

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

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

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person * <u>Horobin Joanna</u> _____ (Last) (First) (Middle) <u>C/O IDERA PHARMACEUTICALS, INC.</u> <u>505 EAGLEVIEW BLVD., SUITE 212</u> _____ (Street) <u>EXTON PA 19341</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>Chief Medical Officer</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>01/03/2019</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	01/03/2019		A		18,100 <sup>(1)</sup>	A	\$0	20,144 <sup>(2)</sup>	D	

**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
Stock Option (Right to Buy)	\$3.14	01/03/2019		A		45,500		(3)	01/03/2029	Common Stock	45,500	\$0	45,500	D	

**Explanation of Responses:**

- Represents a restricted stock unit ("RSU") award granted under the Issuer's 2013 Stock Incentive Plan. Each RSU represents a right to receive one share of Issuer common stock. The RSU award vests over a four-year period commencing on January 3, 2019. Twenty-five percent (25%) of the shares subject to the RSU award shall vest on each one-year anniversary of the grant date of the award.
- Securities beneficially owned totaling 20,144 includes 2,044 shares of Issuer common stock owned and 18,100 of unvested RSU's held by the reporting person.
- The stock option award was granted under the Issuer's 2013 Stock Incentive Plan. The stock option vests and becomes exercisable over a four-year period commencing on January 3, 2019. Twenty-five percent (25%) of the stock option vests and becomes exercisable on January 3, 2020 (first anniversary of the date of grant) and the balance vests in twelve equal quarterly installments over the remaining three years of the four-year period, subject to continued service with the Issuer.

/s/ Joanna Horobin

01/07/2019

\*\* 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.