

IDERA PHARMACEUTICALS, INC.

Form 4/A

April 23, 2012

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

OMB APPROVAL

OMB Number: 3235-0287
Expires: January 31, 2015
Estimated average burden hours per response... 0.5

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 OF SECURITIES

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

(Print or Type Responses)

1. Name and Address of Reporting Person *
Senator Investment Group LP

2. Issuer Name and Ticker or Trading Symbol
IDERA PHARMACEUTICALS, INC. [IDRA]

5. Relationship of Reporting Person(s) to Issuer
(Check all applicable)

(Last) (First) (Middle)
510 MADISON AVENUE, 28TH FLOOR
(Street)

3. Date of Earliest Transaction (Month/Day/Year)
04/19/2012

___ Director ___X___ 10% Owner
___ Officer (give title below) ___ Other (specify below)

NEW YORK, NY 10022

4. If Amendment, Date Original Filed(Month/Day/Year)
08/12/2010

6. Individual or Joint/Group Filing(Check Applicable Line)
X Form filed by One Reporting Person
___ Form filed by More than One Reporting Person

(City) (State) (Zip)

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 Ownership (Instr. 4)			
			Code	V	Amount	(A) or (D)	Price			
Common Stock	04/19/2012		S		37,000	D	\$ 2.01	2,843,000	I	See Footnote (1) (2)
Common Stock	04/20/2012		S		27,300	D	\$ 2	2,815,700	I	See Footnote (1) (2)

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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 control

SEC 1474 (9-02)

