ARCA biopharma, Inc. Form SC 13G/A February 04, 2011

#### OMB APPROVAL

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### UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

#### **SCHEDULE 13G**

Under the Securities Exchange Act of 1934 (AMENDMENT NO 1)\*

ARCA BIOPHARMA, INC.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

00211Y100

(CUSIP Number)

December 31, 2010

(Date of Event which Requires Filing of this Statement)

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

- o Rule 13d-1(b)
- o Rule 13d-1(c)
- þ Rule 13d-1(d)

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).

<sup>\*</sup> 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.

**CUSIP No.** 13G 00211Y100 Page 2 of 21 Pages NAME OF REPORTING PERSONS 1 InterWest Partners IX, LP I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP 2 (a) o (b) o SEC USE ONLY 3 CITIZENSHIP OR PLACE OF ORGANIZATION 4 California **SOLE VOTING POWER** 5 NUMBER OF 521,904 **SHARES** SHARED VOTING POWER BENEFICIALLY **OWNED BY** 0 **REPORTING** SOLE DISPOSITIVE POWER 7 **PERSON** WITH 521,904 SHARED DISPOSITIVE POWER 8 0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

# Edgar Filing: ARCA biopharma, Inc. - Form SC 13G/A

521,904

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

Page 2 of 21 Pages

CUSIP No. 00211Y100 13G Page 3 of 21 Pages

NAME OF REPORTING PERSONS

1 InterWest Management Partners IX, LLC (the General Partner of InterWest Partners IX, LP)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

California

**SOLE VOTING POWER** 

5

NUMBER OF 521,904

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 0

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 521,904

SHARED DISPOSITIVE POWER

8

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

# Edgar Filing: ARCA biopharma, Inc. - Form SC 13G/A

Page 3 of 21 Pages							
	00						
12	TYPE OF REPORTING PERSON						
	5.9%						
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)						
	o						
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:						
	521,904						

CUSIP No. 00211Y100 13G Page 4 of 21 Pages

NAME OF REPORTING PERSONS

1 Harvey B. Cash (a Managing Director of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

**SOLE VOTING POWER** 

5

NUMBER OF 0

SHARES SHARED VOTING POWER

**BENEFICIALLY** 

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 0

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

**12** 

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Harvey B. Cash that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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CUSIP No. 00211Y100 13G Page 5 of 21 Pages

NAME OF REPORTING PERSONS

1 Bruce A. Cleveland (a Venture Member of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

**SOLE VOTING POWER** 

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 0

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

**12** 

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Bruce A. Cleveland that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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CUSIP No. 00211Y100 13G Page 6 of 21 Pages

NAME OF REPORTING PERSONS

1 Christopher B. Ehrlich (a Venture Member of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

SOLE VOTING POWER

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 0

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

**12** 

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Christopher B. Ehrlich that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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CUSIP No. 00211Y100 13G Page 7 of 21 Pages

NAME OF REPORTING PERSONS

1 Philip T. Gianos (a Managing Director of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

SOLE VOTING POWER

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 0

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

**12** 

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Philip T. Gianos that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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CUSIP No. 00211Y100 13G Page 8 of 21 Pages

NAME OF REPORTING PERSONS

1 Linda S. Grais (a Venture Member of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

SOLE VOTING POWER

5

NUMBER OF 11,000

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 11,000

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

6.0%

TYPE OF REPORTING PERSON

**12** 

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Linda S. Grais that she is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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CUSIP No. 00211Y100 13G Page 9 of 21 Pages

NAME OF REPORTING PERSONS

1 W. Stephen Holmes III (a Managing Director of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

SOLE VOTING POWER

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 0

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

**12** 

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by W. Stephen Holmes III that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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CUSIP No. 00211Y100 13G Page 10 of 21 Pages

NAME OF REPORTING PERSONS

1 Nina S. Kjellson (a Venture Member of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

SOLE VOTING POWER

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 0

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

**12** 

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Nina S. Kjellson that she is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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CUSIP No. 00211Y100 13G Page 11 of 21 Pages

NAME OF REPORTING PERSONS

1 Gilbert H. Kliman (a Managing Director of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

**SOLE VOTING POWER** 

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 0

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

12

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Gilbert H. Kliman that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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CUSIP No. 00211Y100 13G Page 12 of 21 Pages

NAME OF REPORTING PERSONS

1 Khaled A. Nasr (a Venture Member of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

SOLE VOTING POWER

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 0

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

12

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Khaled A. Nasr that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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CUSIP No. 00211Y100 13G Page 13 of 21 Pages

NAME OF REPORTING PERSONS

1 Arnold L. Oronsky (a Managing Director of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

SOLE VOTING POWER

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 0

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

12

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Arnold L. Oronsky that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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CUSIP No. 00211Y100 13G Page 14 of 21 Pages

NAME OF REPORTING PERSONS

1 Douglas A. Pepper (a Venture Member of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

**SOLE VOTING POWER** 

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 0

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

12

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Douglas A. Pepper that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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CUSIP No. 00211Y100 13G Page 15 of 21 Pages

NAME OF REPORTING PERSONS

1 Thomas L. Rosch (a Managing Director of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

SOLE VOTING POWER

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 0

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

**12** 

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Thomas L. Rosch that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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CUSIP No. 00211Y100 13G Page 16 of 21 Pages

NAME OF REPORTING PERSONS

1 Michael B. Sweeney (a Managing Director of InterWest Management Partners IX, LLC)

I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY)

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) o

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

**United States** 

SOLE VOTING POWER

5

NUMBER OF 0

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 521,904

REPORTING SOLE DISPOSITIVE POWER

PERSON 7

WITH 0

SHARED DISPOSITIVE POWER

8

521,904

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

5.9%

TYPE OF REPORTING PERSON

**12** 

IN

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Michael B. Sweeney that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

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#### ITEM 1.

(a) NAME OF ISSUER: ARCA biopharma, Inc.

#### (b) ADDRESS OF ISSUER S PRINCIPAL EXECUTIVE OFFICE:

8001 Arista Place, Suite 200, Broomfield, CO 80021

#### ITEM 2.

#### (a) NAME OF PERSON(S) FILING:

InterWest Partners IX, LP ( IWP IX )

InterWest Management Partners IX, LLC ( IMP IX )

Harvey B. Cash ( Cash )

Bruce A. Cleveland ( Cleveland )

Christopher B. Ehrlich ( Ehrlich )

Philip T. Gianos ( Gianos )

Linda S. Grais (Grais)

W. Stephen Holmes III ( Holmes )

Nina S. Kjellson (Kjellson)

Gilbert H. Kliman ( Kliman )

Khaled A. Nasr ( Nasr )

Arnold L. Oronsky ( Oronsky )

Douglas A. Pepper ( Pepper )

Thomas L. Rosch (Rosch)

Michael B. Sweeney ( Sweeney )

#### (b) ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE:

2710 Sand Hill Road, Second Floor, Menlo Park, CA 94025

#### (c) CITIZENSHIP/PLACE OF ORGANIZATION:

**IWP IX:** California IMP IX: California Cash: **United States** Cleveland: **United States** Ehrlich: **United States** Gianos: **United States** Grais: **United States United States** Holmes: Kjellson: **United States United States** Kliman: Nasr: **United States United States** Oronsky: **United States** Pepper: Rosch: **United States** Sweeney: **United States** 

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#### (d) TITLE OF CLASS OF SECURITIES: Common Stock

(e) CUSIP NUMBER: 00211Y100 ITEM 3. NOT APPLICABLE. ITEM 4. OWNERSHIP.

				Cleveland	
	IWP IX	<b>IMP IX</b> (1)	<b>Cash (2)</b>	(2)	Ehrlich (2)
Beneficial Ownership	521,904	521,904	521,904	521,904	521,904
Percentage of Class	5.9%	5.9%	5.9%	5.9%	5.9%
Sole Voting Power	521,904	521,904	0	0	0
Shared Voting Power	0	0	521,904	521,904	521,904
Sole Dispositive Power	521,904	521,904	0	0	0
Shared Dispositive Power	0	0	521,904	521,904	521,904
		Gianos (2)	Grais (2) **	Holmes (2)	Kjellson (2)
Beneficial Ownership		521,904	532,904	521,904	521,904
Percentage of Class		5.9%	6.0%	5.9%	5.9%
Sole Voting Power		0	11,000	0	0
Shared Voting Power		521,904	521,904	521,904	521,904
Sole Dispositive Power		0	11,000	0	0
Shared Dispositive Power		521,904	521,904	521,904	521,904
			Kliman (2)	Nasr (2)	Oronsky (2)
Beneficial Ownership			521,904	521,904	521,904
Percentage of Class			5.9%	5.9%	5.9%
Sole Voting Power			0	0	0
Shared Voting Power			521,904	521,904	521,904
Sole Dispositive Power			0	0	0
Shared Dispositive Power			521,904	521,904	521,904
			Pepper (2)	Rosch (2)	Sweeney (2)
Beneficial Ownership			521,904	521,904	521,904
Percentage of Class			5.9%	5.9%	5.9%
Sole Voting Power			0	0	0
Shared Voting Power		521,904	521,904	521,904	
Sole Dispositive Power			0	0	0
Shared Dispositive Power			521,904	521,904	521,904

<sup>\*\*</sup> Includes 11,000 shares issuable to Grais pursuant to outstanding options exercisable within 60 days of December 31, 2010.

(2) Cash, Gianos, Holmes, Kliman, Oronsky, Rosch, and Sweeney are Managing Directors of IMP IX. Cleveland, Ehrlich, Grais, Kjellson, Nasr, and Pepper are Venture Members of IMP IX. Page 18 of 21 Pages

<sup>(1)</sup> IMP IX is the general partner of IWP IX.

#### ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.

Not applicable.

### ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON.

Under certain circumstances set forth in the limited liability company operating agreement of IMP IX, the members of such limited liability company have the right to receive dividends from, or the proceeds from the sale of, the common stock of Issuer beneficially owned by such limited liability company.

# ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY.

Not applicable.

#### ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP.

No reporting person is a member of a group as defined in section 240.13d-1(b)(1)(iii)(H) of the Act.

#### ITEM 9. NOTICE OF DISSOLUTION OF THE GROUP.

Not applicable.

#### ITEM 10. CERTIFICATION.

Not applicable.

#### **EXHIBITS**

Joint Filing Statement attached as Exhibit A.

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#### **SIGNATURE**

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

Date: February 4, 2011

By: /s/ Harvey B. Cash Name: Harvey B. Cash

By: /s/ Bruce A. Cleveland Name: Bruce A. Cleveland

By: /s/ Christopher B. Ehrlich Name: Christopher B. Ehrlich

By: /s/ Philip T. Gianos Name: Philip T. Gianos

By: /s/ Linda S. Grais Name: Linda S. Grais

By: /s/ W. Stephen Holmes Name: W. Stephen Holmes

By: /s/ Nina S. Kjellson Name: Nina S. Kjellson

By: /s/ Gilbert H. Kliman Name: Gilbert H. Kliman

By: /s/ Khaled A. Nasr Name: Khaled A. Nasr

By: /s/ Arnold L. Oronsky Name: Arnold L. Oronsky

#### INTERWEST PARTNERS IX, LP

By: InterWest Management Partners IX, LLC its General Partner

By: /s/ W. Stephen Holmes Managing Director

#### INTERWEST MANAGEMENT PARTNERS IX, LLC

By: /s/ W. Stephen Holmes

# Edgar Filing: ARCA biopharma, Inc. - Form SC 13G/A

# Managing Director

By: /s/ Douglas A. Pepper Name: Douglas A. Pepper

By: /s/ Thomas L. Rosch Name: Thomas L. Rosch

By: /s/ Michael B. Sweeney Name: Michael B. Sweeney

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# **EXHIBIT A Joint Filing Statement**

We, the undersigned, hereby express our agreement that the attached Schedule 13G is filed on behalf of each of us.

Date: February 4, 2011

By: /s/ Harvey B. Cash Name: Harvey B. Cash

By: /s/ Bruce A. Cleveland Name: Bruce A. Cleveland

By: /s/ Christopher B. Ehrlich Name: Christopher B. Ehrlich

By: /s/ Philip T. Gianos Name: Philip T. Gianos

By: /s/ Linda S. Grais Name: Linda S. Grais

By: /s/ W. Stephen Holmes Name: W. Stephen Holmes

By: /s/ Nina S. Kjellson Name: Nina S. Kjellson

By: /s/ Gilbert H. Kliman Name: Gilbert H. Kliman

By: /s/ Khaled A. Nasr Name: Khaled A. Nasr

By: /s/ Arnold L. Oronsky Name: Arnold L. Oronsky

#### INTERWEST PARTNERS IX, LP

By: InterWest Management Partners IX, LLC its General Partner

By: /s/ W. Stephen Holmes Managing Director

#### INTERWEST MANAGEMENT PARTNERS IX, LLC

By: /s/ W. Stephen Holmes

# Edgar Filing: ARCA biopharma, Inc. - Form SC 13G/A

# Managing Director

By: /s/ Douglas A. Pepper Name: Douglas A. Pepper

By: /s/ Thomas L. Rosch Name: Thomas L. Rosch

By: /s/ Michael B. Sweeney Name: Michael B. Sweeney

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