

ARQULE INC  
Form SC 13G/A  
October 20, 2017  
**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**SCHEDULE 13G**

(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT  
TO RULES 13d-1(b), (c), AND (d) AND AMENDMENTS THERETO FILED  
PURSUANT TO RULE 13d-2(b)

(Amendment No. 6)<sup>1</sup>

ArQule, Inc.  
(Name of Issuer)

Common Stock, par value \$0.01 per share  
(Title of Class of Securities)

04269E107  
(CUSIP Number)

October 20, 2017  
(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)

<sup>1</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 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. 04269E107

1	NAME OF REPORTING PERSON	
	Biotechnology Value Fund, L.P.	
2	CHECK THE APPROPRIATE BOX IF A (a) MEMBER OF A GROUP (b)	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY	5	SOLE VOTING POWER  0 shares
OWNED BY EACH REPORTING PERSON WITH	6	SHARED VOTING POWER  8,821,008 (1)
	7	SOLE DISPOSITIVE POWER  0 shares
	8	SHARED DISPOSITIVE POWER  8,821,008 (1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
10	8,821,008 (1)	

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

11 PERCENT OF CLASS  
REPRESENTED BY  
AMOUNT IN ROW (9)

10.0% (1)

12 TYPE OF REPORTING  
PERSON

PN

Includes 1,116,177 shares of Common Stock currently issuable upon the exercise of certain warrants. As of October 16, 2017, the warrant exercise limitation described in the next sentence limits the aggregate exercise of warrants by the Reporting Persons to 1,116,177 out of the 2,439,932 shares of Common Stock underlying the warrants owned by the Reporting Persons in the aggregate. The warrants may not be exercised if, after such exercise, the Reporting Persons would beneficially own in the aggregate, as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, more than 19.9% of the number of shares of Common Stock then (1) issued and outstanding. In providing beneficial ownership described herein, the Reporting Persons have assumed 1,116,177 of the 1,201,053 warrants owned by BVF would be exercised. BVF2 holds warrants to purchase 823,231 additional shares which are excluded herein as a result of the 19.9% limitation. BVTOS holds warrants to purchase 199,687 additional shares which are excluded herein as a result of the 19.9% limitation. The Reporting Persons through certain managed accounts holds warrants to purchase 215,961 additional shares which are excluded herein as a result of the 19.9% limitation. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.

CUSIP NO. 04269E107

1	NAME OF REPORTING PERSON	
	Biotechnology Value Fund II, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a)
		(b)
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
5	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	SOLE VOTING POWER
		0 shares
6		SHARED VOTING POWER
		5,124,370 (1)
7		SOLE DISPOSITIVE POWER
		0 shares
8		SHARED DISPOSITIVE POWER
		5,124,370 (1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
10	5,124,370 (1) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW	

(9) EXCLUDES  
CERTAIN  
SHARES

11 PERCENT OF CLASS  
REPRESENTED BY  
AMOUNT IN ROW (9)

12 5.8% (1)  
TYPE OF REPORTING  
PERSON

PN

Excludes 823,231 shares of Common Stock not issuable upon the exercise of certain warrants due to the warrant exercise limitation. As of October 16, 2017, the warrant exercise limitation described in the next sentence limits the aggregate exercise of warrants by the Reporting Persons to 1,116,177 out of the 2,439,932 shares of Common Stock underlying the warrants owned by the Reporting Persons in the aggregate. The warrants may not be exercised if, after such exercise, the Reporting Persons would beneficially own in the aggregate, as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, more than 19.9% of the number of shares (1) of Common Stock then issued and outstanding. In providing beneficial ownership described herein, the Reporting Persons have assumed 1,116,177 of the 1,201,053 warrants owned by BVF would be exercised. BVF2 holds warrants to purchase 823,231 additional shares which are excluded herein as a result of the 19.9% limitation. BVTOS holds warrants to purchase 199,687 additional shares which are excluded herein as a result of the 19.9% limitation. The Reporting Persons through certain managed accounts holds warrants to purchase 215,961 additional shares which are excluded herein as a result of the 19.9% limitation. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.

CUSIP NO. 04269E107

1	NAME OF REPORTING PERSON	
	Biotechnology Value Trading Fund OS LP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	
	(a)	
	(b)	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Cayman Islands	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER
		0 shares
	6	SHARED VOTING POWER
		1,378,710 (1)
	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER
		1,378,710 (1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
10	1,378,710 (1)	

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

11 PERCENT OF CLASS  
REPRESENTED BY  
AMOUNT IN ROW (9)

12 1.6% (1)  
TYPE OF REPORTING  
PERSON

PN

Excludes 199,687 shares of Common Stock not issuable upon the exercise of certain warrants due to the warrant exercise limitation. As of October 16, 2017, the warrant exercise limitation described in the next sentence limits the aggregate exercise of warrants by the Reporting Persons to 1,116,177 out of the 2,439,932 shares of Common Stock underlying the warrants owned by the Reporting Persons in the aggregate. The warrants may not be exercised if, after such exercise, the Reporting Persons would beneficially own in the aggregate, as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, more than 19.9% of the number of shares (1) of Common Stock then issued and outstanding. In providing beneficial ownership described herein, the Reporting Persons have assumed 1,116,177 of the 1,201,053 warrants owned by BVF would be exercised. BVF2 holds warrants to purchase 823,231 additional shares which are excluded herein as a result of the 19.9% limitation. BVTOS holds warrants to purchase 199,687 additional shares which are excluded herein as a result of the 19.9% limitation. The Reporting Persons through certain managed accounts holds warrants to purchase 215,961 additional shares which are excluded herein as a result of the 19.9% limitation. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.



CUSIP NO. 04269E107

1	NAME OF REPORTING PERSON	
	BVF Partners OS Ltd.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a)
		(b)
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Cayman Islands	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER
		0 shares
	6	SHARED VOTING POWER
		1,378,710 (1)
	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER
		1,378,710 (1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	1,378,710 (1)	
10	CHECK BOX IF THE AGGREGATE	

AMOUNT IN ROW  
(9) EXCLUDES  
CERTAIN  
SHARES

11 PERCENT OF CLASS  
REPRESENTED BY  
AMOUNT IN ROW (9)

12 1.6% (1)  
TYPE OF REPORTING  
PERSON

CO

Excludes 199,687 shares of Common Stock not issuable upon the exercise of certain warrants due to the warrant exercise limitation. As of October 16, 2017, the warrant exercise limitation described in the next sentence limits the aggregate exercise of warrants by the Reporting Persons to 1,116,177 out of the 2,439,932 shares of Common Stock underlying the warrants owned by the Reporting Persons in the aggregate. The warrants may not be exercised if, after such exercise, the Reporting Persons would beneficially own in the aggregate, as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, more than 19.9% of the number of shares (1) of Common Stock then issued and outstanding. In providing beneficial ownership described herein, the Reporting Persons have assumed 1,116,177 of the 1,201,053 warrants owned by BVF would be exercised. BVF2 holds warrants to purchase 823,231 additional shares which are excluded herein as a result of the 19.9% limitation. BVTOS holds warrants to purchase 199,687 additional shares which are excluded herein as a result of the 19.9% limitation. The Reporting Persons through certain managed accounts holds warrants to purchase 215,961 additional shares which are excluded herein as a result of the 19.9% limitation. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.

CUSIP NO. 04269E107

1	NAME OF REPORTING PERSON	
	BVF Partners L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a)
		(b)
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
5	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	SOLE VOTING POWER
		0 shares
6		SHARED VOTING POWER
		17,553,089
		(1)
7		SOLE DISPOSITIVE POWER
		0 shares
8		SHARED DISPOSITIVE POWER
		17,553,089
		(1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	17,553,089 (1)	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES	

CERTAIN  
SHARES

11 PERCENT OF CLASS  
REPRESENTED BY  
AMOUNT IN ROW (9)

12 19.9% (1)  
TYPE OF REPORTING  
PERSON

PN, IA

(1) Includes 1,116,177 shares of Common Stock currently issuable upon the exercise of certain warrants. Excludes 1,323,755 shares of Common Stock not issuable upon the exercise of certain warrants due to the warrant exercise limitation. As of October 16, 2017, the warrant exercise limitation described in the next sentence limits the aggregate exercise of warrants by the Reporting Persons to 1,116,177 out of the 2,439,932 shares of Common Stock underlying the warrants owned by the Reporting Persons in the aggregate. The warrants may not be exercised if, after such exercise, the Reporting Persons would beneficially own in the aggregate, as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, more than 19.9% of the number of shares of Common Stock then issued and outstanding. In providing beneficial ownership described herein, the Reporting Persons have assumed 1,116,177 of the 1,201,053 warrants owned by BVF would be exercised. BVF2 holds warrants to purchase 823,231 additional shares which are excluded herein as a result of the 19.9% limitation. BVTOS holds warrants to purchase 199,687 additional shares which are excluded herein as a result of the 19.9% limitation. The Reporting Persons through certain managed accounts holds warrants to purchase 215,961 additional shares which are excluded herein as a result of the 19.9% limitation. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.

CUSIP NO. 04269E107

1	NAME OF REPORTING PERSON	
	BVF Inc.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a)
		(b)
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER
		0 shares
OWNED BY EACH REPORTING PERSON WITH	6	SHARED VOTING POWER
		17,553,089 (1)
PERSON WITH	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER
		17,553,089 (1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
10	17,553,089 (1) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES	

CERTAIN  
SHARES

11 PERCENT OF CLASS  
REPRESENTED BY  
AMOUNT IN ROW (9)

12 19.9% (1)  
TYPE OF REPORTING  
PERSON

CO

(1) Includes 1,116,177 shares of Common Stock currently issuable upon the exercise of certain warrants. Excludes 1,323,755 shares of Common Stock not issuable upon the exercise of certain warrants due to the warrant exercise limitation. As of October 16, 2017, the warrant exercise limitation described in the next sentence limits the aggregate exercise of warrants by the Reporting Persons to 1,116,177 out of the 2,439,932 shares of Common Stock underlying the warrants owned by the Reporting Persons in the aggregate. The warrants may not be exercised if, after such exercise, the Reporting Persons would beneficially own in the aggregate, as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, more than 19.9% of the number of shares of Common Stock then issued and outstanding. In providing beneficial ownership described herein, the Reporting Persons have assumed 1,116,177 of the 1,201,053 warrants owned by BVF would be exercised. BVF2 holds warrants to purchase 823,231 additional shares which are excluded herein as a result of the 19.9% limitation. BVTOS holds warrants to purchase 199,687 additional shares which are excluded herein as a result of the 19.9% limitation. The Reporting Persons through certain managed accounts holds warrants to purchase 215,961 additional shares which are excluded herein as a result of the 19.9% limitation. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.

CUSIP NO. 04269E107

1	NAME OF REPORTING PERSON	
	Mark N. Lampert	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a)
		(b)
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	United States	
5	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	SOLE VOTING POWER
		0 shares
6		SHARED VOTING POWER
		17,553,089
		(1)
7		SOLE DISPOSITIVE POWER
		0 shares
8		SHARED DISPOSITIVE POWER
		17,553,089
		(1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	17,553,089 (1)	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES	

CERTAIN  
SHARES

11 PERCENT OF CLASS  
REPRESENTED BY  
AMOUNT IN ROW (9)

12 19.9% (1)  
TYPE OF REPORTING  
PERSON

IN

(1) Includes 1,116,177 shares of Common Stock currently issuable upon the exercise of certain warrants. Excludes 1,323,755 shares of Common Stock not issuable upon the exercise of certain warrants due to the warrant exercise limitation. As of October 16, 2017, the warrant exercise limitation described in the next sentence limits the aggregate exercise of warrants by the Reporting Persons to 1,116,177 out of the 2,439,932 shares of Common Stock underlying the warrants owned by the Reporting Persons in the aggregate. The warrants may not be exercised if, after such exercise, the Reporting Persons would beneficially own in the aggregate, as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, more than 19.9% of the number of shares of Common Stock then issued and outstanding. In providing beneficial ownership described herein, the Reporting Persons have assumed 1,116,177 of the 1,201,053 warrants owned by BVF would be exercised. BVF2 holds warrants to purchase 823,231 additional shares which are excluded herein as a result of the 19.9% limitation. BVTOS holds warrants to purchase 199,687 additional shares which are excluded herein as a result of the 19.9% limitation. The Reporting Persons through certain managed accounts holds warrants to purchase 215,961 additional shares which are excluded herein as a result of the 19.9% limitation. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.



CUSIP NO. 04269E107

This amendment corrects a typographical error made to the previous 13G amendment regarding the number of shares acquired.

Item 1(a). Name of Issuer:

ArQule, Inc., a Delaware corporation (the “Issuer”).

Item 1(b).

Address of Issuer's Principal Executive Offices:

One Wall Street

Burlington, Massachusetts 01803

Item 2(a).	Name of Person Filing
Item 2(b).	Address of Principal Business Office or, if None, Residence
Item 2(c).	Citizenship

Biotechnology Value Fund, L.P. (“BVF”)

1 Sansome Street, 30<sup>th</sup> Floor

San Francisco, California 94104

Citizenship: Delaware

Biotechnology Value Fund II, L.P. (“BVF2”)

1 Sansome Street, 30<sup>th</sup> Floor

San Francisco, California 94104

Citizenship: Delaware

Biotechnology Value Trading Fund OS LP (“Trading Fund OS”)

PO Box 309 Ugland House

Grand Cayman, KY1-1104

Cayman Islands

Citizenship: Cayman Islands

BVF Partners OS Ltd. (“Partners OS”)

PO Box 309 Ugland House

Grand Cayman, KY1-1104

Cayman Islands

Citizenship: Cayman Islands

BVF Partners L.P. (“Partners”)

1 Sansome Street, 30th Floor

San Francisco, California 94104

Citizenship: Delaware

BVF Inc.

1 Sansome Street, 30<sup>th</sup> Floor

San Francisco, California 94104

Citizenship: Delaware

Mark N. Lampert (“Mr. Lampert”)

1 Sansome Street, 30<sup>th</sup> Floor

San Francisco, California 94104

Citizenship: United States

Each of the foregoing is referred to as a “Reporting Person” and collectively as the “Reporting Persons.”

CUSIP NO. 04269E107

Item 2(d).

Title of Class of Securities:

Common Stock, par value \$0.01 per share (the "Common Stock")

Item 2(e).

CUSIP Number:

04269E107

Item 3. If This Statement is Filed Pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a:

/x/Not applicable.

(a) // Broker or dealer registered under Section 15 of the Exchange Act.

(b) // Bank as defined in Section 3(a)(6) of the Exchange Act.

(c) // Insurance company as defined in Section 3(a)(19) of the Exchange Act.

(d) // Investment company registered under Section 8 of the Investment Company Act.

(e) // An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E).

(f) // An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F).

(g) // A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G).

(h) // A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act.

(i) // A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act.

(j) // Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

(k) // Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with Rule 240.13d-1(b)(1)(ii)(J), please specify the type of institution: \_\_\_\_\_

CUSIP NO. 04269E107

Item 4.

Ownership

(a)

Amount beneficially owned:

On October 11, 2017, the Reporting Persons participated in a private placement (the “Private Placement”) with the Issuer. Pursuant to the Private Placement, the Reporting Persons acquired in the aggregate 9,037,054 Shares of Common Stock and warrants (the “Warrants”) exercisable for an aggregate of 2,439,932 Shares of Common Stock. Pursuant to the Private Placement, the Warrants are subject to an exercise limitation, and may not be exercised if, after such exercise, the Reporting Persons would beneficially own in the aggregate, as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, more than 19.9% of the number of shares of Common Stock then issued and outstanding. Such Warrants have an initial exercise price of \$1.75 per Share, subject to adjustment pursuant to the terms of the Warrants, and expire on October 11, 2021. As of October 16, 2017, the warrant exercise limitation described in the prior sentence limits the aggregate exercise of the Warrants by the Reporting Persons to 1,116,177 out of the 2,439,932 shares of Common Stock underlying the Warrants owned by the Reporting Persons in the aggregate. In providing beneficial ownership described herein, the Reporting Persons have assumed 1,116,177 of the 1,201,053 warrants owned by BVF would be exercised. BVF2 holds warrants to purchase 823,231 additional shares which are excluded herein as a result of the 19.9% limitation. BVTOS holds warrants to purchase 199,687 additional shares which are excluded herein as a result of the 19.9% limitation. The Reporting Persons through certain managed accounts holds warrants to purchase 215,961 additional shares which are excluded herein as a result of the 19.9% limitation.

As of October 16, 2017 (i) BVF beneficially owned 8,821,008 shares of Common Stock, including 1,116,177 shares of Common Stock issuable upon the exercise of certain Warrants, (ii) BVF2 beneficially owned 5,124,370 shares of Common Stock, and (iii) Trading Fund OS beneficially owned 1,378,710 shares of Common Stock.

Partners OS as the general partner of Trading Fund OS may be deemed to beneficially own the 1,378,710 shares of Common Stock beneficially owned by Trading Fund OS.

Partners, as the general partner of BVF, BVF2, the investment manager of Trading Fund OS, and the sole member of Partners OS, may be deemed to beneficially own the 17,553,089 shares of Common Stock beneficially owned in the aggregate by BVF, BVF2, Trading Fund OS, and certain Partners managed accounts (the “Partners Managed Accounts”), including 2,229,001 shares of Common Stock held in the Partners Managed Accounts.

BVF Inc., as the general partner of Partners, may be deemed to beneficially own the 17,553,089 shares of Common Stock beneficially owned by Partners.

Mr. Lampert, as a director and officer of BVF Inc., may be deemed to beneficially own the 17,553,089 shares of Common Stock beneficially owned by BVF Inc.

The foregoing should not be construed in and of itself as an admission by any Reporting Person as to beneficial ownership of any shares of Common Stock owned by another Reporting Person. Partners OS disclaims beneficial ownership of the shares of Common Stock beneficially owned by Trading Fund OS. Each of Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership of the shares of Common Stock beneficially owned by BVF, BVF2, Trading Fund OS, and the Partners Managed Accounts, and the filing of this statement shall not be construed as an admission that any such person or entity is the beneficial owner of any such securities.

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(b) Percent of class:

The following percentages are based on a denominator which is the sum of: (i) 71,171,551 shares of Common Stock outstanding as of July 20, 2017, as disclosed in the Issuer's Quarterly Report filed on Form 10-Q with the Securities and Exchange Commission on August 4, 2017, (ii) the 15,918,751 Shares of Common Stock issued by the Issuer pursuant to the Private Placement and (ii) certain of the 2,439,932 shares of Common Stock underlying certain Warrants, as applicable.

As of October 16, 2017 (i) BVF beneficially owned approximately 10.0% of the outstanding shares of Common Stock, including shares of Common Stock issuable upon the exercise of certain Warrants, (ii) BVF2 beneficially owned approximately 5.8% of the outstanding shares of Common Stock, including shares of Common Stock issuable upon the exercise of certain Warrants, (iii) Trading Fund OS beneficially owned approximately 1.6% of the outstanding shares of Common Stock, (iv) Partners OS may be deemed to beneficially own approximately 1.6% of the outstanding shares of Common Stock, and (v) each of Partners, BVF Inc. and Mr. Lampert may be deemed to beneficially own approximately 19.9% of the outstanding shares of Common Stock (approximately 2.5% of which is held in the Partners Managed Accounts).

(c) Number of shares as to which such person has:

(i) Sole power to vote or to direct the vote

See Cover Pages Items 5-9.

(ii) Shared power to vote or to direct the vote

See Cover Pages Items 5-9.

(iii) Sole power to dispose or to direct the disposition of

See Cover Pages Items 5-9.

(iv) Shared power to dispose or to direct the disposition of

See Cover Pages Items 5-9.

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.

Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the shares of Common Stock beneficially owned by BVF, BVF2, Trading Fund OS, and the Partners Managed Accounts.

Item 7. Identification and Classification of the Subsidiary That Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

Not Applicable.

Item 8. Identification and Classification of Members of the Group.

See Exhibit 99.1 to Amendment No. 3 to the Schedule 13G filed with the Securities and Exchange Commission on February 16, 2016.

Item 9. Notice of Dissolution of Group.

Not Applicable.



CUSIP NO. 04269E107

Item 10.

Certifications.

By signing below each of the undersigned certifies that, to the best of its knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

CUSIP NO. 04269E107

SIGNATURE

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

Dated: October 20, 2017

BIOTECHNOLOGY VALUE FUND,  
L.P.

BVF INC.

By: BVF Partners L.P., its general partner

By: /s/ Mark N. Lampert

By: BVF Inc., its general partner

Mark N. Lampert  
President

By: /s/ Mark N. Lampert

Mark N. Lampert  
President

/s/ Mark N. Lampert  
MARK N. LAMPERT

BIOTECHNOLOGY VALUE FUND II,  
L.P.

By: BVF Partners L.P., its general partner

By: BVF Inc., its general partner

By: /s/ Mark N. Lampert

Mark N. Lampert  
President

BVF PARTNERS L.P.

By: BVF Inc., its general partner

By: /s/ Mark N. Lampert

Mark N. Lampert  
President

BVF PARTNERS OS LTD.

By: BVF Partners L.P., its sole member

By: BVF Inc., its general partner

By: /s/ Mark N. Lampert  
Mark N. Lampert  
President