

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. 2)*

ACADIA Pharmaceuticals Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

004225108

(CUSIP number)

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

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

May 15, 2013

(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.

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Baker Bros. Advisors, LLC		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*		(a) <input type="checkbox"/> (b) <input type="checkbox"/>
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) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER: 17,614,812	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 17,614,812	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 17,614,812		
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>		
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 19.9% (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) Felix J. Baker		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*		(a) <input type="checkbox"/> (b) <input type="checkbox"/>
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) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION United States		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER: 17,614,812	
	8.	SHARED VOTING POWER:	
	9.	SOLE DISPOSITIVE POWER: 17,614,812	
	10.	SHARED DISPOSITIVE POWER:	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 17,614,812		
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>		
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 19.9% (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.

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) <input type="checkbox"/> (b) <input type="checkbox"/>
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) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION United States		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER: 17,614,812	
	8.	SHARED VOTING POWER	
	9.	SOLE DISPOSITIVE POWER: 17,614,812	
	10.	SHARED DISPOSITIVE POWER:	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 17,614,812		
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(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. 2 to Schedule 13D

This Amendment No. 2 to Schedule 13D amends and supplements the previously filed Schedules 13D filed by Julian C. Baker, Felix J. Baker and Baker Bros. Advisors, LLC (the "Reporting Persons"). Except as supplemented herein, such statements, as heretofore amended and supplemented, remain in full force and effect.

ITEM 3. Source and Amount of Funds or Other Consideration.

The Reporting Persons acquired certain of the shares of Common Stock in connection with a registered direct underwritten offering by the Issuer (the "Offering") on May 15, 2013. In the Offering, the Issuer sold a total of 8,000,000 shares of the Common Stock (collectively, the "Shares") for a purchase price of \$12.50 per share. The sale of such Shares is expected to close on May 20, 2013, subject to customary closing conditions.

Baker Brothers Life Sciences, L.P., 667, L.P., and 14159, L.P. ("the Funds") purchased an aggregate of 1,993,000 Shares as follows:

Fund	Shares	Price Paid
667, L.P.	218,846	\$ 2,735,575
Baker Brothers Life Sciences, L.P.	1,730,970	\$ 21,637,125
14159, L.P.	43,184	\$ 539,800

The funds used to purchase the Shares acquired in the offering detailed above were provided from the available working capital of the entities there indicated.

ITEM 4. Purpose of Transactions.

The Funds hold the securities for investment purposes. Whether the Reporting Persons or their affiliates purchase any additional securities or dispose of any securities, and the amount and timing of any such transactions, will depend upon the Reporting Persons' continuing assessments of pertinent factors, including the availability of shares of Common Stock or other securities for purchase at particular price levels, the Issuer's business and prospects, other business investment opportunities, economic conditions, stock market conditions, money market conditions, the attitudes and actions of the board of directors and management of the Issuer, the availability and nature of opportunities to dispose of shares in the Issuer and other plans and requirements of the particular entities. The Reporting Persons may discuss items of mutual interest with the Issuer, which could include items in (a) through (j).

Whether the Reporting Persons or their affiliates purchase any additional securities or dispose of any securities, and the amount and timing of any such transactions, will depend upon the Reporting Persons' continuing assessments of pertinent factors, including the availability of shares of Common Stock or other securities for purchase at particular price levels, the Issuer's business and prospects, other business investment opportunities, economic conditions, stock market conditions, money market conditions, the attitudes and actions of the board of directors and management of the Issuer, the availability and nature of opportunities to dispose of shares in the Issuer and other plans and requirements of the particular entities. Depending upon their assessments of these factors from time to time, the Reporting Persons or their affiliates may change their present intentions as stated above, including determining to acquire additional securities of the Issuer, including shares of Common Stock (by means of open market purchases, privately negotiated purchases, exercise of some or all of the Warrants, or otherwise) or to dispose of some or all of the securities of the Issuer, including shares of Common Stock, under their control.

Except as otherwise disclosed herein, at the present time, the Reporting Persons do not have any plans or proposals with respect to any extraordinary corporate transaction involving the Issuer or any sale of its assets, or with respect to its management, capitalization, dividend strategy, charter or by-laws, or any other change in its business or corporate structure or with respect to the delisting or deregistration of any of its securities including, without limitation, those matters described in subparagraphs (a) through (j) of Item 4 of Schedule 13D.

Dr. Stephen R. Biggar, an Partner of the Adviser serves on the Issuer’s Board of Directors as a representative of the Funds.

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 Schedule 13D are incorporated herein by reference. Set forth below is the aggregate number of shares of Common Stock of the Issuer directly held by each of the Funds, which may be deemed to be indirectly beneficially owned by the Reporting Persons, as well as shares of Common Stock that may be acquired upon exercise of the 2019 Warrants and the 2018 Warrants (as defined below) by the Funds, subject to the limitations on exercise described below.

Holder	Shares of Common Stock	2019 Warrants	2018 Warrants
667, L.P.	1,264,321	42,131	-
Baker Brothers Life Sciences, L.P.	15,960,582	447,138	1,426,590
14159, L.P.	389,909	10,731	39,378
Total	17,614,812	500,000	1,465,968

The 2019 Warrants are only exercisable to the extent that after giving effect to such exercise the holders thereof and their affiliates would beneficially own, for purposes of Rule 13d-3 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), no more than 19.99% of the outstanding shares of Common Stock of the Issuer. As a result of this restriction, the number of shares that may be issued upon exercise of the 2019 Warrants by the above holders may change depending upon changes in the outstanding shares of Common Stock.

The 2018 Warrants are only exercisable to the extent that giving effect to such exercise would not cause the holders thereof and their affiliates to beneficially own, for purposes of Rule 13d-3 under the Exchange Act, in excess of 9.9% of the outstanding shares of Common Stock of the Issuer. As a result of this restriction, the number of shares that may be issued on exercise of the 2018 Warrants by the above holders may change depending upon changes in the outstanding shares of Common Stock.

On April 12, 2012, the Adviser, each of the Funds, and the general partners of the Funds entered into an amended and restated management agreement (the “Management Agreement”) which gave the Adviser complete and unlimited discretion and authority with respect to the Funds’ investments and voting power over investments. The general partners of the Funds relinquished all discretion and authority with respect to the Funds’ investments and voting power over investments. In connection with the services provided by the Adviser to the Funds, the Adviser receives a management based fee that does not confer any pecuniary interest.

The Adviser, and Felix J. Baker and Julian C. Baker as principals of 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.

The Reporting Persons disclaim beneficial ownership of the securities held by each of the Funds, and this Schedule 13D 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) Except as otherwise disclosed in this or any previously filed Schedule 13D none of the Reporting Persons has effected any transaction in the securities of the Issuer in the past sixty days.

(d) Not applicable.

(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

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.

May 17, 2013

BAKER BROS. ADVISORS, 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

JOINT FILING AGREEMENT

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree that only one statement containing the information required by Schedule 13D need be filed with respect to the ownership by each of the undersigned of the shares of Common Stock of Acadia Pharmaceuticals, Inc.

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original.

EXECUTED as of this 17th day of May, 2013.

BAKER BROS. ADVISORS, 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
