

ZAMECNIK PAUL C  
Form 4  
February 12, 2007

**FORM 4**

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

OMB APPROVAL

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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 OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
ZAMECNIK PAUL C

2. Issuer Name and Ticker or Trading Symbol  
IDERA PHARMACEUTICALS, INC. [IDP]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)  
101 CHESTNUT STREET  
(Street)

3. Date of Earliest Transaction (Month/Day/Year)  
02/08/2007

Director  10% Owner  
 Officer (give title below)  Other (specify below)

BOSTON, MA 02108  
(City) (State) (Zip)

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)  
 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. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) |       | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|-------|---|--|-----------------------------------|
|                                 |                                      |  |                                | (A) or (D)  | Price |   |  |                                   |
| Common Stock                    | 02/08/2007                           |  | M                              | V   | 125   | A \$ 4  | 101,973  | D                                 |
| Common Stock                    | 02/08/2007                           |  | M                              | V   | 125   | A \$ 4  | 101,973  | D                                 |

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

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(9-02)

**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) | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | 6. Date Exercisable and Expiration Date (Month/Day/Year) | 7. Title and Amount of Underlying Securities (Instr. 3 and 4) | 8. P Der Der Sec (Ins      |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|----------------------------|
|  |  |                                      |  | Code                           | V (A) (D)   | Date Exercisable Expiration Date                         | Title   | Amount or Number of Shares |
| Stock Options                              | \$ 4   | 02/08/2007                           |  | M                              | 125   | 05/01/1998 05/01/2007                                    | Common Stock  | 125                        |
| Stock Options                              | \$ 4   | 02/08/2007                           |  | M                              | 125   | 05/01/1999 05/01/2008                                    | Common Stock  | 125                        |

## Reporting Owners

| Reporting Owner Name / Address                             | Relationships |           |         |       |
|--|---------------|-----------|---------|-------|
|  | Director      | 10% Owner | Officer | Other |
| ZAMECNIK PAUL C<br>101 CHESTNUT STREET<br>BOSTON, MA 02108 |               | X         |         |       |

## Signatures

Paul Zamecnik 02/09/2007  
 \*\*Signature of Date  
 Reporting Person

## Explanation of Responses:

\* 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.

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