

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

July 20, 2022

Nancy Simonian, M.D. Chief Executive Officer and President Syros Pharmaceuticals, Inc. 35 CambridgePark Drive, 4th Floor Cambridge, Massachusetts 02140

> Re: Syros Pharmaceuticals, Inc. Registration Statement on Form S-4 Filed July 18, 2022 File No. 333-266184

Dear Dr. Simonian:

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 Conlon Danberg at 202-551-4466 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Stephanie Leopold, Esq.