

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, par value \$0.001 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 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 (the "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).

Page 2 of 7

- (1) Names of Reporting Persons
I.R.S. Identification Nos. of above persons (entities only)

Illinois Emerging Technologies Fund, LP (20-0632094)
- (2) Check the Appropriate Box if a Member of a Group (a)

(b)
- (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 20,334,546

(6) Shared Voting Power

(7) Sole Dispositive Power 20,334,546

(8) Shared Dispositive Power

- (9) Aggregate Amount Beneficially Owned by Each Reporting Person 20,334,546
- (10) Check if the Aggregate Amount in Row (9) Excludes Certain Shares
(See Instructions) []
- (11) Percent of Class Represented by Amount in Row (9) 14.12%
- (12) Type of reporting person (See Instructions) PN

Page 3 of 7

- (1) Names of Reporting Persons
I.R.S. Identification Nos. of above persons (entities only)

Illinois Ventures GP, LLC (52-2438345)
- (2) Check the Appropriate Box if a Member of a Group (a) []

(b) []
- (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 20,334,546*
- (6) Shared Voting Power
- (7) Sole Dispositive Power 20,334,546*
- (8) Shared Dispositive Power

- (9) Aggregate Amount Beneficially Owned by Each Reporting Person 20,334,546*
- (10) Check if the Aggregate Amount in Row (9) Excludes Certain Shares
(See Instructions) []
- (11) Percent of Class Represented by Amount in Row (9) 14.12%
- (12) Type of reporting person (See Instructions) OO

* Represents shares of common stock that are beneficially owned by Illinois Emerging Technologies Fund, LP, of which the Reporting Person is the general partner.

Page 4 of 7

Item 1.

- (a) Name of Issuer:
Cortex Pharmaceuticals, Inc.
- (b) Address of Issuer's Principal Executive Offices:
15241 Barranca Parkway, Irvine, California 92618.

Item 2.

- (a) Name of Person Filing:
Illinois Emerging Technologies Fund, LP ("IETF").
IllinoisVentures GP, LLC, the sole general partner of IETF ("GP").
IETF and GP are sometimes hereinafter collectively referred to as
the "Reporting Persons."

The Reporting Persons have entered into a Joint Filing Agreement,
dated as of the date hereof, a copy of which is filed with this
Schedule 13G as Exhibit 1 (which is incorporated herein by
reference), pursuant to which the Reporting Persons have agreed to
file this statement jointly in accordance with the provisions of
Rule 13d-1(k) under the Act.

- (b) Address of Principal Business Office or, if none, Residence:

Illinois Emerging Technologies Fund, LP
20 North Wacker Drive, Suite 1201
Chicago, IL 60606

IllinoisVentures GP, LLC
20 North Wacker Drive, Suite 1201
Chicago, IL 60606

- (c) Citizenship:
IETF is a Delaware limited partnership.
GP is a Delaware limited liability company.

- (d) Title of Class of Securities:
Common stock, par value \$0.001 per share, of the Issuer
("Common Stock")

- (e) CUSIP Number:
220524300

Item 3. If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b) or
(c) check whether the person filing is:

- (a) [] Broker or dealer registered under section 15 of the
Act (15 U.S.C. 78o).
(b) [] Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
(c) [] Insurance company as defined in section 3(a)(19) of the Act
(15 U.S.C. 78c).
(d) [] Investment company registered under section 8 of the Investment
Company Act of 1940 (15 U.S.C. 80a-8).
(e) [] An investment adviser in accordance with Section
240.13d-1(b)(1)(ii)(E);
(f) [] An employee benefit plan or endowment fund in accordance with
Section 240.13d-1(b)(1)(ii)(F);

Page 5 of 7

- (g) [] A parent holding company or control person in accordance
with Section 240.13d-1(b)(1)(ii)(G);
(h) [] A savings associations as defined in Section 3(b) of
the Federal Deposit Insurance Act (12 U.S.C. 1813);
(i) [] A church plan that is excluded from the definition of an
investment company under section 3(c)(14) of the Investment
Company Act of 1940 (15 U.S.C. 80a-3);
(j) [] Group, in accordance with Section 240.13d-1(b)(1)(ii)(J).

Item 4. Ownership:

- (a) Amount beneficially owned:
As of the date of this statement, IETF beneficially owned 20,334,546
shares of Common Stock and GP, as the general partner of IETF, may be
deemed to beneficially own 20,334,546 shares of Common Stock held

by IETF.

As permitted by Rule 13d-4 under the Act, the filing of this statement shall not be construed as an admission any Reporting Person is, for the purposes of Section 13(d) or 13(g) of the Act or any other purpose, the beneficial owner of any securities covered by this statement.

(b) Percent of class:
14.12%

(c) 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. Certifications.

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 having that purpose or effect.

Page 6 of 7

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.

Date: August 20, 2012

ILLINOIS EMERGING TECHNOLOGIES FUND, LP

By: IllinoisVentures GP, LLC, its general partner

By: /s/ John E. Banta

Name: John E. Banta
Title: Managing Principal

ILLINOISVENTURES GP, LLC

By: /s/ John E. Banta

Name: John E. Banta
Title: Managing Principal

Page 7 of 7

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: August 20, 2012

ILLINOIS EMERGING TECHNOLOGIES FUND, LP

By: IllinoisVentures GP, LLC, its general partner

By: /s/ John E. Banta

Name: John E. Banta
Title: Managing Principal

ILLINOISVENTURES GP, LLC

By:/s/ John E. Banta

Name: John E. Banta
Title:
Managing Principal