

ARCA biopharma, Inc.
Form SC 13G
February 05, 2009

**SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549
SCHEDULE 13G**

Under the Securities Exchange Act of 1934

(Amendment No. _____)*

ARCA biopharma, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

00211Y 10 0

(CUSIP Number)

January 27, 2009

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

Rule 13d-1(b)

Rule 13d-1(c)

Rule 13d-1(d)

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be filed for the purpose of Section 18 of the Securities Exchange Act of 1934 (Act) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 00211Y 10 0

13G

Page 2 of 13 Pages

1 NAMES OF REPORTING PERSONS
Boulder Ventures IV (Annex), L.P.

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2 (a)
(b) (1)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION
Delaware, United States of America

	5	SOLE VOTING POWER
NUMBER OF		0 shares
SHARES	6	SHARED VOTING POWER
BENEFICIALLY		803,666 shares of Common Stock (2)
OWNED BY		
EACH	7	SOLE DISPOSITIVE POWER
REPORTING		0 shares
PERSON		
WITH:	8	SHARED DISPOSITIVE POWER
		803,666 shares of Common Stock (2)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
803,666 shares of Common Stock (2)

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

10.6%(3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

PN

(1) This Schedule 13G is filed by Boulder Ventures IV (Annex), L.P. (BV IV Annex), Boulder Ventures IV, L.P. (BV IV LP), BV Partners IV, L.L.C. (BV IV LLC), Josh E. Fidler (Fidler), Andrew E. Jones (Jones), Kyle Lefkoff (Lefkoff), Lawrence M. Macks (Macks) and Peter Roshko (Roshko) (collectively, the Fund Entities). The Fund Entities expressly disclaim status as a group for purposes of this Schedule 13G.

(2) Includes 725,111 shares of Common Stock and currently exercisable warrants to purchase 28,651 shares of Common Stock held by BV IV Annex and 48,007 shares of Common Stock and currently exercisable warrants to purchase 1,897 shares of Common Stock held by BV IV LP. BV IV LLC serves as the general partner of BV IV Annex and BV IV LP, and owns no securities of the Issuer directly. Fidler, Jones, Lefkoff, Macks and Roshko are Managing Members of BV IV LLC and share voting and dispositive power over the shares held by BV IV Annex and BV IV LP. The information with respect to the ownership of the Common Stock of the Issuer by the persons filing this statement on Schedule 13G is provided as of January 27, 2009.

(3) This percentage is calculated based upon 7,556,786 shares of the Issuer s common stock outstanding as of February 4, 2009.

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Page 3 of 13 Pages

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2 (a)
(b) (1)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION
Delaware, United States of America

	5	SOLE VOTING POWER
NUMBER OF		0 shares
SHARES	6	SHARED VOTING POWER
BENEFICIALLY		803,666 shares of Common Stock (2)
OWNED BY		
EACH	7	SOLE DISPOSITIVE POWER
REPORTING		0 shares
PERSON		
WITH:	8	SHARED DISPOSITIVE POWER
		803,666 shares of Common Stock (2)

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10.6%(3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

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1 NAMES OF REPORTING PERSONS
BV Partners IV, L.L.C.

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2 (a)
(b) (1)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION
Delaware, United States of America

5 SOLE VOTING POWER
NUMBER OF 0 shares
SHARES BENEFICIALLY OWNED BY 6 SHARED VOTING POWER
803,666 shares of Common Stock (2)

7 EACH REPORTING PERSON
SOLE DISPOSITIVE POWER
0 shares
WITH: 8 SHARED DISPOSITIVE POWER
803,666 shares of Common Stock (2)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
803,666 shares of Common Stock (2)

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

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11

10.6% (3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

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1 NAMES OF REPORTING PERSONS
Josh E. Fidler

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2 (a)
(b) (1)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION
United States of America

	5	SOLE VOTING POWER
NUMBER OF		0 shares
SHARES	6	SHARED VOTING POWER
BENEFICIALLY		803,666 shares of Common Stock (2)
OWNED BY		
EACH	7	SOLE DISPOSITIVE POWER
REPORTING		0 shares
PERSON		
WITH:	8	SHARED DISPOSITIVE POWER
		803,666 shares of Common Stock (2)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
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CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

10.6%(3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

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1 NAMES OF REPORTING PERSONS
Andrew E. Jones

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2
(a)
(b) (1)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION
United States of America

	5	SOLE VOTING POWER
NUMBER OF		0 shares
SHARES	6	SHARED VOTING POWER
BENEFICIALLY		803,666 shares of Common Stock (2)
OWNED BY		
EACH	7	SOLE DISPOSITIVE POWER
REPORTING		0 shares
PERSON		
WITH:	8	SHARED DISPOSITIVE POWER
		803,666 shares of Common Stock (2)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
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PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

10.6% (3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

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1 NAMES OF REPORTING PERSONS
Kyle Lefkoff

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2 (a)
(b) (1)

3 SEC USE ONLY

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United States of America

	5	SOLE VOTING POWER
NUMBER OF		0 shares
SHARES	6	SHARED VOTING POWER
BENEFICIALLY		803,666 shares of Common Stock (2)
OWNED BY		
EACH	7	SOLE DISPOSITIVE POWER
REPORTING		0 shares
PERSON		
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PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

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10.6% (3)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

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1 NAMES OF REPORTING PERSONS
Lawrence M. Macks

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2 (a)
(b) (1)

3 SEC USE ONLY

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United States of America

	5	SOLE VOTING POWER
NUMBER OF		0 shares
SHARES	6	SHARED VOTING POWER
BENEFICIALLY		803,666 shares of Common Stock (2)
OWNED BY		
EACH	7	SOLE DISPOSITIVE POWER
REPORTING		0 shares
PERSON		
WITH:	8	SHARED DISPOSITIVE POWER
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PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

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TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

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CUSIP No. 00211Y 10 0

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1 NAMES OF REPORTING PERSONS
Peter Roshko

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2 (a)
(b) (1)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION
United States of America

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NUMBER OF		0 shares
SHARES	6	SHARED VOTING POWER
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Introductory Note: This Statement on Schedule 13G is filed on behalf of Boulder Ventures IV (Annex), L.P., a Delaware limited partnership (BV IV Annex), Boulder Ventures IV, L.P., a Delaware limited partnership (BV IV LP), BV Partners IV, L.L.C., a Delaware limited liability company (BV IV LLC), Josh E. Fidler (Fidler), Andrew E. Jones (Jones), Kyle Lefkoff (Lefkoff), Lawrence M. Macks (Macks) and Peter Roshko (Roshko), in respect of shares of Common Stock of ARCA biopharma, Inc.

Item 1

Item 1(a). Name of Issuer: ARCA biopharma, Inc. (ABIO)

Item 1(b). Address of Issuer's Principal Executive Offices:

8001 Arista Place, Suite 200
Broomfield Co 80021

Item 2(a). Name of Person(s) Filing:

Boulder Ventures IV (Annex), L.P. (BV IV Annex)
Boulder Ventures IV, L.P. (BV IV LP)
BV Partners IV, L.L.C. (BV IV LLC)
Josh E. Fidler (Fidler)
Andrew E. Jones (Jones)
Kyle Lefkoff (Lefkoff)
Lawrence M. Macks (Macks)
Peter Roshko (Roshko)

Item 2(b). Address of Principal Business Office or, if none, Residence:

1900 Ninth Street, Suite 200
Boulder, CO 80302

Item 2(c). Citizenship:

Entities:	BV IV Annex	Delaware
	BV IV LP	Delaware
	BV IV LLC	Delaware
Individuals:	Fidler	United States of America
	Jones	United States of America
	Lefkoff	United States of America
	Macks	United States of America
	Roshko	United States of America

Item 2(d). Title of Class of Securities: Common Stock

Item 2(e). CUSIP Number: 00211Y 10 0

Item 3. Not applicable.

Item 4. Ownership

The following information with respect to the ownership of the Common Stock of the Issuer by the persons filing this statement on Schedule 13G is provided as of January 27, 2009:

	Shares Held	Sole Voting	Shared Voting	Sole Dispositive	Shared Dispositive	Beneficial Ownership	Percentage of Class (1)
Fund Entities	Directly	Power	Power	Power	Power	Ownership	
Boulder IV Annex	752,762(2)	0	803,666(2)	0	803,666(2)	803,666(2)	10.6%
BV IV LP	49,904(2)	0	803,666(2)	0	803,666(2)	803,666(2)	10.6%
BV IV LLC (3)	0	0	803,666(2)	0	803,666(2)	803,666(2)	10.6%
Fidler (3)	0	0	803,666(2)	0	803,666(2)	803,666(2)	10.6%
Jones (3)	0	0	803,666(2)	0	803,666(2)	803,666(2)	10.6%
Lefkoff (3)	0	0	803,666(2)	0	803,666(2)	803,666(2)	10.6%
Lawrence (3)	0	0	803,666(2)	0	803,666(2)	803,666(2)	