

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13D
Under the Securities Exchange Act of 1934

(Amendment No.1)

Aquinox Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, par value \$0.000001 per share

(Title of Class of Securities)

03842B101

(CUSIP number)

Alexandra A. Toohey
Chief Financial Officer
Baker Bros. Advisors LP
667 Madison Avenue, 21st Floor
New York, NY 10065
(212) 339-5690

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

August 7, 2015

(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)

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.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

*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 ("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).

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Baker Bros. Advisors LP 13-4093645	
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) o	
6.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER 4,267,300
	8.	SHARED VOTING POWER: 0
	9.	SOLE DISPOSITIVE POWER: 4,267,300
	10.	SHARED DISPOSITIVE POWER: 0
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 4,267,300	
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) 39.8%(1)	
14.	TYPE OF REPORTING PERSON (See Instructions) IA, PN	

(1) Based on 10,727,221 shares of common stock outstanding as of August 5, 2015, as reported in the Issuer's Form 10-Q filed with the SEC on August 6, 2015.

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Baker Bros. Advisors (GP) LLC 46-3147749		
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) o		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		7.	SOLE VOTING POWER 4,267,300
		8.	SHARED VOTING POWER: 0
		9.	SOLE DISPOSITIVE POWER: 4,267,300
		10.	SHARED DISPOSITIVE POWER: 0
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 4,267,300		
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) 39.8%(1)		
14.	TYPE OF REPORTING PERSON (See Instructions) HC, OO		

(1) Based on 10,727,221 shares of common stock outstanding as of August 5, 2015, as reported in the Issuer's Form 10-Q filed with the SEC on August 6, 2015.

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) o	
6.	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER: 4,269,560 (1)
	8.	SHARED VOTING POWER: 0
	9.	SOLE DISPOSITIVE POWER: 4,269,560 (1)
	10.	SHARED DISPOSITIVE POWER: 0
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 4,269,560 (1)	
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) 39.8%(2)	
14.	TYPE OF REPORTING PERSON (See Instructions) IN, HC	

(1) This number includes 2,260 shares of common stock directly held and solely beneficially owned by Julian C. Baker that were received in an in kind pro rata distribution from an affiliated investment fund in January 2015 without consideration. This Amendment No. 1 is being filed solely to reflect the addition of these shares and certain shares that were received by Felix J. Baker in the same pro rata distribution in January 2015 that were inadvertently omitted from the original Schedule 13D filing.

(2) Based on 10,727,221 shares of common stock outstanding as of August 5, 2015, as reported in the Issuer's Form 10-Q filed with the SEC on August 6, 2015.

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 (See Instructions) 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: 4,269,560 (1)	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 4,269,560 (1)	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 4,269,560 (1)		
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) 39.8%(2)		
14.	TYPE OF REPORTING PERSON (See Instructions) IN, HC		

(1) This number includes 2,260 shares of common stock directly held and solely beneficially owned by Felix J. Baker that were received in an in kind pro rata distribution from an affiliated investment fund in January 2015 without consideration. This Amendment No. 1 is being filed solely to reflect the addition of these shares and certain shares that were received by Julian C. Baker in the same pro rata distribution in January 2015 that were inadvertently omitted from the original Schedule 13D filing.

(2) Based on 10,727,221 shares of common stock outstanding as of August 5, 2015, as reported in the Issuer's Form 10-Q filed with the SEC on August 6, 2015.

Amendment No. 1 to Schedule 13D

This Amendment No. 1 to Schedule 13D amends and supplements the previously filed Schedule 13D filed by Baker Bros. Advisors LP, Baker Bros. Advisors (GP) LLC, Julian C. Baker and Felix J. Baker. Except as supplemented herein, such statements, as heretofore amended and supplemented, remain in full force and effect. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable. Each capitalized term used but not defined herein has the meaning ascribed to such term in the Schedule 13D, as amended.

Item 5. Interest in Securities of the Issuer.

Item 5 of Schedule 13D is supplemented and superseded, as the case may be, as follows:

(a) and (b) Items 7 through 11 and 13 of each of the cover pages of this Amendment No. 1 are incorporated herein by reference. Such information is based upon 10,727,221 shares of Common Stock outstanding as of August 5, 2015, as reported in the Issuer's Form 10-Q filed with the SEC on August 6, 2015.

This Amendment No. 1 is being filed solely to reflect the addition of 2,260 shares of Common Stock of the Issuer directly held and solely beneficially owned by Felix J. Baker and 2,260 shares of Common Stock of the Issuer directly held and solely beneficially owned by Julian C. Baker that were received in a pro rata distribution from an affiliated investment fund in January 2015 without consideration. Such shares of Common Stock were inadvertently omitted from the original Schedule 13D filing.

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.

August 11, 2015

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
