FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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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

1. Name and Address HARTLEY C KEITH	of Reporting Person [*]	2. Issuer Name and Ticker or Trading Symbol IDERA PHARMACEUTICALS, INC. [IDRA]	5. Relationship of Reporting Person(s) to Issuer				
(Last) (First) 14 WYNNWOOD ROA	(Middle) D	3. Date of Earliest Transaction (Month/Day/Year) 06/15/2010	(Check all applicable) X Director 10% Owner Officer (give title below) Other (specify below)				
(Street) GREENWICH CT 06830-3 (City) (State) (Zip)		4. If Amendment, Date of Original Filed (Month/Day/Year)	 6. Individual or Joint/Group Filing (Check Applicable Line) X 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)	Transaction Code		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			Securities Beneficially Owned	Form: Direct (D)	7. Nature of Indirect Beneficial Ownership
			Code	v	Amount	(A) or (D)	Reported (I)		or Indirect (I) (Instr. 4)	(Instr. 4)

	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. Transac Code (Instr. 8)	e Derivative		6. Date Exercisable and Expiration Date (Month/Day/Year)		 7. Title and Amount of Underlying Securities (Instr. 3 and 4) 		8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Stock Option	\$ 4.16	06/15/2010		A		10,000		(1)	06/15/2020	Common Stock	10,000	\$0	10,000	D	

Explanation of Responses:

1. The option vests in twelve equal quarterly installments over three years, beginning on September 15, 2010.

/s/C. Keith Hartley	<u>0</u>
** Signature of Reporting	Г
Person	L

<u>06/15/2010</u>

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.