ARQULE INC Form SC 13G/A February 17, 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. 1)1

ArQule, Inc. (Name of Issuer)

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

04269E107 (CUSIP Number)

December 31, 2014 (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).

<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 the disclosures provided in a prior cover page.

## CUSIP NO. 04269E107

1	NAME OF REF	PORTING PERS	ON		
2	Biotechnology Value Fund, L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (b) o SEC USE ONLY				
4	CITIZENSHIP OR PLACE OF ORGANIZATION				
NUMBER OF	Delaware	5	SOLE VOTING POWER		
SHARES BENEFICIALLY OWNED BY EACH		6	0 shares SHARED VOTING POWER		
REPORTING PERSON WITH		7	2,005,974 SOLE DISPOSITIVE POWER		
		8	0 shares SHARED DISPOSITIVE POWE	R	
9	AGGREGATE	AMOUNT BEN	2,005,974 EFICIALLY OWNED BY EACH	REPORTING PERSON	
10	2,005,974 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES				
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)				
12	3.2% TYPE OF REPORTING PERSON				
	PN				
2					

NAME OF REPORTING PERSON

# CUSIP NO. 04269E107

2 3				(a) x (b) o	
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	1,040,010 SOLE DISPOSITIVE POWER		
		8	0 shares SHARED DISPOSITIVE POWE	R	
9	AGGREGATE	AMOUNT BEN	1,040,010 EFICIALLY OWNED BY EACH	REPORTING PERSON	
10	1,040,010 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES				
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)				
12	1.7% TYPE OF REPORTING PERSON				
	PN				
3					

## CUSIP NO. 04269E107

1	NAME OF RE	PORTING PERS	ON			
2	BVF Investments, 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	Delaware	5	SOLE VOTING POWER			
BENEFICIALLY OWNED BY EACH		6	0 shares SHARED VOTING POWER			
REPORTING PERSON WITH		7	385,250 SOLE DISPOSITIVE POWER			
		8	0 shares SHARED DISPOSITIVE POWE	R		
9	AGGREGATE	AMOUNT BEN	385,250 EFICIALLY OWNED BY EACH	REPORTING PERSON		
10	385,250 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES					
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)					
12	Less than 1% TYPE OF REPORTING PERSON					
	OO					
1						

## CUSIP NO. 04269E107

1	NAME OF REPORTING PERSON					
2	Investment 10, L.L.C.  CHECK THE APPROPRIATE BOX IF A MEMBER OF A  GROUP  (b) o  SEC USE ONLY					
	SEC USE ONL	ιI				
4	CITIZENSHIP OR PLACE OF ORGANIZATION					
NUMBER OF SHARES	Illinois	5	SOLE VOTING POWER			
BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	•	6	0 shares SHARED VOTING POWER			
		7	559,004 SOLE DISPOSITIVE POWER			
		8	0 shares SHARED DISPOSITIVE POWE	R		
9	AGGREGATE	AMOUNT BEN	559,004 EFICIALLY OWNED BY EACH	REPORTING PERSON		
10	559,004 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES					
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)					
12	Less than 1% TYPE OF REPORTING PERSON					
	OO					
5						

NAME OF REPORTING PERSON

## CUSIP NO. 04269E107

2 3 4				(a) x (b) o	
NUMBER OF SHARES	Delaware	5	SOLE VOTING POWER		
BENEFICIALLY OWNED BY EACH		6	0 shares SHARED VOTING POWER		
REPORTING PERSON WITH		7	733,573 SOLE DISPOSITIVE POWER		
		8	0 shares SHARED DISPOSITIVE POWE	ER	
9	AGGREGATE	AMOUNT BEN	733,573 EFICIALLY OWNED BY EACH	REPORTING PERSON	
10	733,573 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES				
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)				
12	1.2% TYPE OF REP	ORTING PERSC	DN		
	OO				
6					

## CUSIP NO. 04269E107

1

NAME OF REPORTING PERSON

_						
2	BVF Partners L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x (b) o					
3		SEC USE ONLY				
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	4,723,811 SOLE DISPOSITIVE POWER			
		8	0 shares SHARED DISPOSITIVE POWE	R		
9	AGGREGATE	AMOUNT BEN	4,723,811 EFICIALLY OWNED BY EACH	REPORTING PERSON		
10	4,723,811 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES					
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)					
12	7.5% TYPE OF REPORTING PERSON					
	PN, IA					
7						

NAME OF REPORTING PERSON

## CUSIP NO. 04269E107

2 3 4	BVF Inc. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP SEC USE ONLY  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	4,723,811 SOLE DISPOSITIVE POWER		
		8	0 shares SHARED DISPOSITIVE POWE	ER	
9	AGGREGATE	AMOUNT BEN	4,723,811 EFICIALLY OWNED BY EACH	I REPORTING PERSON	
10	4,723,811 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES				
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)				
12	7.5% TYPE OF REPORTING PERSON				
	СО				
8					

## CUSIP NO. 04269E107

1

NAME OF REPORTING PERSON

_					
2	Mark N. Lampert 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	United States	5	SOLE VOTING POWER		
SHARES BENEFICIALLY OWNED BY	•	6	0 shares SHARED VOTING POWER		
EACH REPORTING PERSON WITH		7	4,723,811 SOLE DISPOSITIVE POWER		
		8	0 shares SHARED DISPOSITIVE POWE	R	
9	AGGREGATE	AMOUNT BEN	4,723,811 EFICIALLY OWNED BY EACH	REPORTING PERSON	
10	4,723,811 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES				
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)				
12	7.5% TYPE OF REPORTING PERSON				
	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")

900 North Michigan Avenue, Suite 1100

Chicago, Illinois 60611

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")

900 North Michigan Avenue, Suite 1100

Chicago, Illinois 60611

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. 04269E	E107					
Item 2(c	d).	Title of Class of Securities:					
Commo	n Stock, par	value \$0.01 per	share (the "Common Stock"	<sup>'</sup> )			
Item 2(e	e).		CUSIP N	Number:			
04269E	107						
Item 3.1	If This State	ment is Filed Pur	rsuant to Rule 13d-1(b), or 1	3d-2(b) or (c), Check Whether the Person Filing is a	a:		
			/x/	Not applicable.			
	(a)	//	Broker or dealer registere	d under Section 15 of the Exchange Act.			
	(b)	//	Bank as defined in	n Section 3(a)(6) of the Exchange Act.			
	(c)	// In	nsurance company as defined	d in Section 3(a)(19) of the Exchange Act.			
	(d) /	/ Investme	ent company registered unde	er Section 8 of the Investment Company Act.			
	(e)	//	An investment adviser in	accordance with Rule 13d-1(b)(1)(ii)(E).			
(f)	) //	An employee be	enefit plan or endowment fu	nd in accordance with Rule 13d-1(b)(1)(ii)(F).			
(g	g) //	A parent holdi	ng company or control perso	on in accordance with Rule 13d-1(b)(1)(ii)(G).			
(l	n) //	A savings as	sociation as defined in Section	on 3(b) of the Federal Deposit Insurance Act.			
	_	n that is exclude ompany Act.	d from the definition of an	investment company under Section 3(c)(14) of t	:he		
	(j)	//	Group, in acc	cordance with Rule 13d-1(b)(1)(ii)(J).			
	_		ale 240.13d-1(b)(1)(ii)(K). Lease specify the type of institution	If filing as a non-U.S. institution in accordance we tution:	ith		
Item 4.			Owners	ship			
		(a)	Ame	ount beneficially owned:			
A	As of the clo	ose of business o	n December 31, 2014 (i) B	VF beneficially owned 2,005,974 shares of Comm	on		

Stock, (ii) BVF2 beneficially owned 1,040,010 shares of Common Stock, (iii) BVLLC beneficially owned 385,250 shares of Common Stock, (iv) ILL10 beneficially owned 559,004 shares of Common Stock, and (v)

MSI beneficially owned 733,573 shares of Common Stock.

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Partners, as the general partner of BVF and BVF2, the manager of BVLLC, and the investment adviser of each of ILL10 and MSI, may be deemed to beneficially own the 4,723,811 shares of Common Stock beneficially owned in the aggregate by BVF, BVF2, BVLLC, ILL10 and MSI.

BVF Inc., as the general partner of Partners, may be deemed to beneficially own the 4,723,811 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 4,723,811 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, BVLLC, 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 62,770,092 shares of Common Stock outstanding as of October 27, 2014, as disclosed in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 10, 2014.

As of the close of business on December 31, 2014, (i) BVF beneficially owned approximately 3.2% of the outstanding shares of Common Stock, (ii) BVF2 beneficially owned approximately 1.7% of the outstanding shares of Common Stock, (iii) BVLLC beneficially owned less than 1% of the outstanding shares of Common Stock, (iv) ILL10 beneficially owned less than 1% of the outstanding shares of Common Stock, (v) MSI beneficially owned approximately 1.2% of the outstanding shares of Common Stock, and (vi) each of Partners, BVF Inc. and Mr. Lampert may be deemed to beneficially own approximately 7.5% 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.

Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the shares of Common Stock beneficially owned by BVF, BVF2, BVLLC, 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: February 13, 2015

By:

BIOTECHNOLOGY VALUE FUND, L.P.

BVF Partners L.P., its general

BVF Partners L.P., its investment By:

INVESTMENT 10, L.L.C.

MSI BVF SPV, LLC

adviser partner

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

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 BVF Partners L.P., its investment By: By:

> partner adviser

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

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

> Mark N. Lampert Mark N. Lampert

> > BVF INC.

President President

BVF PARTNERS L.P.

By: BVF Inc., its general partner By: /s/ Mark N. Lampert

Mark N. Lampert

President By: /s/ Mark N. Lampert

Mark N. Lampert

/s/ Mark N. Lampert MARK N. LAMPERT

BVF INVESTMENTS, L.L.C.

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

President

By: /s/ Mark N. Lampert

Mark N. Lampert

President