
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. 14)*

ACADIA Pharmaceuticals Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

004225108

(CUSIP number)

Alexandra A. Toohy
Chief Financial Officer
Baker Bros. Advisors LP
860 Washington Street, 3rd Floor
New York, NY 10014
(212) 339-5690

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

September 17, 2019

(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 10 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 Baker Bros. Advisors LP		
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: 41,016,086 (1)	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 41,016,086 (1)	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 41,016,086 (1)		
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) 27.0% (1)(2)		
14.	TYPE OF REPORTING PERSON* IA, PN		

(1) Includes 61,250 shares of the common stock of ACADIA Pharmaceuticals Inc. (the "Issuer") underlying options directly held by Julian C. Baker, a managing member of Baker Bros. Advisors (GP) LLC (the "Adviser GP") and 100,250 shares of the common stock of the Issuer underlying options directly held by Dr. Stephen R. Biggar, a full-time employee of Baker Bros. Advisors LP (the "Adviser").

(2) Based on 151,641,630 shares of the Issuer's common stock outstanding as of September 20, 2019, as reported in the Issuer's Prospectus filed with the Securities Exchange Commission ("SEC") on September 17, 2019.

1.	NAMES OF REPORTING PERSONS Baker Bros. Advisors (GP) 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: 41,016,086 (1)
		8.	SHARED VOTING POWER: 0
		9.	SOLE DISPOSITIVE POWER: 41,016,086 (1)
		10.	SHARED DISPOSITIVE POWER: 0
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 41,016,086 (1)		
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) 27.0% (1)(2)		
14.	TYPE OF REPORTING PERSON* HC, OO		

- (1) Includes 61,250 shares of the common stock of the Issuer underlying options directly held by Julian C. Baker, a managing member of the Adviser GP and 100,250 shares of the common stock of the Issuer underlying options directly held by Dr. Stephen R. Biggar, a full-time employee of the Adviser.
- (2) Based on 151,641,630 shares of the Issuer's common stock outstanding as of September 20, 2019, as reported in the Issuer's Prospectus filed with the SEC on September 17, 2019.

1.	NAMES OF REPORTING PERSONS 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: 41,167,857 (1)
	8.	SHARED VOTING POWER:
	9.	SOLE DISPOSITIVE POWER: 41,167,857 (1)
	10.	SHARED DISPOSITIVE POWER:
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 41,167,857 (1)	
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) 27.1% (1)(2)	
14.	TYPE OF REPORTING PERSON* IN, HC	

- (1) Includes 61,250 shares of the common stock of the Issuer underlying options directly held by Julian C. Baker, a managing member of the Adviser GP and 100,250 shares of the common stock of the Issuer underlying options directly held by Dr. Stephen R. Biggar, a full-time employee of the Adviser.
- (2) Based on 151,641,630 shares of the Issuer's common stock outstanding as of September 20, 2019, as reported in the Issuer's Prospectus filed with the SEC on September 17, 2019.

1.	NAMES OF REPORTING PERSONS 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: 41,167,857 (1)
	8.	SHARED VOTING POWER
	9.	SOLE DISPOSITIVE POWER: 41,167,857 (1)
	10.	SHARED DISPOSITIVE POWER:
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 41,167,857 (1)	
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) 27.1% (1)(2)	
14.	TYPE OF REPORTING PERSON* IN, HC	

- (1) Includes 61,250 shares of the common stock of the Issuer underlying options directly held by Julian C. Baker, a managing member of the Adviser GP and 100,250 shares of the common stock of the Issuer underlying options directly held by Dr. Stephen R. Biggar, a full-time employee of the Adviser.
- (2) Based on 151,641,630 shares of the Issuer's common stock outstanding as of September 20, 2019, as reported in the Issuer's Prospectus filed with the SEC on September 17, 2019.

1	NAMES OF REPORTING PERSONS FBB3 LLC		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>		
3	SEC USE ONLY		
4	SOURCE OF FUNDS (See Instructions) OO		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 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 48,895	
	8	SHARED VOTING POWER 0	
	9	SOLE DISPOSITIVE POWER 48,895	
	10	SHARED DISPOSITIVE POWER 0	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 48,895		
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) (1)		
14	TYPE OF REPORTING PERSON (See Instructions) OO		

(1) The percentage of ownership is less than 0.1%, based on 151,641,630 shares of the Issuer's Common Stock outstanding as of September 20, 2019, as reported in the Issuer's Prospectus filed with the SEC on September 17, 2019.

Amendment No. 14 to Schedule 13D

This Amendment No. 14 to Schedule 13D amends and supplements the previously filed Schedules 13D filed by Baker Bros. Advisors LP (the “Adviser”), Baker Bros. Advisors (GP) LLC (the “Adviser GP”), Julian C. Baker, Felix J. Baker and FBB3 LLC (“FBB3”) (collectively the “Reporting Persons”). Except as supplemented herein, such statements, as heretofore amended and supplemented, remain in full force and effect.

The Adviser GP is the sole general partner of the Adviser. Pursuant to management agreements, as amended, among the Adviser, Baker Brothers Life Sciences, L.P. (“Life Sciences”) and 667, L.P. (“667”, and together with Life Sciences, the “Funds”), and their respective general partners, the Funds’ respective general partners relinquished to the Adviser all discretion and authority with respect to the investment and voting power of the securities held by the Funds, and thus the Adviser has complete and unlimited discretion and authority with respect to the Funds’ investments and voting power over investments.

All capitalized terms contained herein but not otherwise defined shall have the meanings ascribed to such terms in the Schedule 13D, as amended. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

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

Item 3 of Schedule 13D is supplemented and amended, as the case may be, as follows:

The disclosure regarding the purchases in Item 4 below is incorporated herein by reference.

Item 4. Purpose of the Transaction.

Item 4 of Schedule 13D is supplemented and amended, as the case may be, as follows:

On September 17, 2019, ACADIA Pharmaceuticals Inc. (the “Issuer”) entered into an underwriting agreement (the “Underwriting Agreement”) with J.P. Morgan Securities LLC, and BofA Merrill Lynch, as representatives of the several underwriters listed on Schedule A thereto (the “Underwriters”), related to a public offering (the “Offering”) of 6,250,000 shares of the Issuer’s common stock at a price to the public of \$40.00 per share. In addition, the Issuer granted the Underwriters an option exercisable for 30 days from the date of the Underwriting Agreement to purchase, at the public offering price less any underwriting discounts and commissions, up to an additional 937,500 shares of common stock to cover overallotments, if any. The Offering is expected to close on September 20, 2019.

Pursuant to the Offering, on September 18, 2019, 667 and Life Sciences purchased 68,475 and 1,494,025 shares of the Issuer’s common stock, respectively, at the offering price of \$40.00 per share, totaling 1,562,500 shares in the aggregate. Each of 667 and Life Sciences purchased the shares of the Issuer’s common stock with their working capital.

The Funds hold securities of the Issuer for investment purposes. The Reporting Persons or their affiliates may purchase additional securities or dispose of securities in varying amounts and at varying times depending 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 business prospects of the Issuer, 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 subparagraphs (a) through (j) of Schedule 13D.

Depending upon their assessments of the above factors, the Reporting Persons or their affiliates may change their present intentions as stated above and they may assess whether to make suggestions to the management of the Issuer regarding financing, and whether to acquire additional securities of the Issuer, including shares of common stock (by means of open market purchases, privately negotiated purchases, exercise of some of all of the Prefunded Warrants, exercise of some or all of the Stock Options (defined below), 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 including, without limitation, those matters described in subparagraphs (a) through (j) of Item 4 of Schedule 13D.

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. 14 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 the Adviser, the Adviser GP, Julian C. Baker and Felix J. Baker, as well as shares of common stock of the Issuer that may be acquired upon exercise of the Prefunded Warrants (as defined below) by the Funds, subject to the limitations on exercise described below.

Holder	Shares of Common Stock	Prefunded Warrants
667, L.P.	3,383,621	42,131
Baker Brothers Life Sciences, L.P.	37,470,965	447,138
Total	40,854,586	489,269

The warrants to acquire common stock at an exercise price of \$0.01 per share with no expiration date (the “Prefunded 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 (“Beneficial Ownership Limitation”). By written notice to the Issuer, the Funds may from time to time increase or decrease the Beneficial Ownership Limitation applicable to that Fund to any other percentage not in excess of 19.99%. Any such change will not be effective until the 65th day after such notice is delivered to the Issuer. As a result of this restriction, the number of shares that may be issued upon exercise of the Prefunded Warrants by the above holders may change depending upon changes in the outstanding shares of common stock of the Issuer.

The Adviser GP, Felix J. Baker and Julian C. Baker as managing members of the Adviser GP, and the Adviser may be deemed to be beneficial owners of securities of the Issuer directly held by the Funds.

Julian C. Baker and Stephen R. Biggar currently serve on the Issuer’s Board of Directors (the “Board”) as representatives of the Funds. Julian C. Baker and Dr. Biggar as compensation for their service on the Board, hold options to purchase shares of common stock of the Issuer (“Stock Options”). Julian C. Baker and Dr. Biggar hold 72,500 and 111,500 Stock Options, respectively, of which 61,250 and 100,250, respectively, are vested or will vest within 60 days hereof. The policy of the Funds and the Adviser does not permit managing members of the Adviser GP or full-time employees of the Adviser to receive compensation for serving as directors of the Issuer, and the Funds are instead entitled to the pecuniary interest in the Stock Options. Julian C. Baker and Dr. Biggar have no voting or dispositive power and no pecuniary interest in the Stock Options. Other than through their control of the Adviser, Felix J. Baker and Julian C. Baker have neither voting nor dispositive power and have no direct pecuniary interest in the Stock Options held by Dr. Biggar. The Funds are instead entitled to the pecuniary interest in the Stock Options held by Julian C. Baker and Dr. Biggar. Baker Bros. Advisors LP has voting and investment power over the Stock Options held by Julian C. Baker and Dr. Biggar disclosed herein and in previous amendments to this Schedule 13D.

The Adviser GP, and Felix J. Baker and Julian C. Baker as managing members of the Adviser GP, may be deemed to have the power to vote or direct the vote of and the power to dispose or direct the disposition of the Stock Options held by Julian C. Baker and Dr. Biggar disclosed herein and in previous amendments to this Schedule 13D.

Julian C. Baker and Felix J. Baker are also the sole managers of FBB3 and by policy they do not transact in or vote the securities of the Issuer held by FBB3.

(c) The disclosure regarding the purchase of common stock of the Issuer in the Offering described in Item 4 is incorporated by reference herein. Except as described in this Amendment No. 14, none of the Reporting Persons has effected any transaction in the securities of the Issuer in the past 60 days.

(d) Certain securities of 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 managing 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 managing members of Baker Brothers Life Sciences Capital (GP), LLC.

(e) Not applicable.

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.

September 20, 2019

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

FBB3 LLC

By: /s/ Julian C. Baker

Name: Julian C. Baker

Title: Manager
