

IDERA PHARMACEUTICALS, INC.  
 Form 4  
 December 19, 2008

**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 \*  
 AGRAWAL SUDHIR

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

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)

3. Date of Earliest Transaction (Month/Day/Year)  
 12/17/2008

Director  10% Owner  
 Officer (give title below)  Other (specify below)  
 CEO, President & CSO

C/O IDERA PHARMACEUTICALS, INC., 167 SIDNEY STREET

(Street)

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

CAMBRIDGE, MA 02139

(City) (State) (Zip)

**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 Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price
Common Stock	12/17/2008		S <sup>(1)</sup>		6,715	D	\$ 8.6353 (2)
Common Stock	12/17/2008		M		14,377	A	\$ 4 136,713
Common Stock	12/18/2008		S <sup>(1)</sup>		13,418	D	\$ 8.5495 (3)
Common Stock	12/18/2008		M		28,069	A	\$ 4 151,364

Stock

Common					\$		
Stock	12/19/2008		S <sup>(1)</sup>	9,887	D	8.5084	141,477 D
						<u>(4)</u>	

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

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**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)	Amount or Number of Shares
Stock Options	\$ 4	12/17/2008		M	14,377	04/01/2001 01/01/2009	Common Stock	14,377
Stock Options	\$ 4	12/18/2008		M	28,069	04/01/2001 01/01/2009	Common Stock	28,069

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
AGRAWAL SUDHIR C/O IDERA PHARMACEUTICALS, INC. 167 SIDNEY STREET CAMBRIDGE, MA 02139	X		CEO, President & CSO	

## Signatures

Sudhir Agrawal 12/19/2008

\*\*Signature of Reporting Person Date

## 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).

The sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on May 21, 2008, and as subsequently amended. The proceeds of such sales are to be used to exercise expiring stock options and applicable taxes associated

- (1) with the exercise of the options and the sale of the shares under the plan. The reporting person hereby undertakes to provide upon request by the staff of the Securities and Exchange Commission, the issuer or a shareholder of the issuer full information regarding the number of shares sold at each separate price.
- (2) Represents the sale of 6,715 shares in 20 separate transactions, ranging from \$8.35 to \$8.71 per share, resulting in a weighted average sale price per share of \$8.6353.
- (3) Represents the sale of 13,418 shares in 30 separate transactions, ranging from \$8.22 to \$8.70 per share, resulting in a weighted average sale price per share of \$8.5495.
- (4) Represents the sale of 9,887 shares in 33 separate transactions, ranging from \$8.00 to \$8.77 per share, resulting in a weighted average sale price per share of \$8.5084.

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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