UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 8-K

Current Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported)

May 13, 2005

CORTEX PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 1-16467 (Commission File Number)

33-0303583 (I.R.S Employer Identification No.)

15241 Barranca Parkway

Irvine, California (Address of principal executive offices)

92618 (Zip Code)

Registrant s telephone number, including area code: (949) 727-3157

N/A

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- " Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- " Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- " Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- " Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02. Results of Operations and Financial Condition.

On May 13, 2005, Cortex Pharmaceuticals, Inc. issued a press release to report its financial results. The press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

All of the foregoing information, including Exhibit 99.1, is being furnished under Item 2.02 and shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such a filing.

Item 9.01. Financial Statements and Exhibits.

- (a) Financial Statements of Businesses Acquired: None.
- (b) Pro Forma Financial Information: None.
- (c) Exhibits.

Exhibit Number	Description
99.1	Press release of Cortex Pharmaceuticals, Inc. dated May 13, 2005.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

CORTEX PHARMACEUTICALS, INC.

Date: May 13, 2005

By: /s/ Maria S. Messinger

Maria S. Messinger

Vice President, Chief Financial Officer

and Corporate Secretary

EXHIBIT INDEX

Exhibit Number	Description	Sequential Page No.
99 1	Press release of Cortex Pharmaceuticals Inc. dated May 13, 2005	