Syros Pharmaceuticals, Inc. 35 CambridgePark Drive, 4th Floor Cambridge, MA 02140

April 26, 2023

VIA EDGAR SUBMISSION

U.S. Securities and Exchange Commission Division of Corporation Finance, Office of Life Sciences 100 F Street, N.E. Washington, D.C. 20549 Attention: James McNamara

Re: Syros Pharmaceuticals, Inc.
Registration Statement on Form S-3
File No. 333-271160
Request for Acceleration

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Syros Pharmaceuticals, Inc. hereby requests acceleration of the effective date of its Registration Statement on Form S-3 (File No. 333-271160), so that it may become effective at 4:00 p.m., Eastern time, on April 28, 2023, or as soon as practicable thereafter, or at such later time as the Registrant or its counsel may orally request via telephone call to the staff.

Very truly yours,

SYROS PHARMACEUTICALS, INC.

By: /s/ Gerald Quirk

Name: Gerald E. Quirk Title: Chief Legal Officer