

SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 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 13d-2(b)  
(Amendment No. 5)<sup>1</sup>

Flamel Technologies, S.A.

(Name of Issuer)

Ordinary Shares

(Title of Class of Securities)

338488 10 9

(CUSIP Number)

December 31, 2004

(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 the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for purposes 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).

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1 NAME OF REPORTING PERSON:

Biotechnology Value Fund, L.P.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):

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  
SHARES  
BENEFICIALLY  
OWNED  
BY  
EACH  
REPORTING

5 SOLE VOTING POWER

0

6 SHARED VOTING POWER

661,442

7 SOLE DISPOSITIVE POWER

0

PERSON WITH: 8 SHARED DISPOSITIVE POWER 661,442

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 661,442

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\* 0

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 3.08%

12 TYPE OF REPORTING PERSON\* PN

\*SEE INSTRUCTIONS BEFORE FILLING OUT!

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1 NAME OF REPORTING PERSON: Biotechnology Value Fund II, L.P. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):

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 SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	7	SOLE VOTING POWER	0
	6	SHARED VOTING POWER	775,570
	7	SOLE DISPOSITIVE POWER	0
	8	SHARED DISPOSITIVE POWER	775,570

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 775,570

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\* 0

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 3.62%

12 TYPE OF REPORTING PERSON\* PN

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1 NAME OF REPORTING PERSON:  
**BVF Investments, L.L.C.**  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):

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 SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER <b>0</b>
	6	SHARED VOTING POWER <b>661,800</b>
	7	SOLE DISPOSITIVE POWER <b>0</b>
	8	SHARED DISPOSITIVE POWER <b>661,800</b>

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
**661,800**

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\* o

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
**3.09%**

12 TYPE OF REPORTING PERSON\*  
**OO**

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1 NAME OF REPORTING PERSON:  
**Investment 10, LLC**  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):

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

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER <b>0</b>
	6	SHARED VOTING POWER <b>111,620</b>
	7	SOLE DISPOSITIVE POWER <b>0</b>
	8	SHARED DISPOSITIVE POWER <b>111,620</b>

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
**111,620**

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\* o

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
**0.52%**

12 TYPE OF REPORTING PERSON\*  
**OO**

**\*SEE INSTRUCTIONS BEFORE FILLING OUT!**

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1 NAME OF REPORTING PERSON:  
**BVF Partners L.P.**  
S.S. OR I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):

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 SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER <b>0</b>
	6	SHARED VOTING POWER <b>2,210,432</b>
	7	SOLE DISPOSITIVE POWER <b>0</b>
	8	SHARED DISPOSITIVE POWER <b>2,210,432</b>

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
**2,210,432**

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\* o

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

10.31% (See Item 2(d))

12 TYPE OF REPORTING PERSON\*

PN

\*SEE INSTRUCTIONS BEFORE FILLING OUT!

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1 NAME OF REPORTING PERSON:

**BVF Inc.**

S.S. OR I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):

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 SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER
		<b>0</b>
	6	SHARED VOTING POWER
		<b>2,210,432</b>
	7	SOLE DISPOSITIVE POWER
		<b>0</b>
	8	SHARED DISPOSITIVE POWER
		<b>2,210,432</b>

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

**2,210,432**

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\*

o

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

10.31% (See Item 2(d))

12 TYPE OF REPORTING PERSON\*

IA, CO

\*SEE INSTRUCTIONS BEFORE FILLING OUT!

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ITEM 1(a). NAME OF ISSUER:

Flamel Technologies, S.A. ("Flamel")

ITEM 1(b). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:

**ITEM 2(a). NAME OF PERSON FILING:**

This Amendment to Schedule 13G is being filed on behalf of the following persons (the "Reporting Persons"):

- (i) Biotechnology Value Fund, L.P. ("BVF")
- (ii) Biotechnology Value Fund II, L.P. ("BVF2")
- (iii) BVF Investments, L.L.C. ("Investments")
- (iv) Investment 10, L.L.C. ("ILL10")
- (v) BVF Partners L.P. ("Partners")
- (vi) BVF Inc. ("BVF Inc.")

**ITEM 2(b). ADDRESS OF PRINCIPAL BUSINESS OFFICE:**

The principal business office of the Reporting Persons comprising the group filing this Amendment to Schedule 13G is located at 227 West Monroe Street, Suite 4800, Chicago, Illinois, 60606.

**ITEM 2(c). CITIZENSHIP:**

BVF:	a Delaware limited partnership
BVF2:	a Delaware limited partnership
Investments:	a Delaware limited liability company
ILL10:	an Illinois limited liability company
Partners:	a Delaware limited partnership
BVF Inc.:	a Delaware corporation

**ITEM 2(d). TITLE OF CLASS OF SECURITIES:**

This Amendment to Schedule 13G is being filed with respect to the French Ordinary Shares represented by American Depositary Shares ("Ordinary Shares") of Flamel. The Reporting Persons' percentage ownership of Ordinary Shares is based on 21,446,590 shares being outstanding, as advised by Flamel, and the ownership of 400,000 warrants (the "Warrants") by the Reporting Persons to purchase an equivalent number of Ordinary Shares.

On October 28, 2004, the Reporting Persons acquired greater than ten percent of the Ordinary Shares of Flamel.

As of December 31, 2004, (i) BVF beneficially owned 661,442 Ordinary Shares, of which 120,000 shares are attributable to Warrants; (ii) BVF2 beneficially owned 775,570 Ordinary Shares, of which 260,000 shares are attributable to Warrants; (iii) Investments beneficially owned 661,800 Ordinary Shares, none of which are attributable to Warrants; and (iv) ILL10 beneficially owned 111,620 Ordinary Shares, of which 20,000 shares are attributable to Warrants.

**ITEM 2(e). CUSIP Number:**

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**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: One of the following**

Not applicable as this Amendment to Schedule 13G is filed pursuant to Rule 13d-1(c).

**ITEM 4. OWNERSHIP:**

The information in items 1 and 5 through 11 on the cover pages (pp. 2 - 7) on this Amendment to Schedule 13G is hereby incorporated by reference.

**ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS:**

If this statement is being filed to report the fact that as of the date hereof the Reporting Persons have ceased to be the beneficial owner of more than five percent of the class of securities check the following. o

**ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON:**

BVF shares voting and dispositive power over the Ordinary Shares it beneficially owns with Partners. BVF2 also shares voting and dispositive power over the Ordinary Shares it beneficially owns with Partners. Investments also shares voting and dispositive power over the Ordinary Shares it beneficially owns with Partners. Pursuant to the operating agreement of Investments, Partners is authorized, among other things, to invest the funds of Ziff Asset Management, L.P., the majority member of Investments, in Ordinary Shares Investments beneficially owns and to vote and exercise dispositive power over those Ordinary Shares. Partners and BVF Inc. share voting and dispositive power over the Ordinary Shares beneficially owned by BVF, BVF2, Investments and those owned by ILL10, on whose behalf Partners acts as investment manager and, accordingly, Partners and BVF Inc. have beneficial ownership of all of the Ordinary Shares owned by such parties.

**ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY:**

Not applicable.

**ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF A GROUP:**

Not applicable.

**ITEM 9. NOTICE OF DISSOLUTION OF GROUP:**

Not applicable.

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**ITEM 10. CERTIFICATION**

By signing below I certify that, to the best of my 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.

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: February 14, 2005

**BIOTECHNOLOGY VALUE FUND, L.P.**

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

By: BVF Inc., its general partner

By: /s/ MARK N. LAMPERT

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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

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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

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Mark N. Lampert  
President

**INVESTMENT 10, L.L.C.**

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

By: BVF Inc., its general partner

By: /s/ MARK N. LAMPERT

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Mark N. Lampert  
President

**BVF PARTNERS L.P.**

By: BVF Inc., its general partner

By: /s/ MARK N. LAMPERT

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Mark N. Lampert  
President

**BVF INC.**

By: /s/ MARK N. LAMPERT

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Mark N. Lampert  
President

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