

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* <u>Casey Mark J</u> (Last) (First) (Middle) <u>C/O IDERA PHARMACEUTICALS, INC.</u> <u>167 SIDNEY STREET</u> (Street) <u>CAMBRIDGE MA 02139</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>IDERA PHARMACEUTICALS, INC. [IDRA]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Senior VP and General Counsel</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>06/29/2015</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

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			

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 Securities Underlying Derivative Security (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: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
						Date Exercisable	Expiration Date						Title
Stock Option	\$3.44	06/29/2015		A	325,000	(1)	06/29/2025	Common Stock	325,000	\$0.00	325,000	D	
Stock Option	\$3.44	06/29/2015		A	275,000	(2)	06/29/2025	Common Stock	275,000	\$0.00	275,000	D	

Explanation of Responses:

- This option was granted under the Company's 2013 Stock Incentive Plan. The option vests with respect to 25% of the underlying shares on the first anniversary of the date of grant and the balance of the underlying shares vests in twelve equal quarterly installments following the first anniversary of the date of grant.
- This option was not granted pursuant to any pre-existing equity plan of the Company. Instead, this option was made as an inducement grant pursuant to Nasdaq Listing Rule 5635(c)(4) in connection with the reporting person's appointment as Senior Vice President and General Counsel. The option vests with respect to 25% of the underlying shares on the first anniversary of the date of grant and the balance of the underlying shares vests in twelve equal quarterly installments following the first anniversary of the date of grant.

Remarks:

/s/ Mark Casey 07/01/2015
 ** 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.