

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. \_\_) \*

Acadia Pharmaceuticals Inc.  
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(Name of Issuer)

COMMON STOCK  
-----

(Title of Class of Securities)

004225108  
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(CUSIP Number)

August 20, 2004  
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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)

\*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 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).

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CUSIP No. 004225108 13G Page 2 of 11 Pages  
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1 NAME OF REPORTING PERSON

Biotechnology Value Fund, L.P.

I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (entities only)

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)

- (a)   
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware  
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NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER	0
	-----		
	6	SHARED VOTING POWER	265,500 shares
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	7	SOLE DISPOSITIVE POWER	0
-----			
	8	SHARED DISPOSITIVE POWER	265,500 shares
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9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		
	265,500 shares		
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10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)		
	<input type="checkbox"/>		
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11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)		
	1.57%		
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12	TYPE OF REPORTING PERSON (See Instructions)		
	PN		
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1 NAME OF REPORTING PERSON

Biotechnology Value Fund II, L.P.

I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (entities only)

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2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)

(a)

(b)

-----  
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

0

6 SHARED VOTING POWER

168,500 shares

7 SOLE DISPOSITIVE POWER

0

8 SHARED DISPOSITIVE POWER

168,500 shares

-----  
9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

168,500 shares

-----  
10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)

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

1.00%

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12 TYPE OF REPORTING PERSON (See Instructions)

PN  
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1 NAME OF REPORTING PERSON

BVF Investments, L.L.C.

I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (entities only)

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2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)

(a)

(b)

-----  
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

0

6 SHARED VOTING POWER

407,000 shares

7 SOLE DISPOSITIVE POWER

0

8 SHARED DISPOSITIVE POWER

407,000 shares

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9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

407,000 shares

-----  
10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)

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

2.41%

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12 TYPE OF REPORTING PERSON (See Instructions)

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1 NAME OF REPORTING PERSON

Investment 10, LLC

I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (entities only)

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2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)

(a)

(b)

-----  
3 SEC USE ONLY

-----  
4 CITIZENSHIP OR PLACE OF ORGANIZATION

Illinois

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NUMBER OF  
SHARES  
BENEFICIALLY  
OWNED BY  
EACH  
REPORTING  
PERSON  
WITH

5 SOLE VOTING POWER

0

6 SHARED VOTING POWER

44,000 shares

-----  
7 SOLE DISPOSITIVE POWER

0

8 SHARED DISPOSITIVE POWER

44,000 shares  
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9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

44,000 shares

-----  
10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)

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

0.26%

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12 TYPE OF REPORTING PERSON (See Instructions)

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1 NAME OF REPORTING PERSON

BVF Partners L.P.

I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (entities only)

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2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)

(a)

(b)

-----  
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

0

-----  
6 SHARED VOTING POWER

885,000 shares

-----  
7 SOLE DISPOSITIVE POWER

0

-----  
8 SHARED DISPOSITIVE POWER

885,000 shares

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9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

885,000 shares

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10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)

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

5.24%

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12 TYPE OF REPORTING PERSON (See Instructions)

PN  
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1 NAME OF REPORTING PERSON

BVF Inc.

I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (entities only)

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)

(a)

(b)

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  0
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6 SHARED VOTING POWER

885,000 shares

7 SOLE DISPOSITIVE POWER

0

8 SHARED DISPOSITIVE POWER

885,000 shares

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

885,000 shares

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)

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

5.24%

12 TYPE OF REPORTING PERSON (See Instructions)

CO

## Item 1(a). Name of Issuer:

Acadia Pharmaceuticals Inc.

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

3911 Sorrento Valley Blvd.  
San Diego, CA 92121

## Item 2(a). Names of Person Filing

This 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.")

\* Attached as Exhibit 1 is a copy of an agreement among the Reporting Persons that this Schedule 13G and any amendments thereto shall be filed on behalf of each of them.

## Item 2(b). Address of Principal Business Office or, if none, Residence:

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

## Item 2(c). Citizenship or Place of Organization:

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 Schedule 13G is being filed with respect to the common stock, par value \$0.0001 per share (the "Common Stock"), of Acadia Pharmaceuticals Inc. The Reporting Persons' percentage ownership of Common Stock is based on 16,865,917 shares of Common Stock being outstanding.

As of August 20, 2004, (i) BVF beneficially owned 265,500 shares of Common Stock; (ii) BVF2 beneficially owned 168,500 shares of Common Stock; (iii) Investments beneficially owned 407,000 shares of Common Stock; and (iv) ILL10 beneficially owned 44,000 shares of Common Stock. Beneficial ownership by Partners and BVF Inc. includes 885,000 shares of Common Stocks.

## Item 2(e). CUSIP Number:

004225108

## 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 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 Schedule 13G is hereby incorporated by reference.

## Item 5. Ownership of 5 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. | |

## Item 6. Ownership of More than 5 Percent on Behalf of Another Person

Pursuant to the operating agreement of Investments, Partners is authorized, among other things, to invest funds of Ziff Asset Management, L.P., the majority member of Investments, in shares of Common Stock described herein and to vote and exercise dispositive power over those securities. Partners and BVF Inc. share voting and dispositive power over the shares of Common Stock 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 shares of Common Stock held by such parties.

## Item 7. Identification and Classification of the Subsidiary Which Acquired the Securities Being Reported on By the Parent Holding Company

Not Applicable.

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

Not Applicable.

## Item 9. Notice of Dissolution of Group

Not Applicable.

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.

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: August 30, 2004

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., its 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  
-----

Mark N. Lampert  
President

BVF INC.

By: /s/ MARK N. LAMPERT  
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Mark N. Lampert  
President

**AGREEMENT REGARDING JOINT FILING**

The undersigned, Biotechnology Value Fund, L.P., a Delaware limited partnership, Biotechnology Value Fund II, L.P., a Delaware limited partnership, BVF Investments, L.L.C., a Delaware limited liability company, Investment 10, L.L.C., an Illinois limited liability company, BVF Partners L.P., a Delaware limited partnership, and BVF Inc., a Delaware corporation, hereby agree and acknowledge that the information required by Schedule 13G, to which this Agreement is attached as an exhibit, is filed on behalf of each of them. The undersigned further agree that any amendments or supplements thereto shall also be filed on behalf of each of them.

Dated: August 30, 2004

**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., its 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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