ARCA biopharma, Inc. Form SC 13D November 02, 2012

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

(Rule 13d-102)

INFORMATION INCLUDED IN STATEMENTS FILED PURSUANT TO RULE 13d-1(a)

AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(a)

(Amendment No.)*

ARCA BIOPHARMA, INC.

(Name of Issuer)

Common Stock, \$0.001

(Title and Class of Securities)

00211Y100

(CUSIP Number)

Atlas Venture

Attention: Frank Castellucci

25 First Street, Suite 303

Cambridge, MA 02141

617-588-2600

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

October 25, 2012

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. o

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7 for other parties to whom copies are to be sent.

* 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 disclosures provided in a prior cover page.

The information required on 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. 00211Y100 13D 1 Names of Reporting Persons I.R.S. Identification Nos. of Above Persons (Entities Only) Atlas Venture Fund VII, L.P. 2 Check the Appropriate Box if a Member of a Group (See Instructions) (b) 3 SEC Use Only 4 Source of Funds (See Instructions) OO 5 Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) o 6 Citizenship or Place of Organization Delaware 7 Sole Voting Power Number of Shared Voting Power Shares 8 Beneficially 1,893,025* Owned by Each 9 Sole Dispositive Power Reporting Person With Shared Dispositive Power 10 1,893,025* 11 Aggregate Amount Beneficially Owned by Each Reporting Person 1,893,025* 12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) o 13 Percent of Class Represented by Amount in Row (11) 12.0% 14 Type of Reporting Person (See Instructions) PN

*Includes 313,483 shares issuable upon the exercise of warrants

CUSIP No. 002	11Y100	13D		
1		Names of Reporting Persons R.S. Identification Nos. of Above Persons (Entities Only)		
	Atlas Venture Associates VII, L.P.			
2	Check the Appropri (a) (b)	iate Box if a Member of a Group (See Instructions) o x		
3	SEC Use Only			
4	Source of Funds (So AF	ee Instructions)		
5	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) o			
6	Citizenship or Place of Organization Delaware			
NI I C	7	Sole Voting Power 0		
Number of Shares Beneficially Owned by	8.	Shared Voting Power 1,893,025*		
Each Reporting Person With	9	Sole Dispositive Power 0		
CISON WITH	10	Shared Dispositive Power 1,893,025*		
11	Aggregate Amount 1,893,025*	Beneficially Owned by Each Reporting Person		
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) of			
13	Percent of Class Re 12.0%	epresented by Amount in Row (11)		
14	Type of Reporting PN	Person (See Instructions)		

*Includes 313,483 shares issuable upon the exercise of warrants

CUSIP No. 0	00211Y100	13D
Item 1.	Security and Issuer	
(the <u>Commo</u> the principal e	on Stock) of ARCA biopharma, Inc., a corporation o	D (this <u>Statement</u>) relates is the common stock, par value \$0.001 per share rganized under the laws of the state of Delaware (the <u>Company</u>). The address of s, Suite 430, Broomfield, CO 80021. Information given in response to each s applicable.
Item 2.	Identity and Background	
(a) Name:		
Atlas Venture	e Fund VII, L.P. (<u>Atlas V</u> II).	
Atlas Venture	e Associates VII, L.P. (<u>AVA VII L</u> P) is the sole get	neral partner of Atlas VII.
Atlas VII and	AVA VII LP are referred to individually herein as a	Reporting Person and collectively as the Reporting Persons .
Formela, Pete Company. Ea	er Barrett and Jeff Fagnan is each a director of AVA V	neral partner of AVA VII LP. As of the date of this Statement, Jean-Francois III Inc. and Dr. Formela serves as a member of the board of directors of the eff Fagnan disclaims beneficial ownership of the shares of Common Stock
(b) and (c) Re	esidence or business address and principal business	s/occupation:
The principal Persons is:	business of each of the Reporting Persons is venture	capital investing and the principal business office of each of the Reporting
25 First Street Cambridge, M		

(d) and (e) During the past five years, none of the Reporting Persons has been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
(f) Citizenship:
Atlas VII and AVA VII LP is each a limited partnership formed under the laws of the State of Delaware.
Item 3. Source and Amount of Funds or Other Consideration
The Reporting Persons previously reported their beneficial ownership of shares of Common Stock on Schedule 13G in accordance with Rule 13d-1(d) of the Securities Exchange Act of 1934, as amended. This Statement is being filed on Schedule 13D as the result of the purchase by Atlas VII of shares of Common Stock in connection with a private placement by the Company (the Offering) which closed on October 25, 2012 (the Issuance Date). In the Offering, the Company sold a total of 825,184 units (the Units), each Unit consisting of (i) one share of Common Stock (collectively, the Shares) and (ii) one warrant (collectively, the Warrants) to purchase 0.75 shares of Common Stock at an exercise price of \$0.3001 per share, for a purchase price of \$0.39385 per unit. The Units were not issued or certificated. The Shares and Warrants were immediately separable and issued separately. The Warrants have a five year term and were exercisable on the Issuance Date.
Atlas VII purchased an aggregate 317,379 Units, consisting of 317,379 Shares and Warrants to purchase 238,034 Shares (the <u>Warrant Shares</u>) for an aggregate purchase price of \$125,000.
Atlas VII used capital contributions from its investors to purchase the Units.

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Item 4.	Purpose of Transaction	
As described i Offering.	in Item 3, Item 5 and Item 6, the Reporting Persons acquire	red beneficial ownership of the shares of Common Stock as part of the
Item 5.	Interest in Securities of the Issuer	
Company s is of shares of Co	ssued and outstanding shares of Common Stock shall be d	ally owned by each of the Reporting Persons. All references to the eemed to mean 15,444,782 shares of Common Stock, which is the number outstanding as of August 10, 2012 plus the total number of shares of
Amount Bene	eficially Owned:	
Stock issuable 12.0% of the i	e upon the exercise of warrants ((i) and (ii) collectively, the	79,542 shares of Common Stock and (ii) 313,483 shares of Common e Beneficially Owned Shares). Accordingly, Atlas VII beneficially owns general partner of Atlas VII, AVA VII LP may also be deemed to
each a director		his Statement, Jean-Francois Formela, Peter Barrett and Jeff Fagnan is the board of directors of the Company. Each of AVA VII Inc., hip of the Beneficially Owned Shares.
his service as Director Opti will be transfe	a member of the board of directors of the Company and wations). The proceeds from any sale of the shares of Com	rsuant to the terms of stock option awards he received in connection with which are exercisable within 60 days of the date of this Statement (the mon Stock issued to Dr. Formela upon the exercise of the Director Options are Persons disclaims beneficial ownership of the shares of Common
(c) Except as 60 days.	described in this Statement, none of the Reporting Persons	s has effected any transaction in the securities of the Company in the past

(d) No person other than the Reporting Persons has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of the securities to which this Statement relates.
(e) Not applicable.
Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer
Subscription Agreement
As disclosed in Item 3, Atlas VII participated in the Offering by entering into a Subscription Agreement with the Company, dated October 22, 2012, pursuant to which Atlas VII purchased an aggregate of 317,379 Units in the Offering for an aggregate purchase price of \$125,000.
Warrant to Purchase Common Stock
In connection with the purchase of the Units, Atlas VII received a Warrant to purchase 0.75 shares of Common Stock for each Unit purchased. The terms of such Warrant are described in Item 3.
Registration Rights Agreement
In connection with the Offering, each of the purchasers, including Atlas VII, entered into a registration rights
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agreement (the <u>Registration Rights Agreement</u>) with the Company. The Registration Rights Agreement provides that the Company will file a registration statement for the resale of the Shares and the Warrant Shares within 60 calendar days following the closing of the Offering, which was October 25, 2012, and use its commercially reasonable efforts to cause the Registration Rights Agreement to be declared effective as soon as practicable but not later than 90 calendar days following such closing date, or the 120th calendar day after the such closing date in the event that such registration statement is subject to review by the U.S. Securities and Exchange Commission. The Registration Rights Agreement contains customary cross-indemnification provisions, under which the Company is obligated to indemnify the selling stockholders, including Atlas VII and its affiliates, in the event of material misstatements or omissions in the registration statement attributable to the Company, and the selling stockholders are obligated to indemnify the Company for material misstatements or omissions attributable to them.

Except as described in this Item 6, none of the Reporting Persons have any other existing agreement with respect to shares of Common Stock or other securities of the Company.

Item 7. Material to be Filed as Exhibits

Exhibit 1: Joint Filing Agreement as required by Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended
 Exhibit 2: Subscription Agreement, between the Company and each of the purchasers identified therein, dated October 22, 2012
 Exhibit 3: Form of Warrant to Purchase Common Stock
 Exhibit 4: Registration Rights Agreement, between the Company and each of the Buyers identified therein, dated October 22, 2012

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SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, each of the undersigned hereby certifies that the information set forth in this statement is true, complete and correct.

EXECUTED as a sealed instrument this 2nd day of November, 2012.

Atlas Venture Fund VII, L.P.

By: Atlas Venture Associates VII, L.P.,

its general partner

By: Atlas Venture Associates VII, Inc.,

its general partner

By: /s/ Kristen Laguerre

Name: Kristen Laguerre Title: Vice President

Atlas Venture Associates VII, L.P.

By: Atlas Venture Associates VII, Inc.,

its general partner

By: /s/ Kristen Laguerre

Name: Kristen Laguerre Title: Vice President

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