



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

August 21, 2017

David P. Schenkein, M.D.
President and Chief Executive Officer
Agius Pharmaceuticals, Inc.
88 Sidney Street
Cambridge, MA 02139

**Re: Agius Pharmaceuticals, Inc.
Form 10-K
Filed February 16, 2017
File No. 001-36014**

Dear Dr. Schenkein:

We have completed our review of your filing. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Sincerely,

/s/ Mary Beth Breslin for

Suzanne Hayes
Assistant Director
Office of Healthcare & Insurance