

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

April 7, 2023

Gerald Quirk Chief Legal Officer Syros Pharmaceuticals, Inc. 35 Cambridge Park Drive, 4th Floor Cambridge, MA 02140

Re: Syros Pharmaceuticals, Inc.
Registration Statement on Form S-3
Filed April 6, 2023
File No. 333-271160

Dear Gerald Quirk:

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 Jimmy McNamara at 202-551-7349 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Cynthia T. Mazareas