



DIVISION OF
CORPORATION FINANCE

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

March 5, 2018

Roger D. Tung
President and Chief Executive Officer
Concert Pharmaceuticals, Inc.
99 Hayden Avenue, Suite 500
Lexington, MA 02421

Re: Concert Pharmaceuticals, Inc.
Registration Statement on Form S-3
Filed March 1, 2018
File No. 333-223334

Dear Dr. Tung:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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.

Please contact Irene Paik at 202-551-6553 with any questions.

Division of Corporation Finance
Office of Healthcare & Insurance

cc: John M. Mutkoski - Goodwin Procter LLP