

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

March 8, 2022

Roger D. Tung, Ph.D.
President and Chief Executive Officer
Concert Pharmaceuticals, Inc.
65 Hayden Avenue, Suite 3000N
Lexington, MA 02421

Re: Concert Pharmaceuticals, Inc.
Registration Statement on Form S-3
Filed March 3, 2022
File No. 333-263247

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 Chris Edwards at 202-551-6761 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Sarah Ashfaq, Esq.