

**UNITED STATES
SECURITIES AND EXCHANGE
COMMISSION**

Washington, D.C. 20549

SCHEDULE 13D/A
Under the Securities Exchange Act of 1934
(Amendment No. 5)*
Flamel Technologies, S.A.

(Name of Issuer)

Ordinary Shares

(Title of Class of Securities)

338488 109

(CUSIP Number)

William Roiniotis
BVF Partners L.P.
900 North Michigan Avenue, Suite 1100
Chicago, Illinois 60611
(312) 506-6500

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

October 13, 2006

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* 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).

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only)
Biotechnology Value Fund, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)
Not Applicable

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
260,097

9. Sole Dispositive Power
0

10. Shared Dispositive Power
260,097

11. Aggregate Amount Beneficially Owned by Each Reporting Person
260,097

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
1.1%

14. Type of Reporting Person (See Instructions)
PN

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only)
Biotechnology Value Fund II, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)
Not Applicable

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
324,470

9. Sole Dispositive Power
0

10. Shared Dispositive Power
324,470

11. Aggregate Amount Beneficially Owned by Each Reporting Person
324,470

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
1.3%

14. Type of Reporting Person (See Instructions)
PN

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only)
BVF Investments, L.L.C.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)
Not Applicable

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
521,900

9. Sole Dispositive Power
0

10. Shared Dispositive Power
521,900

11. Aggregate Amount Beneficially Owned by Each Reporting Person
521,900

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
2.2%

14. Type of Reporting Person (See Instructions)
OO

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only)
Investment 10, L.L.C.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)
Not Applicable

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Illinois

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
74,520

9. Sole Dispositive Power
0

10. Shared Dispositive Power
74,520

11. Aggregate Amount Beneficially Owned by Each Reporting Person
74,520

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
0.3%

14. Type of Reporting Person (See Instructions)
OO

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only)
BVF Partners L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)
Not Applicable

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
1,180,987

9. Sole Dispositive Power
0

10. Shared Dispositive Power
1,180,987

11. Aggregate Amount Beneficially Owned by Each Reporting Person
1,180,987

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
4.9%

14. Type of Reporting Person (See Instructions)
PN

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only)
BVF Inc.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)
Not Applicable

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
1,180,987

9. Sole Dispositive Power
0

10. Shared Dispositive Power
1,180,987

11. Aggregate Amount Beneficially Owned by Each Reporting Person
1,180,987

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
4.9%

14. Type of Reporting Person (See Instructions)
IA, CO

This Amendment No. 5 to Schedule 13D is filed by the Reporting Persons to amend the Statement on Schedule 13D (the "Schedule 13D") filed by the Reporting Persons with the Securities and Exchange Commission on April 21, 2005, as previously amended on July 22, 2005, January 13, 2006, April 25, 2006 and September 18, 2006.

Capitalized terms used herein and not defined herein have the meanings ascribed to them in the Schedule 13D. Except as specifically set forth herein, the information set forth in the Schedule 13D remains unchanged.

As disclosed in Item 5, the Reporting Persons have sold Ordinary Shares reducing their percentage ownership of Flamel to 4.9%. Accordingly, this is the Reporting Persons' final amendment to the Schedule 13D and is an exit filing.

The Schedule 13D is hereby amended as follows:

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER

Item 5 is hereby amended and restated to read in its entirety as follows:

The Reporting Persons' percentage ownership of the Ordinary Shares is based on 23,811,090 shares being outstanding, as reported in Flamel's Report on Form 6-K for the month of August 2006.

(a) BVF beneficially owns 260,097 Ordinary Shares, BVF2 beneficially owns 324,470 Ordinary Shares, Investments beneficially owns 521,900 Ordinary Shares, ILL10 beneficially owns 74,520 Ordinary Shares and each of Partners and BVF Inc. beneficially owns 1,180,987 Ordinary Shares, representing percentage ownership of approximately 1.1%, 1.3%, 2.2%, 0.3% and 4.9%, respectively.

(b) Each of BVF, BVF2, Investments and ILL10 shares with Partners voting and dispositive power over the Ordinary Shares each such entity beneficially owns. Partners and BVF Inc. share voting and dispositive power over the 1,180,987 Ordinary Shares they beneficially own with BVF, BVF2 and Investments, and ILL10.

(c) The following sales of Ordinary Shares have been made by the following Reporting Persons since the amendment to the Schedule 13D filed on September 18, 2006.

Sales of Ordinary Shares

<u>Reporting Person</u>	<u>Date</u>	<u>Shares Sold</u>	<u>Sales Price</u>
BVF	09/29/2006	10,300	\$18.60
	10/05/2006	13,500	\$19.10
	10/06/2006	3,700	\$19.03
	10/10/2006	300	\$19.60
	10/11/2006	4,400	\$21.46
	10/13/2006	8,900	\$23.44

<u>Reporting Person</u>	<u>Date</u>	<u>Shares Sold</u>	<u>Sales Price</u>
BVF2	09/29/2006	11,200	\$18.60
	10/02/2006	2,000	\$19.10
	10/05/2006	9,000	\$19.10
	10/06/2006	4,500	\$19.03
	10/11/2006	5,500	\$21.46
	10/13/2006	11,000	\$23.44

<u>Reporting Person</u>	<u>Date</u>	<u>Shares Sold</u>	<u>Sales Price</u>
BVFLLC	10/02/2006	5,000	\$19.10
	10/06/2006	7,200	\$19.03
	10/11/2006	8,800	\$21.46
	10/13/2006	17,600	\$23.44

<u>Reporting Person</u>	<u>Date</u>	<u>Shares Sold</u>	<u>Sales Price</u>
ILL10	09/29/2006	3,500	\$18.60
	10/06/2006	1,000	\$19.03
	10/11/2006	1,300	\$21.46
	10/13/2006	2,500	\$23.44

All of the above listed transactions were open market sales.

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.

Dated: October 13, 2006

BIOTECHNOLOGY VALUE FUND, 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

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 INVESTMENTS, L.L.C.

By: BVF Partners L.P., its manager

By: BVF Inc., its general partner

By: /s/ Mark N. Lampert

Mark N. Lampert

President

INVESTMENT 10, L.L.C.

By: BVF Partners L.P., its attorney-in-fact

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 INC.

By: /s/ Mark N. Lampert

Mark N. Lampert
President