

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

SCHEDULE 13D  
(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT  
TO RULE 13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT  
TO RULE 13d-2(a)

(Amendment No. 4)\*

**ACADIA Pharmaceuticals Inc.**

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(Name of Issuer)

**Common Stock, par value \$0.0001 per share**

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(Title of Class of Securities)

**004225108**

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(CUSIP number)

Leo Kirby  
667 Madison Avenue, 21<sup>st</sup> Floor  
New York, NY 10065  
(212) 339-5633

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(Name, address and telephone number of person authorized to receive notices and communications)

July 1, 2013

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(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 Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box .

(Continued on the following pages)

(Page 1 of 9 Pages)

\*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 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act.

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1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)  Baker Bros. Advisors LP	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) p (b) p	
3.	SEC USE ONLY	
4.	SOURCE OF FUNDS* OO	
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) o	
6.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER: 19,955,126
	8.	SHARED VOTING POWER: 0
	9.	SOLE DISPOSITIVE POWER: 19,955,126
	10.	SHARED DISPOSITIVE POWER: 0
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 19,955,126	
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* p	
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 22.6% (1)	
14.	TYPE OF REPORTING PERSON* IA	

(1) Based on 79,164,885 shares of common stock outstanding as reported in the Issuer's Form 10-Q filed with the SEC on May 7, 2013, plus 9,200,000 shares issued as reported in the Issuer's Form 8-K filed with the SEC on May 15, 2013.

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)  Baker Bros. Advisors (GP) LLC	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) p (b) p	
3.	SEC USE ONLY	
4.	SOURCE OF FUNDS* OO	
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) o	
6.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER: 19,955,126
	8.	SHARED VOTING POWER: 0
	9.	SOLE DISPOSITIVE POWER: 19,955,126
	10.	SHARED DISPOSITIVE POWER: 0
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 19,955,126	
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* p	
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 22.6% (1)	
14.	TYPE OF REPORTING PERSON* HC	

(1) Based on 79,164,885 shares of common stock outstanding as reported in the Issuer's Form 10-Q filed with the SEC on May 7, 2013, plus 9,200,000 shares issued as reported in the Issuer's Form 8-K filed with the SEC on May 15, 2013.

1.	<p>NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)</p> <p>Felix J. Baker</p>	
2.	<p>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) p (b) p</p>	
3.	<p>SEC USE ONLY</p>	
4.	<p>SOURCE OF FUNDS* OO</p>	
5.	<p>CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) o</p>	
6.	<p>CITIZENSHIP OR PLACE OF ORGANIZATION</p> <p>United States</p>	
<p>NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH</p>	7.	SOLE VOTING POWER: 19,955,126
	8.	SHARED VOTING POWER:
	9.	SOLE DISPOSITIVE POWER: 19,955,126
	10.	SHARED DISPOSITIVE POWER:
11.	<p>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 19,955,126</p>	
12.	<p>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* p</p>	
13.	<p>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 22.6% (1)</p>	
14.	<p>TYPE OF REPORTING PERSON* IN, HC</p>	

(1) Based on 79,164,885 shares of common stock outstanding as reported in the Issuer's Form 10-Q filed with the SEC on May 7, 2013, plus 9,200,000 shares issued as reported in the Issuer's Form 8-K filed with the SEC on May 15, 2013.

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)  Julian C. Baker	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) p (b) p	
3.	SEC USE ONLY	
4.	SOURCE OF FUNDS* OO	
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) o	
6.	CITIZENSHIP OR PLACE OF ORGANIZATION  United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER: 19,955,126
	8.	SHARED VOTING POWER
	9.	SOLE DISPOSITIVE POWER: 19,955,126
	10.	SHARED DISPOSITIVE POWER:
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 19,955,126	
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* p	
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 22.6% (1)	
14.	TYPE OF REPORTING PERSON* IN, HC	

(1) Based on 79,164,885 shares of common stock outstanding as reported in the Issuer's Form 10-Q filed with the SEC on May 7, 2013, plus 9,200,000 shares issued as reported in the Issuer's Form 8-K filed with the SEC on May 15, 2013.

## **Amendment No. 4 to Schedule 13D**

This Amendment No. 4 to Schedule 13D amends and supplements the previously filed Schedules 13D filed by Julian C. Baker, Felix J. Baker and Baker Bros. Advisors, LLC. Except as supplemented herein, such statements, as heretofore amended and supplemented, remain in full force and effect.

On July 1, 2013, a Certificate of Conversion was filed with the State of Delaware to convert Baker Bros. Advisors, LLC from a limited liability company into a limited partnership named Baker Bros. Advisors LP (the "Adviser"). Baker Bros. Advisors (GP) LLC (the "Adviser GP") is the sole general partner of the Adviser.

Pursuant to the amended and restated management agreements, as amended, among the Adviser, Baker Brothers Life Sciences, L.P. ("Life Sciences"), 14159, L.P. ("14159"), and 667, L.P. ("667"), and together with Life Sciences and 14159, the "Funds"), and their respective general partners, the Adviser has complete and unlimited discretion and authority with respect to the Funds' investments and voting power over investments.

### **ITEM 2. Identity and Background.**

(a) The Reporting Persons are:

1. The Adviser
2. The Adviser GP
3. Felix J. Baker
4. Julian C. Baker

(b) The business address of each of the Reporting Persons is:

c/o Baker Bros. Advisors LP  
667 Madison Avenue, 21<sup>st</sup> Floor  
New York, NY 10065  
(212) 339-5633

(c) The Adviser is an entity engaged in investment activities, and the Adviser GP is in the business of acting as its general partner and, through the Adviser, investment activities. The principal business of each of Julian C. Baker and Felix J. Baker is to serve as a managing member of the Adviser GP.

(d) and (e) During the past five years, none of the Reporting Persons nor any of the Funds has been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) The Adviser GP is a limited liability company organized under the laws of the State of Delaware. The Adviser is a limited partnership organized under the laws of the State of Delaware. The citizenship of each of Julian C. Baker and Felix J. Baker is the United States of America.

### **ITEM 5. Interest in Securities of the Issuer.**

(a) and (b) Items 7 through 11 and 13 of each of the cover pages of this Amendment No. 4 are incorporated herein by reference.

The Adviser GP, Felix J. Baker and Julian C. Baker as principals of the Adviser GP, and the Adviser may be deemed to be beneficial owners of securities of the Issuer directly held by the Funds, and may be deemed to have the power to vote or direct the vote of and the power to dispose or direct the disposition of such securities.

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The Reporting Persons disclaim beneficial ownership of the securities held by each of the Funds, and this Amendment No. 4 shall not be deemed an admission that the Reporting Persons are the beneficial owners of such securities for purposes of Section 13(d) or for any other purpose.

(c) Dr. Stephen R. Biggar, an Partner of the Adviser serves on the Issuer's Board of Directors as a representative of the Funds. On June 7, 2013, Dr. Biggar was granted 12,500 options (the "Options") to purchase the common stock of the Issuer at \$17.01 per share expiring 10 years from the date of grant. These Options vest in four equal tranches beginning on June 7, 2013. Dr. Biggar may from time to time in the future receive additional securities of the Issuer as compensation for his service on the Board, consistent with other non-employee directors of the Issuer.

Dr. Stephen Biggar serves on the Issuer's Board of Directors as a representative of the Funds. Due to an agreement between Dr. Biggar and the Adviser, as well as the agreements and policies of the Funds, Dr. Biggar does not have any right to receive securities in compensation for serving as a Director of the Issuer and therefore has no pecuniary interest in the Options. The Funds are entitled to the pecuniary interest in the Options as each holds an indirect pecuniary interest. Felix J. Baker and Julian C. Baker as a result of their ownership interest in the general partners of the general partners of the Funds may be deemed to have an indirect pecuniary interest in the Options (ie. no direct pecuniary interest).

Except as disclosed herein or in any previous amendments to this Schedule 13D, none of the Reporting Persons or their affiliates has effected any other transactions in securities of the Issuer during the past 60 days.

(d) Certain securities of Acadia Pharmaceuticals, Inc. (the "Issuer") are held directly by 667, a limited partnership the sole general partner of which is Baker Biotech Capital, L.P., a limited partnership the sole general partner of which is Baker Biotech Capital (GP), LLC. Julian C. Baker and Felix J. Baker are the controlling members of Baker Biotech Capital (GP), LLC.

Certain securities of the Issuer are held directly by Life Sciences, a limited partnership the sole general partner of which is Baker Brothers Life Sciences Capital, L.P., a limited partnership the sole general partner of which is Baker Brothers Life Sciences Capital (GP), LLC. Julian C. Baker and Felix J. Baker are the controlling members of Baker Brothers Life Sciences Capital (GP), LLC.

Certain securities of the Issuer are held directly by 14159, a limited partnership the sole general partner of which is 14159 Capital, L.P., a limited partnership the sole general partner of which is 14159 Capital (GP), LLC. Julian C. Baker and Felix J. Baker are the controlling members of 14159 Capital (GP), LLC.

(e) Not applicable.

**Item 7. Material to Be Filed as Exhibits.**

**Exhibit Description**

99.1 Agreement Regarding the Joint Filing of Schedule 13D by and among the Reporting Persons

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**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.

July 11, 2013

**BAKER BROS. ADVISORS LP**

By: Baker Bros. Advisors (GP) LLC, its general partner

By: /s/ Scott L. Lessing

Name: Scott L. Lessing

Title: President

**BAKER BROS. ADVISORS (GP) LLC**

By: /s/ Scott L. Lessing

Name: Scott L. Lessing

Title: President

/s/ Julian C. Baker

Julian C. Baker

/s/ Felix J. Baker

Felix J. Baker

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**JOINT FILING AGREEMENT**

In accordance with Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree that this Statement on Schedule 13D relating to the Common Stock, \$0.0001 par value, of Acadia Pharmaceuticals, Inc. is being filed with the Securities and Exchange Commission on behalf of each of them.

July 11, 2013

**BAKER BROS. ADVISORS LP**

By: Baker Bros. Advisors (GP) LLC, its general partner

By: /s/ Scott L. Lessing

Name: Scott L. Lessing

Title: President

**BAKER BROS. ADVISORS (GP) LLC**

By: /s/ Scott L. Lessing

Name: Scott L. Lessing

Title: President

/s/ Julian C. Baker

Julian C. Baker

/s/ Felix J. Baker

Felix J. Baker

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