



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 4546

October 18, 2016

Neil K. Warma
Chief Executive Officer
Opexa Therapeutics, Inc.
2635 Technology Forest Blvd.
The Woodlands, Texas 77381

Re: Opexa Therapeutics, Inc.
Form 10-K for Fiscal Year Ended December 31, 2015
Response Dated October 7, 2016
File No. 001-33004

Dear Mr. Warma:

We have reviewed your October 7, 2016 response to our comment letter and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Business, page 2

Option and License Agreement with Merck Serono, page 6

1. We note your response to Comments 1 and 2 of our letter dated September 27, 2016. Please provide us with the description of the License Agreement with Baylor College of Medicine which you intend to include in your next Quarterly Report on Form 10-Q.

Neil K. Warma
Opexa Therapeutics, Inc.
October 18, 2016
Page 2

Please contact Michael Gershon at (202) 551-6598 or Michael Clampitt at (202) 551-3434 with any questions.

Sincerely,

p.p./s/ Michael Clampitt

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance

cc: Mike Hird, Esq.