

[Cortex Letter Head]

May 11, 2015

VIA EDGAR

Jeffrey P. Riedler  
Assistant Director  
United States Securities and Exchange Commission  
100 F Street, N.E.  
Washington, D.C. 20549

Re: **Cortex Pharmaceuticals, Inc.**  
**Preliminary Information Statement on Schedule 14C**  
**Filed April 23, 2015**  
**File No. 001-16467**

Dear Mr. Riedler:

Cortex Pharmaceuticals, Inc. (the “Company”) has considered carefully the comment in your letter dated April 30, 2015, and on behalf of the Company, I respectfully provide the Company’s response to your comment below. For your convenience, the text of the comment is reproduced below before the response.

**Summary of Corporate Actions, page 1**

1. Please amend this disclosure to state, if true, that you have no plans, arrangements, agreements or understandings for the newly authorized but unissued common shares resulting from the amendment to your Certificate of Incorporation. If you do have any such plans, arrangements, etc. for these shares, please amend your disclosure to describe them.

***Response:***

The Company is amending its Preliminary 14C to include the following insert, which will appear after the first paragraph in the section entitled “Summary of Corporate Actions” on page 1 of the document:

The Company intends to use the newly authorized shares of common stock to provide a sufficient number of common shares for the Company’s current and expected future equity-based commitments and transactions, including:

- (i) the conversion into common stock of the Company’s Series G 1.5% Convertible Preferred Shares (issued in March and April 2014);
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- (ii) the conversion into common stock of the Company's Convertible Notes issued from November, 2014 through February, 2015; and the exercise of warrants issued in connection with that transaction;
- (iii) the exercise of other currently outstanding stock options and warrants; and
- (iv) the future issuances of common stock (or securities convertible into or exercisable for shares of common stock): (a) pursuant to the Plan; (b) in satisfaction of certain trade accounts payable and other liabilities; and (c) to fund the Company's business operations, including research and development activities.

Although the Company does not currently have any formal arrangements, agreements or understandings with respect to the authorized but unissued shares of common stock resulting from the amendment (other than as specified herein), the Company is actively seeking to raise additional working capital, and anticipates entering into agreements to issue additional shares of common stock and/or securities convertible into or exercisable for common stock in one or more equity or equity-linked financing transactions in 2015 and likely thereafter.

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In connection with the response to your comment set forth above, the Company acknowledges that:

- The Company is responsible for the adequacy and accuracy of the disclosure in its filings;
- Staff comments or changes to disclosure in response to Staff comments do not foreclose the Securities and Exchange Commission from taking any action with respect to the filing; and
- The Company may not assert Staff comments as a defense in any proceeding initiated by the Securities and Exchange Commission or any person under the federal securities laws of the United States.

If you have any questions about any of the Company's responses to your comments or require further explanation, please do not hesitate to contact Jeff E. Margolis, the Company's Director, Vice President, Secretary and Treasurer, at (917) 834-7206 or Robert N. Weingarten, the Company's Director, Vice President and Chief Financial Officer, at (201) 444-4947.

Sincerely,

*/s/ Robert N. Weingarten*

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Robert N. Weingarten  
Vice President, Chief Financial Officer and Director

Cc: Arnold S. Lippa (Cortex)  
Jeff E. Margolis (Cortex)  
James Fischer, Esq. (Drinker Biddle & Reath LLP)  
W. Eric Marr, Esq. (Drinker Biddle & Reath LLP)