

OMB APPROVAL	
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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

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

1. Name and Address of Reporting Person* <u>Kraus Carl N</u> (Last) (First) (Middle) <u>C/O IDERA PHARMACEUTICALS, INC.</u> <u>505 EAGLEVIEW BLVD.</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>09/28/2022</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)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Options (Right to Buy)	\$12.28	09/28/2022		A ⁽¹⁾		651,364		(2)	02/09/2032	Common Stock	651,364	(3)	651,364	D	
Options (Right to Buy)	\$12,280	09/28/2022		A ⁽¹⁾		6,843		(2)	02/09/2032	Series Z Preferred Stock	6,843	(3)	6,843	D	
Series Z Preferred Stock	(4)	09/28/2022		A ⁽¹⁾		6,843		(4)	(4)	Common Stock	6,843,000	(1)	6,843	D	

Explanation of Responses:

- Pursuant to the Agreement and Plan of Merger by and between Idera Pharmaceuticals, Inc. ("Idera") and Aceragen, Inc. ("Aceragen"), dated September 28, 2022 (the "Merger Agreement"), Aceragen merged with and became a wholly-owned subsidiary of Idera (the "Merger"). Shares of Aceragen common stock convertible into shares of common stock of Idera, par value \$0.001 per share ("Common Stock") and shares of the Idera Series Z Non-Voting Convertible Preferred Stock, par value \$0.01 ("Series Z Preferred Stock").
- The option vests 25% on October 25, 2022, and then in equal monthly installments over the following 3 years, subject to the Reporting Person's continued service to Issuer through each vesting date.
- Pursuant to the Merger Agreement, the Reporting Person received Idera options for 651,364 shares of Common Stock and options for 6,843 shares of Series Z Preferred Stock options in exchange for 300,000 Aceragen options.
- Contingent upon stockholder approval of the conversion of Series Z Preferred Stock into shares of Common Stock, each share of Series Z Preferred Stock is convertible into 1,000 shares of Common Stock, at any time at the option of the holder thereof, subject to certain limitations (represents Series Z Preferred Stock options issuable upon the exercise of the Series Z Stock options reported above).

/s/ John J. Kirby, Attorney-in-Fact for Carl N. Kraus 09/30/2022

** 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.