

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>Abdul-Wahab Umari</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) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) <u>05/07/2013</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			
Common Stock	05/07/2013		P		2,600,000	A	\$0	0 ⁽⁴⁾	I	See Footnotes ⁽⁴⁾⁽⁵⁾
Common Stock	05/07/2013		P		2,400,000	A	\$0	0 ⁽⁴⁾	I	See Footnotes ⁽⁴⁾⁽⁶⁾

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)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Warrants	\$0.61	05/07/2013		A		1,000,000		05/07/2013	05/07/2018	Common Stock	1,000,000	\$0	0 ⁽¹⁾	I	See Footnotes ⁽¹⁾⁽⁴⁾
Warrants	\$0.79	05/07/2013		A		575,758		05/07/2013	06/01/2014	Common Stock	575,758	\$0	0 ⁽¹⁾	I	See Footnotes ⁽¹⁾⁽⁴⁾
Warrants	\$0.79	05/07/2013		A		313,341		05/07/2013	06/01/2014	Common Stock	313,341	\$0	0 ⁽²⁾	I	See Footnotes ⁽²⁾⁽⁴⁾
Warrants	\$0.79	05/07/2013		A		110,901		05/07/2013	06/01/2014	Common Stock	110,901	\$0	0 ⁽³⁾	I	See Footnotes ⁽³⁾⁽⁴⁾
Warrants	\$0.47	05/07/2013		P		2,600,000		05/07/2013	05/07/2018	Common Stock	2,600,000	\$0	0 ⁽⁴⁾	I	See Footnotes ⁽⁴⁾⁽⁵⁾
Warrants	\$0.47	05/07/2013		P		2,400,000		05/07/2013	05/07/2018	Common Stock	2,400,000	\$0	0 ⁽⁶⁾	I	See Footnotes ⁽⁴⁾⁽⁶⁾

Explanation of Responses:

- On May 7, 2013, upon the consummation of a public offering of the Issuer (the "Offering"), Pillar Pharmaceuticals I, L.P. ("Pillar I"), of which Pillar Invest Corporation ("Pillar GP") is the general partner, acquired, directly from the Issuer, warrants to purchase up to 1,575,758 shares of common stock (the "Pillar I Shares") of the Issuer.
- On May 7, 2013, upon the consummation of the Offering, Pillar Pharmaceuticals II, L.P. ("Pillar II"), of which Pillar GP is the general partner, acquired, directly from the Issuer, warrants to purchase up to 313,341 shares of common stock (the "Pillar II Shares") of the Issuer.
- On May 7, 2013, upon the consummation of the Offering, Participations Besancon ("Besancon"), a fund advised by Pillar GP, acquired, directly from the Issuer, warrants to purchase up to 110,901 shares of common stock (the "Besancon Warrants").
- Abdul-Wahab Umari is a director of Pillar GP and serves as the representative of a Pillar I, Pillar II, Pillar III and Pillar GP on the Issuer's board of directors. Mr. Umari disclaims Section 16 beneficial ownership of the Pillar I Shares, Pillar II Shares, Pillar III Shares, Besancon Warrants and Besancon Shares and this report shall not be deemed an admission that he is the beneficial owners of any such securities, except to the extent of his pecuniary interest therein, if any, by virtue of his ownership interest in Pillar GP. As of the date hereof, Mr. Umari owns directly 46,117 shares of common stock of the Issuer.
- On May 7, 2013, upon the consummation of the Offering, Pillar Pharmaceuticals III, L.P. ("Pillar III"), of which Pillar GP is the general partner, acquired, in the Offering, 2,600,000 shares of common stock and warrants to purchase up to 2,600,000 shares of common stock (the "Pillar III Shares") of the Issuer.
- On May 7, 2013, upon the consummation of the Offering, Participations Besancon acquired, in the Offering, 2,400,000 shares of common stock and warrants to purchase up to 2,400,000 shares of common stock (the "Besancon Shares").

/s/ Abdul-Wahab Umari

05/17/2013

** 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.

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