ARQULE INC Form SC 13G/A May 28, 2015

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. 2)1

ArQule, Inc. (Name of Issuer)

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

04269E107 (CUSIP Number)

May 26, 2015 (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)
- x Rule 13d-1(c)
- o 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).

¹ 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. 04269E107

1	NAME OF RE	PORTING PERS	ON	
2	Biotechnology Value Fund, L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x (b) o			
3	SEC USE ONL	LY.		
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
	Delaware			
NUMBER OF SHARES	Delaware	5	SOLE VOTING POWER	
BENEFICIALLY			0 shares	
OWNED BY		6	SHARED VOTING POWER	
EACH				
REPORTING		_	2,931,016	
PERSON WITH		7	SOLE DISPOSITIVE POWER	
			0 shares	
		8	SHARED DISPOSITIVE POWE	R
			2,931,016	
9	AGGREGATE	AMOUNT BEN	EFICIALLY OWNED BY EACH	REPORTING PERSON
	2 021 016			
10	2,931,016	IE TUE ACCDEC	GATE AMOUNT IN ROW (9)	
10		ERTAIN SHARE	* *	
	LACLODES C	LICITUIN SIITUKI	20	
11	PERCENT OF	CLASS REPRES	SENTED BY AMOUNT IN ROW	(9)
	4.7%			
12	TYPE OF REP	ORTING PERSC)N	
	PN			
	1			
2				

NAME OF REPORTING PERSON

CUSIP NO. 04269E107

2	Biotechnology Value Fund II, L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP SEC USE ONLY			(a) x (b) o
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
NUMBER OF SHARES	Delaware	5	SOLE VOTING POWER	
BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	•	6	0 shares SHARED VOTING POWER	
		7	1,779,082 SOLE DISPOSITIVE POWER	
		8	0 shares SHARED DISPOSITIVE POWE	R
9	AGGREGATE	AMOUNT BEN	1,779,082 EFICIALLY OWNED BY EACH	REPORTING PERSON
10		IF THE AGGREG ERTAIN SHARE	GATE AMOUNT IN ROW (9)	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	2.8% TYPE OF REP	ORTING PERSC	DN	
	PN			
3				

CUSIP NO. 04269E107

1	NAME OF REPO	RTING PERSO	ON	
2	BVF Investments, L.L.C. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (b) o SEC USE ONLY			
4	CITIZENSHIP OF	R PLACE OF C	DRGANIZATION	
NUMBER OF	Delaware 5	,	SOLE VOTING POWER	
SHARES BENEFICIALLY OWNED BY EACH	6		0 shares SHARED VOTING POWER	
REPORTING PERSON WITH	7		0 shares SOLE DISPOSITIVE POWER	
	8		0 shares SHARED DISPOSITIVE POWE	R
9	AGGREGATE AN		0 shares EFICIALLY OWNED BY EACH	REPORTING PERSON
10	0 CHECK BOX IF T EXCLUDES CER		SATE AMOUNT IN ROW (9)	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	0% TYPE OF REPOR	RTING PERSO	N	
	00			
4				

CUSIP NO. 04269E107

1	NAME OF REI	PORTING PERS	ON	
2	Investment 10, L.L.C. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (b) o SEC USE ONLY			
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
NUMBER OF SHARES	Illinois	5	SOLE VOTING POWER	
BENEFICIALLY OWNED BY EACH		6	0 shares SHARED VOTING POWER	
REPORTING PERSON WITH		7	681,799 SOLE DISPOSITIVE POWER	
		8	0 shares SHARED DISPOSITIVE POWE	R
9	AGGREGATE	AMOUNT BEN	681,799 EFICIALLY OWNED BY EACH	REPORTING PERSON
10	681,799 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES			
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	1.1% TYPE OF REPORTING PERSON			
	OO			
5				

NAME OF REPORTING PERSON

CUSIP NO. 04269E107

2 3	MSI BVF SPV, LLC CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP SEC USE ONLY		(a) x (b) o	
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
NUMBER OF SHARES	Delaware	5	SOLE VOTING POWER	
BENEFICIALLY OWNED BY EACH	7	6	0 shares SHARED VOTING POWER	
REPORTING PERSON WITH		7	964,221 SOLE DISPOSITIVE POWER	
		8	0 shares SHARED DISPOSITIVE POWE	.R
9	AGGREGATE	AMOUNT BEN	964,221 EFICIALLY OWNED BY EACH	REPORTING PERSON
10		IF THE AGGREG ERTAIN SHARI	GATE AMOUNT IN ROW (9)	
11	PERCENT OF	CLASS REPRES	SENTED BY AMOUNT IN ROW	(9)
12	1.5% TYPE OF REP	ORTING PERSO	DN	
	OO			
6				

CUSIP NO. 04269E107

1

NAME OF REPORTING PERSON

1	TVIIVIE OF RE	OKTINGTERS		
2	BVF Partners L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x (b) o			
3		SEC USE ONLY (b) o		
4	CITIZENSHIP	OR PLACE OF O	ORGANIZATION	
	Delaware			
NUMBER OF SHARES	Detaware	5	SOLE VOTING POWER	
BENEFICIALLY	•		0 shares	
OWNED BY		6	SHARED VOTING POWER	
EACH			(25(110)	
REPORTING PERSON WITH		7	6,356,118 SOLE DISPOSITIVE POWER	
TERSON WITH		1	SOLE DISTOSITIVE TOWER	
			0 shares	
		8	SHARED DISPOSITIVE POWE	R
			6,356,118	
9	AGGREGATE	AMOUNT BEN	EFICIALLY OWNED BY EACH	REPORTING PERSON
,				
	6,356,118			
10			GATE AMOUNT IN ROW (9)	•
	EXCLUDES C	ERTAIN SHARE	ES	
11	PERCENT OF	CLASS REPRES	SENTED BY AMOUNT IN ROW	(9)
	10.1%			
12	TYPE OF REP	ORTING PERSC)N	
	PN, IA			
	,			
7				
7				

NAME OF REPORTING PERSON

CUSIP NO. 04269E107

2	BVF Inc. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x (b) o			
3	SEC USE ONL	Υ		
4	CITIZENSHIP	OR PLACE OF	ORGANIZATION	
NUMBER OF SHARES	Delaware	5	SOLE VOTING POWER	
BENEFICIALLY OWNED BY EACH		6	0 shares SHARED VOTING POWER	
REPORTING PERSON WITH		7	6,356,118 SOLE DISPOSITIVE POWER	
		8	0 shares SHARED DISPOSITIVE POWE	R
9	AGGREGATE	AMOUNT BEN	6,356,118 EFICIALLY OWNED BY EACH	REPORTING PERSON
10		IF THE AGGREG ERTAIN SHARI	GATE AMOUNT IN ROW (9)	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	10.1% TYPE OF REP	ORTING PERSO	ON	
	CO			
8				

CUSIP NO. 04269E107

1

NAME OF REPORTING PERSON

1	TVIIVIL OF KL	I OKTINO I EKS		
2	Mark N. Lampert CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x (b) o			
3	SEC USE ONL	LY		(0) 0
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
	United States			
NUMBER OF SHARES		5	SOLE VOTING POWER	
BENEFICIALLY	7		0 shares	
OWNED BY EACH		6	SHARED VOTING POWER	
REPORTING			6,356,118	
PERSON WITH		7	SOLE DISPOSITIVE POWER	
			0 shares	
		8	SHARED DISPOSITIVE POWE	R
			6,356,118	
9	AGGREGATE	AMOUNT BEN	EFICIALLY OWNED BY EACH	REPORTING PERSON
	6,356,118			
10			GATE AMOUNT IN ROW (9)	
	EXCLUDES C	ERTAIN SHARI	25	
11	PERCENT OF	CLASS REPRES	SENTED BY AMOUNT IN ROW	(9)
	10.1%			
12	TYPE OF REP	ORTING PERSO	ON	
	IN			
9				

CUSIP NO. 04269E107

Item 1(a). Name of Issuer:

ArQule, Inc., a Delaware corporation (the "Issuer").

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

19 Presidential Way

Woburn, Massachusetts 01801

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, 30th Floor San Francisco, California 94104

Citizenship: Delaware

Biotechnology Value Fund II, L.P. ("BVF2")

1 Sansome Street, 30th Floor San Francisco, California 94104

Citizenship: Delaware

BVF Investments, L.L.C. ("BVLLC")

1 Sansome Street, 30th Floor

San Francisco, California 94104

Citizenship: Delaware

Investment 10, L.L.C. ("ILL10")

900 North Michigan Avenue, Suite 1100

Chicago, Illinois 60611

Citizenship: Illinois

MSI BVF SPV, LLC ("MSI")

c/o Magnitude Capital, LLC

601 Lexington Avenue, 59th Floor

New York, NY 10022

Citizenship: Delaware

BVF Partners L.P. ("Partners")

1 Sansome Street, 30th Floor

San Francisco, California 94104

Citizenship: Delaware

BVF Inc.

1 Sansome Street, 30th Floor

San Francisco, California 94104

Citizenship: Delaware

Mark N. Lampert ("Mr. Lampert") 1 Sansome Street, 30th 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.	04269E10)7		
Item 2(d).			Title of Class of	Securities:
Common St	ock, par va	alue \$0.01 per s	share (the "Common Stock")	
Item 2(e).			CUSIP Nu	mber:
04269E107				
Item 3. If Th	nis Stateme	ent is Filed Purs	suant 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 u	under Section 15 of the Exchange Act.
	(b)	//	Bank as defined in S	Section 3(a)(6) of the Exchange Act.
(0	e)	// In	surance company as defined in	n Section 3(a)(19) of the Exchange Act.
(d)	//	Investme	nt company registered under S	Section 8 of the Investment Company Act.
	(e)	//	An investment adviser in ac	cordance with Rule 13d-1(b)(1)(ii)(E).
(f)	// A	an employee be	nefit plan or endowment fund	in accordance with Rule 13d-1(b)(1)(ii)(F).
(g)	//	A parent holdir	ng company or control person	in accordance with Rule 13d-1(b)(1)(ii)(G).
(h)	//	A savings ass	ociation as defined in Section	3(b) of the Federal Deposit Insurance Act.
	rch plan t ment Com		I from the definition of an in	evestment company under Section 3(c)(14) of the
	(j)	//	Group, in accor	dance with Rule 13d-1(b)(1)(ii)(J).
_			le 240.13d-1(b)(1)(ii)(K). If ase specify the type of institut	filing as a non-U.S. institution in accordance with ion:
Item 4.			Ownershi	p
		(a)	Amou	nt beneficially owned:
		-		owned 2,931,016 shares of Common Stock, (ii) i) BVLLC did not own any shares of Common

Stock, (iv) ILL10 beneficially owned 681,799 shares of Common Stock, and (v) MSI beneficially owned 964,221

11

shares of Common Stock.

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Partners, as the general partner of BVF and BVF2, and the investment adviser of each of ILL10 and MSI, may be deemed to beneficially own the 6,356,118 shares of Common Stock beneficially owned in the aggregate by BVF, BVF2, ILL10 and MSI. Partners is the manager of BVLLC.

BVF Inc., as the general partner of Partners, may be deemed to beneficially own the 6,356,118 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 6,356,118 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. Each of Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership of the shares of Common Stock beneficially owned by BVF, BVF2, ILL10 and MSI, 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.

(b) Percent of class:

The following percentages are based on 62,819,191 shares of Common Stock outstanding as of April 22, 2015, as disclosed in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 6, 2015.

As of the close of business on May 28, 2015, (i) BVF beneficially owned approximately 4.7% of the outstanding shares of Common Stock, (ii) BVF2 beneficially owned approximately 2.8% of the outstanding shares of Common Stock, (iii) BVLLC did not own any percentage of the outstanding shares of Common Stock, (iv) ILL10 beneficially owned approximately 1.1% of the outstanding shares of Common Stock, (v) MSI beneficially owned approximately 1.5% of the outstanding shares of Common Stock, and (vi) each of Partners, BVF Inc. and Mr. Lampert may be deemed to beneficially own approximately 10.1% of the outstanding shares of Common Stock.

(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.

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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.

Pursuant to the operating agreement of BVLLC, Partners is authorized, among other things, to invest the contributed capital of Samana Capital, L.P., the majority member of BVLLC, in the shares of Common Stock and other securities of the Issuer and to vote, exercise or convert and dispose of each security, and is entitled to receive fees based on assets under management and, subject to certain exceptions, allocations based on realized and unrealized gains on such assets. As of May 28, 2015, BVLLC does not own any shares of Common Stock of the Issuer.

Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the shares of Common Stock beneficially owned by BVF, BVF2, ILL10 and MSI.

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

Not Applicable.

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

See Exhibit 99.1 to the Schedule 13G filed by the Reporting Persons with the Securities and Exchange Commission on August 15, 2014.

Item 9. Notice of Dissolution of Group.

Not Applicable.

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: May 28, 2015

By:

BIOTECHNOLOGY VALUE FUND, L.P.

INVESTMENT 10, L.L.C.

MSI BVF SPV, LLC

By: BVF Partners L.P., its general

By: BVF Partners L.P., its investment

partner adviser

By: BVF Inc., its general partner By: BVF Inc., its general partner

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

Mark N. Lampert Mark N. Lampert

President President

BIOTECHNOLOGY VALUE FUND II, L.P.

BVF Partners L.P., its general

By: BVF Partners L.P., its investment

partner adviser

By: BVF Inc., its general partner By: BVF Inc., its general partner

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

Mark N. Lampert Mark N. Lampert

President President

BVF INC.

BVF PARTNERS L.P. By: /s/ Mark N. Lampert

Mark N. Lampert

By: BVF Inc., its general partner President

By: /s/ Mark N. Lampert

Mark N. Lampert /s/ Mark N. Lampert

President MARK N. LAMPERT

BVF INVESTMENTS, L.L.C.

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

by: By Time, its general partner

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

President