



DIVISION OF
CORPORATION FINANCE

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

January 11, 2011

Dr. Mark Varney
President and Chief Executive Officer
Cortex Pharmaceuticals, Inc.
15241 Barranca Parkway
Irvine, CA 92618

Re: Cortex Pharmaceuticals, Inc.
Form 10-K for the Year Ended December 31, 2009
File No. 001-16467

Dear Dr. Varney:

We have completed our review of the above filing and have no further comments at this time.

Sincerely,

Gus Rodriguez
Accounting Branch Chief