ORTHOLOGIC CORP Form SC 13G/A February 09, 2010

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. 5)1

Orthologic Corp. (Name of Issuer)

Common Stock, par value \$0.0005 per share (Title of Class of Securities)

68750J107 (CUSIP Number)

December 31, 2009 (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.

1	NAME OF REPORTING PERSON	
	Biotechnology Value Fund, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A	(a) x
	GROUP	(b) o
3	SEC USE ONLY	

4 CITIZENSHIP OR PLACE OF ORGANIZATION

De	laware	
NUMBER OF	5	SOLE VOTING POWER
SHARES		
BENEFICIALLY		0 shares
OWNED BY	6	SHARED VOTING POWER
EACH		
REPORTING		1,203,488
PERSON WITH	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER

1,203,488

9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,203,488

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

3.0%

12 TYPE OF REPORTING PERSON

PN

1	NAME OF REPORTING PERSON	
	Biotechnology Value Fund II, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A	(a) x
	GROUP	(b) o
3	SEC USE ONLY	

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware		
NUMBER OF	5	SOLE VOTING POWER
SHARES		
BENEFICIALLY		0 shares
OWNED BY	6	SHARED VOTING POWER
EACH		
REPORTING		818,400
PERSON WITH	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER

818,400

9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
10	818,400 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
12	2.0% TYPE OF REPORTING PERSON
	PN

1	NAME OF REPORTING PERSON	
2	BVF Investments, L.L.C.	(a) =
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) x (b) o
3	SEC USE ONLY	

4 CITIZENSHIP OR PLACE OF ORGANIZATION

	Delaware	
NUMBER OF	5	SOLE VOTING POWER
SHARES		
BENEFICIALLY		0 shares
OWNED BY	6	SHARED VOTING POWER
EACH		
REPORTING		3,115,000
PERSON WITH	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER

3,115,000

9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
10	3,115,000 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
12	7.6% TYPE OF REPORTING PERSON
	00

1	NAME OF REPORTING PERSON	
2	Investment 10, L.L.C. CHECK THE APPROPRIATE BOX IF A MEMBER OF A	(a) x
	GROUP	(b) o
3	SEC USE ONLY	

4 CITIZENSHIP OR PLACE OF ORGANIZATION

]	Illinois	
NUMBER OF	5	SOLE VOTING POWER
SHARES		
BENEFICIALLY		0 shares
OWNED BY	6	SHARED VOTING POWER
EACH		
REPORTING		333,500
PERSON WITH	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER

333,500

9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
10	333,500 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
	00

BVF Partners L.P.CHECK THE APPROPRIATE BOX IF A MEMBER OF A	(a) x
GROUP	$(a) \mathbf{x}$ (b) o
3 SEC USE ONLY	

4 CITIZENSHIP OR PLACE OF ORGANIZATION

	Delaware	
NUMBER OF	5	SOLE VOTING POWER
SHARES		
BENEFICIALLY	7	0 shares
OWNED BY	6	SHARED VOTING POWER
EACH		
REPORTING		5,470,388
PERSON WITH	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER

5,470,388

9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
10	5,470,388 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
12	13.4% TYPE OF REPORTING PERSON

PN, IA

1	NAME OF REPORTING PERSON	
	BVF Inc.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A	(a) x
	GROUP	(b) o
3	SEC USE ONLY	

4 CITIZENSHIP OR PLACE OF ORGANIZATION

]	Delaware	
NUMBER OF	5	SOLE VOTING POWER
SHARES		
BENEFICIALLY		0 shares
OWNED BY	6	SHARED VOTING POWER
EACH		
REPORTING		5,470,388
PERSON WITH	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER

5,470,388

9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
10	5,470,388 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
12	13.4% TYPE OF REPORTING PERSON
	СО

1	NAME OF REPORTING PERSON	
2	Mark N. Lampert CHECK THE APPROPRIATE BOX IF A MEMBER OF A	(a) x
3	GROUP SEC USE ONLY	(b) o

4 CITIZENSHIP OR PLACE OF ORGANIZATION

	United States		
NUMBER OF		5	SOLE VOTING POWER
SHARES			
BENEFICIALLY	7		0 shares
OWNED BY		6	SHARED VOTING POWER
EACH			
REPORTING			5,470,388
PERSON WITH		7	SOLE DISPOSITIVE POWER
			0 shares
		8	SHARED DISPOSITIVE POWER

9	5,470,388 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
10	5,470,388 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
12	13.4% TYPE OF REPORTING PERSON
	IN

CUSIP NO. 68750J107

Item 1(a).

Name of Issuer:

Orthologic Corp., a Delaware corporation (the "Issuer").

Item 1(b).

Address of Issuer's Principal Executive Offices:

1275 W. Washington Street Suite 101 Tempe, AZ 85281

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

Biotechnology Value Fund, L.P. ("BVF") 900 North Michigan Avenue, Suite 1100 Chicago, Illinois 60611 Citizenship: Delaware

Biotechnology Value Fund II, L.P. ("BVF2") 900 North Michigan Avenue, Suite 1100 Chicago, Illinois 60611 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

BVF Partners L.P. ("Partners") 900 North Michigan Avenue, Suite 1100 Chicago, Illinois 60611 Citizenship: Delaware

BVF Inc. 900 North Michigan Avenue, Suite 1100 Chicago, Illinois 60611 Citizenship: Delaware

Mark N. Lampert ("Mr. Lampert") 900 North Michigan Avenue, Suite 1100 Chicago, Illinois 60611 Citizenship: United States

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

CUSIP NO. 68750J107

Item 2(d).

Title of Class of Securities:

Common Stock, par value \$0.0005 per share (the "Common Stock")

Item 2(e). CUSIP Number:

68750J107

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)	11	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: _____

Item 4.

Ownership

(a)

Amount beneficially owned:

As of the close of business on December 31, 2009, (i) BVF beneficially owned 1,203,488 shares of Common Stock, (ii) BVF2 beneficially owned 818,400 shares of Common Stock, (iii) BVLLC beneficially owned 3,115,000 shares of Common Stock and (iv) ILL10 beneficially owned 333,500 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 ILL10, may be deemed to beneficially own the 5,470,388 shares of Common Stock beneficially owned in the aggregate by BVF, BVF2, BVLLC and ILL10.

BVF Inc., as the general partner of Partners, may be deemed to beneficially own the 5,470,388 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 5,470,388 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 and ILL10 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:

Based on 40,775,411 shares of Common Stock outstanding as of October 31, 2009, as reported in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 9, 2009. As of the close of business on December 31, 2009, (i) BVF beneficially owned approximately 3.0% of the outstanding shares of Common Stock, (ii) BVF2 beneficially owned approximately 2.0% of the outstanding shares of Common Stock, (iii) BVLLC beneficially owned approximately 7.6% of the outstanding shares of Common Stock, (iv) ILL10 beneficially owned less than 1% of the outstanding shares of Common Stock and (v) each of Partners, BVF Inc. and Mr. Lampert may be deemed to beneficially own approximately 13.4% 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.	
11	

CUSIP NO. 68750J107

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 and ILL10.

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

Not Applicable.Item 8.Identification and Classification of Members of the Group.See Exhibit 99.1.Notice of Dissolution of Group.Item 9.Notice of Dissolution of Group.Not Applicable.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. 68750J107

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 9, 2010

BIOTECHNOLOGY VALUE FUND, L.P.		INVESTMENT 10, L.L.C.	
By:	BVF Partners L.P., its general partner	By:	BVF Partners L.P., its investment manager
By:	BVF Inc., its general partner	By:	BVF Inc., its general partner
By:	/s/ Mark N. Lampert Mark N. Lampert President	By:	/s/ Mark N. Lampert Mark N. Lampert President
BIOTECHNOLOGY VALUE FUND II, L.P.		BVF PARTNERS L.P.	
By:	BVF Partners L.P., its general partner	By:	BVF Inc., its general partner
By:	BVF Inc., its general partner	By:	/s/ Mark N. Lampert Mark N. Lampert
By:	/s/ Mark N. Lampert Mark N. Lampert President	President	
BVF INVESTMEN	VTS, L.L.C.	BVF INC.	
By:	BVF Partners L.P., its manager	By:	/s/ Mark N. Lampert 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	
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