
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13D
Under the Securities Exchange Act of 1934

(Amendment No. 9)

Aquinox Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, par value \$0.000001 per share

(Title of Class of Securities)

03842B101

(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)

August 5, 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)

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 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 11,359,679 (1)
	8.	SHARED VOTING POWER: 0
	9.	SOLE DISPOSITIVE POWER: 11,359,679 (1)
	10.	SHARED DISPOSITIVE POWER: 0
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,359,679 (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) 48.2% (1)(2)	
14.	TYPE OF REPORTING PERSON (See Instructions) IA, PN	

(1) Includes 27,000 shares of the common stock ("Common Stock") of Aquinox Pharmaceuticals, Inc. (the "Issuer") underlying options directly held by Dr. Kelvin M. Neu, a full-time employee of Baker Bros. Advisors LP (the "Adviser") and 27,000 shares of Common Stock underlying options directly held by Dr. Richard S. Levy, a former Senior Advisor of the Adviser.

(2) Based on 23,537,368 shares of common stock outstanding as of August 1, 2019, as reported in the Issuer's Form 10-Q filed with the Securities and Exchange Commission ("SEC") on August 1, 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 11,359,679 (1)	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 11,359,679 (1)	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,359,679 (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) 48.2% (1)(2)		
14.	TYPE OF REPORTING PERSON (See Instructions) HC, OO		

(1) Includes 27,000 shares of Common Stock of the Issuer underlying options directly held by Dr. Neu, a full-time employee of the Adviser and 27,000 shares of Common Stock underlying options directly held by Dr. Levy, a former Senior Advisor of the Adviser.

(2) Based on 23,537,368 shares of common stock outstanding as of August 1, 2019, as reported in the Issuer's Form 10-Q filed with the SEC on August 1, 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: 11,361,939 (1)	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 11,361,939 (1)	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,361,939 (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) 48.2% (1)(2)		
14.	TYPE OF REPORTING PERSON (See Instructions) IN, HC		

(1) Includes 27,000 shares of Common Stock of the Issuer underlying options directly held by Dr. Neu, a full-time employee of the Adviser and 27,000 shares of Common Stock underlying options directly held by Dr. Levy, a former Senior Advisor of the Adviser.

(2) Based on 23,537,368 shares of common stock outstanding as of August 1, 2019, as reported in the Issuer's Form 10-Q filed with the SEC on August 1, 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 (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: 11,361,939 (1)	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 11,361,939 (1)	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,361,939 (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) 48.2% (1)(2)		
14.	TYPE OF REPORTING PERSON (See Instructions) IN, HC		

(1) Includes 27,000 shares of Common Stock of the Issuer underlying options directly held by Dr. Neu, a full-time employee of the Adviser and 27,000 shares of Common Stock underlying options directly held by Dr. Levy, a former Senior Advisor of the Adviser.

(2) Based on 23,537,368 shares of common stock outstanding as of August 1, 2019, as reported in the Issuer's Form 10-Q filed with the SEC on August 1, 2019.

Amendment No. 9 to Schedule 13D

This Amendment No. 9 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 and Felix J. Baker. 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 the 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.

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
860 Washington Street, 3rd Floor
New York, NY 10014

(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 is a limited partnership organized under the laws of the State of Delaware. The Adviser GP is a limited liability company 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 4. Purpose of the Transaction.

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

The information set forth in Item 6 hereof is hereby incorporated by reference into this Item 4.

This Amendment No. 9 is being filed to report the purchase of shares of the common stock of Aquinox Pharmaceuticals, Inc. (the “Issuer”) reported in Item 5(c) that resulted in a more than 1 percent change in beneficial ownership. The disclosure regarding the purchases in Item 5(c) below is incorporated herein by reference.

On May 10, 2019, Dr. Richard S. Levy resigned his role as a Senior Advisor of the Adviser. Dr. Levy continues to serve on the Board of Directors (the “Board”) of the Issuer as an independent director. Effective upon the closing of the Merger (as defined in Item 6), Dr. Levy and Dr. Kelvin M. Neu, a full-time employee of the Adviser, will resign their roles on the Board and M. Canteley Boyd, an employee of the Adviser, will join the Board.

Dr. Neu serves on the Board as representatives of the Funds. The policy of the Funds and the Adviser does not permit employees of the Adviser to receive compensation for serving as directors of the Issuer. Therefore, Dr. Neu has no pecuniary interest in any stock options to purchase common stock ("Common Stock") of the Issuer ("Stock Options"), Common Stock, or Common Stock received from the exercise of Stock Options received as directors' compensation that he may receive in the future. The Funds are instead entitled to the pecuniary interest in the Stock Options, Common Stock and Common Stock received from the exercise of Stock Options received as directors' compensation that he may receive in the future. The same policy will apply with regard to any compensation for serving as a director of the Issuer received by Ms. Boyd when she joins the Issuer's Board.

The Adviser has voting and investment power over any Stock Options, Common Stock and Common Stock underlying such Stock Options and Common Stock received from the exercise of Stock Options by Dr. Neu and Dr. Levy received as directors' compensation during their period of employment for the Adviser that they may receive in the future. 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 any of the Stock Options, Common Stock, Common Stock received from the exercise of Stock Options and Common Stock underlying such Stock Options granted to Dr. Neu and Dr. Levy as directors compensation that they may receive in the future.

The Funds hold securities of the Issuer for investment purposes. The Reporting Persons or their affiliates may, subject to the limitations described Item 6 hereof, purchase or dispose of additional securities of the Issuer or purchase 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 and management of the Issuer, the availability and nature of opportunities to dispose of Common Stock 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 Item 4 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 may purchase or dispose of 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 Stock Options, or otherwise) or may, subject to the limitations described Item 6 hereof, 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.

Item 5 of this Schedule 13D is hereby amended and restated in its entirety as follows:

(a) and (b) Items 7 through 11 and 13 of each of the cover pages of this Amendment No. 9 are incorporated herein by reference. Set forth below is the aggregate number and percentage of shares of Common Stock directly held, as of the date hereof, by each of the following based upon 23,537,368 shares of Common Stock outstanding as of August 1, 2019 as reported in the Issuer's Form 10-Q filed with the SEC on August 1, 2019. Such percentage figures were calculated in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

Holder	Number of Shares of Common Stock we own or have to right to acquire within 60 days	Percent of Class Outstanding
667, L.P.	1,200,520	5.1%
Baker Brothers Life Sciences, L.P.	10,105,159	42.9%
Total	11,305,679	48.0%

As a result of their previous service on the Board, Dr. Neu and Dr. Levy each hold 12,000 Stock Options with an exercise price of \$13.74 per share expiring May 7, 2027 and 15,000 Stock Options with an exercise price of \$13.10 expiring May 6, 2028.

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.

(c) The following transactions in the Common Stock of the Issuer were effected by the Funds noted below during the sixty days preceding the filing of this statement. All transactions were effected in the over-the-counter market directly with a broker-dealer. Except as disclosed herein, none of the Reporting Persons or their affiliates has effected any other transactions in securities of the Issuer during the past 60 days.

Name	Date	Number of Shares	Transaction	Price/Share	Footnotes
667, L.P.	8/6/2019	855	Purchase	2.8328	1
Baker Brothers Life Sciences, L.P.	8/6/2019	9,445	Purchase	2.8328	1
667, L.P.	8/6/2019	5,932	Purchase	2.8469	2
Baker Brothers Life Sciences, L.P.	8/6/2019	65,568	Purchase	2.8469	2
667, L.P.	8/7/2019	531	Purchase	2.9576	3
Baker Brothers Life Sciences, L.P.	8/7/2019	5,869	Purchase	2.9576	3
667, L.P.	8/7/2019	18,943	Purchase	3.0244	4
Baker Brothers Life Sciences, L.P.	8/7/2019	209,382	Purchase	3.0244	4
667, L.P.	8/7/2019	4,564	Purchase	3.1529	5
Baker Brothers Life Sciences, L.P.	8/7/2019	50,436	Purchase	3.1529	5

- (1) The reported price is a weighted average price. These shares were traded in multiple transactions at prices ranging from \$2.76 to \$2.90. The Reporting Persons undertake to provide the staff of the Securities and Exchange Commission (the "Staff"), upon request, full information regarding the number of shares traded at each separate price within the ranges set forth in this footnote.
 - (2) The reported price is a weighted average price. These shares were traded in multiple transactions at prices ranging from \$2.79 to \$2.90. The Reporting Persons undertake to provide the Staff, upon request, full information regarding the number of shares traded at each separate price within the ranges set forth in this footnote.
 - (3) The reported price is a weighted average price. These shares were traded in multiple transactions at prices ranging from \$2.955 to \$2.960. The Reporting Persons undertake to provide the Staff, upon request, full information regarding the number of shares traded at each separate price within the ranges set forth in this footnote.
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- (4) The reported price is a weighted average price. These shares were traded in multiple transactions at prices ranging from \$2.94 to \$3.26. The Reporting Persons undertake to provide the Staff, upon request, full information regarding the number of shares traded at each separate price within the ranges set forth in this footnote.
- (5) The reported price is a weighted average price. These shares were traded in multiple transactions at prices ranging from \$3.03 to \$3.23. The Reporting Persons undertake to provide the Staff, upon request, full information regarding the number of shares traded at each separate price within the ranges set forth in this footnote.

(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.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to the Securities.

On August 5, 2019, the Issuer entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Neoleukin Therapeutics, Inc. (“Neoleukin”), and Apollo Sub Inc., a wholly owned subsidiary of the Issuer (“Merger Sub”). Upon the terms and subject to the conditions set forth in the Merger Agreement, at the closing, Merger Sub will merge with and into the Neoleukin, with Neoleukin surviving as a wholly owned subsidiary of the Issuer (the “Merger”).

Pursuant to the Merger Agreement, at the effective time of the Merger (the “Effective Time”), the Issuer will issue to the former holders of Neoleukin capital stock (i) shares of Common Stock representing approximately 19.5% of the Issuer’s issued and outstanding shares of Common Stock (calculated prior to the issuance of those new shares of Common Stock) and (ii) shares of a newly created Issuer non-voting convertible preferred stock of the Issuer that, following approval by stockholders of the Issuer, will be convertible (the “Preferred Stock Conversion”) into a number of additional shares of Common Stock such that following such conversion, the former holders of Neoleukin capital stock will, together with the shares of Common Stock issued at the Effective Time, hold in aggregate approximately 38.58% of the fully diluted outstanding shares of Common Stock of the Issuer (taking into account currently outstanding Issuer stock options and a portion of the currently granted Issuer stock options that may be in the money at closing, but excluding equity incentive awards covering shares of Common Stock that are expected to be granted to continuing employees, including members of management, of Neoleukin). Any outstanding shares of Neoleukin common stock that are unvested or subject to repurchase or forfeiture restrictions will become fully vested and any repurchase or forfeiture restrictions thereon will lapse immediately prior to the Effective Time.

On August 5, 2019, concurrently with the execution of the Merger Agreement, Felix J. Baker, Julian C. Baker and the Funds entered into a stockholder support agreement with the Issuer and Neoleukin (each, a "Voting Agreement") pursuant to which, among other things and subject to the terms and conditions therein, such stockholders agreed, in their capacities as holders of shares of the Issuer, to vote (or consent pursuant to an action by written consent of the stockholders, if applicable) all shares of the Issuer beneficially owned by such stockholders in favor of the approval of the Preferred Stock Conversion and the amendment of Issuer's restated certificate of incorporation to increase the number of authorized shares of Common Stock to an amount as determined by the Board following the closing.

On August 5, 2019, concurrently with the execution of the Merger Agreement and Voting Agreement, Felix J. Baker, Julian C. Baker and the Funds entered into a lock-up agreement with the Issuer and Neoleukin ("Lock-Up Agreement") pursuant to which they accepted certain restrictions on transfers of any shares of Common Stock for up to 130 days following the Effective Time.

The foregoing descriptions of the Merger Agreement, Voting Agreement and Lock-Up Agreement do not purport to be complete and are qualified in their entirety by reference to the full texts of the Merger Agreement, the form of Voting Agreement and form of Lock-Up Agreement, which are incorporated by reference as Exhibits 99.1, 99.2 and 99.3, respectively, and are incorporated herein by reference.

Item 7. Material to be Filed as Exhibits.

Exhibit	Description
99.1	Merger Agreement, dated August 5, 2019, by and among the Issuer, Apollo Sub, Inc. and Neoleukin Therapeutics, Inc. (incorporated by reference to Exhibit 2.1 to the Issuer's Current Report on Form 8-K, filed with the SEC on August 6, 2019).
99.2	Form of Support Agreement, dated August 5, 2019, by and among the Issuer, Neoleukin Therapeutics, Inc. and the undersigned stockholder (incorporated by reference to Exhibit 2.2 to the Issuer's Current Report on Form 8-K, filed with the SEC on August 6, 2019).
99.3	Form of Lock-Up Agreement, dated August 5, 2019, by and among the Issuer, Apollo Sub, Inc., Neoleukin Therapeutics, Inc. and the undersigned stockholder (incorporated by reference to Exhibit 2.3 to the Issuer's Current Report on Form 8-K, filed with the SEC on August 6, 2019).

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 7, 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
