

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No.)

CORTEX PHARMACEUTICALS, INC.

(Name of Issuer)

COMMON STOCK, \$0.001 par value per share
(Title of Class of Securities)

220524300
(CUSIP Number)

August 10, 2012
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
 Rule 13d-1(c)
 Rule 13d-1(d)

* 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 the disclosures provided in a prior cover page.

The information required in 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)	
	Origin Ventures II, L.P. (20-1849450)	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 24,200,507 (1)
	6	SHARED VOTING POWER None
	7	SOLE DISPOSITIVE POWER 24,200,507 (1)
	8	SHARED DISPOSITIVE POWER None
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 24,200,507 shares of Common Stock (1)	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 16.8% (2)	
12	TYPE OF REPORTING PERSON (See Instructions) PN	

- (1) Origin Ventures II, L.P. ("OVII") has sole voting and dispositive control over 24,200,507 shares of common stock ("Common Stock") of Cortex Pharmaceuticals, Inc. (the "Issuer"), except that Origin Ventures II Management, LLC ("OVIIM"), the general partner of OVII, and Bruce N. Barron ("Barron") and Steven N. Miller ("Miller"), managing directors of OVIIM, may be deemed to share the right to direct the voting and dispositive control over such stock.
- (2) This percentage is calculated based upon 144,041,558 shares of the Issuer's Common Stock issued and outstanding as of August 13, 2012, as disclosed in the Quarterly Report on Form 10-Q of the Issuer for the quarter ended June 30, 2012.

1	NAMES OF REPORTING PERSONS/ I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Origin Ventures II Management, LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER
	6	SHARED VOTING POWER 24,200,507 (3)
	7	SOLE DISPOSITIVE POWER
	8	SHARED DISPOSITIVE POWER 24,200,507 (3)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 24,200,507 shares of Common Stock (3)	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 16.8% (2)	
12	TYPE OF REPORTING PERSON (See Instructions) CO	

(3) OVIIM shares voting and dispositive control over the 24,200,507 shares of Common Stock beneficially owned by OVII.

1	NAMES OF REPORTING PERSONS/ I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Bruce N. Barron	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER
	6	SHARED VOTING POWER 24,200,507 (4)
	7	SOLE DISPOSITIVE POWER
	8	SHARED DISPOSITIVE POWER 24,200,507 (4)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 24,200,507 shares of Common Stock (4)	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 16.8% (2)	
12	TYPE OF REPORTING PERSON (See Instructions) CO	

(4) Barron shares voting and dispositive control over the 24,200,507 shares of Common Stock beneficially owned by OVII.

1	NAMES OF REPORTING PERSONS/ I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Steven N. Miller	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER
	6	SHARED VOTING POWER 24,200,507 (5)
	7	SOLE DISPOSITIVE POWER
	8	SHARED DISPOSITIVE POWER 24,200,507 (5)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 24,200,507 shares of Common Stock (5)	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 16.8% (2)	
12	TYPE OF REPORTING PERSON (See Instructions) CO	

(5) Miller shares voting and dispositive control over the 24,200,507 shares of Common Stock beneficially owned by OVIL.

Item 1.

- (a) Name of Issuer:
Cortex Pharmaceuticals, Inc.
- (b) Address of Issuer's Principal Executive Offices:
7700 Irvine Center Drive
Suite 750
Irvine, CA 92618

Item 2.

- (a) Name of Person(s) Filing:
Origin Ventures II, L.P. ("OVII")
Origin Ventures II Management, LLC ("OVIIM")
Bruce N. Barron ("Barron")
Steven N. Miller ("Miller")
- (b) Address of Principal Business Office(s):
1033 Skokie Blvd., Suite 430
Northbrook, IL, 60062.
- (c) Citizenship:
- | | | |
|--------------|--------|---------------|
| Entities: | OVII | Delaware |
| | OVIIM | Delaware |
| Individuals: | Barron | United States |
| | Miller | United States |
- (d) Title of Class of Securities:
Common Stock
- (e) CUSIP Number:
220524300

Item 3.

Not Applicable.

Item 4. Ownership.

(a) Amount beneficially owned:

As of the date of this statement, OVII beneficially owned 24,200,507 shares of common stock of the Issuer and OVIIM, as the general partner of OVIL, and Barron and Miller as the managing directors of OVIIM, may be deemed to beneficially own 24,200,507 shares of common stock of the Issuer held by OVIL.

(b) Percent of class:

16.8%

(c) Number of shares as to which the person has:

The information in items 5 through 9 on the cover of this statement is hereby incorporated by reference.

Item 5. Ownership of Five Percent or Less of a Class.

Not applicable.

Item 6. Ownership of More Than Five Percent on Behalf of Another Person.

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company.

Not applicable.

Item 8. Identification and Classification of Members of the Group.

Not applicable.

Item 9. Notice of Dissolution of Group.

Not applicable.

Item 10. Certification.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction have that purpose or effect.

EXHIBITS:

A: Joint Filing Statement

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.

Dated: September 19, 2012

Origin Ventures II, L.P.

By: Origin Ventures II Management, LLC

By: /s/ Bruce Barron

Bruce Barron, Managing Director

Dated: September 19, 2012

Origin Ventures II Management, LLC

By: /s/ Bruce Barron

Bruce Barron, Managing Director

Dated: September 19, 2012

By: /s/ Bruce Barron

Bruce Barron

Dated: September 19, 2012

By: /s/ Steven Miller

Steven Miller

EXHIBIT A**JOINT FILING AGREEMENT**

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the undersigned agrees that (i) this statement on Schedule 13G has been adopted and filed on behalf of each of them and (ii) all future amendments to such statement on Schedule 13G will, unless written notice to the contrary is delivered as described below, be jointly filed on behalf of each of them. This agreement may be terminated with respect to the obligations to jointly file future amendments to such statement on Schedule 13G as to any of the undersigned upon such person giving written notice thereof to each of the other persons signatory hereto, at the principal office thereof.

Dated: September 19, 2012

Origin Ventures II, L.P.

By: Origin Ventures II Management, LLC

By: /s/ Bruce Barron

Bruce Barron, Managing Director

Dated: September 19, 2012

Origin Ventures II Management, LLC

By: /s/ Bruce Barron

Bruce Barron, Managing Director

Dated: September 19, 2012

By: /s/ Bruce Barron

Bruce Barron

Dated: September 19, 2012

By: /s/ Steven Miller

Steven Miller