owne | icially d | 6. Ownership Form: Direct (D) or Indirect (I) | 7. Nature of Indirect Beneficial Ownership | |
| | | | | | | | | | Code | v | Amou | | A) or)) | Price | | | (Instr. 4) | (Instr. 4) | |
| Common Stock 06/10/2 | | | | | 2008 | 008 | | | М | | 1,2 | 1,284 A | | \$ <mark>8</mark> | 3 | 7,969 | 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) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | if any | on Date, | 4. Transac Code (Ir 8) | | n Number E | | Expiration | 5. 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 o derivative Securities Beneficially Owned Following Reported Transaction((Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | Code | v | (A) | (D) | Date Exercisab | | piration ate | Title | Amo or Num of Shar | ber | | | | | |
| Warrant to purchase | \$8 | 06/10/2008 | | | М | | | 1,284 | 08/28/200 | 8 08 | /28/2008 | Common Stock | ¹ 1,2 | 84 | \$0.00 | 0 | D | | |

Explanation of Responses:

Remarks:

James B. Wyngaarden

06/11/2008

** 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.

OMB APPROVAL