

December 20, 2022

VIA EDGAR SUBMISSION

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, DC 20549

Attention: Lauren Hamill
Tim Buchmiller

Re: Syros Pharmaceuticals, Inc.
Registration Statement on Form S-3
File No. 333-267888
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. 333-267888), so that it may become effective at 4:00 p.m., Eastern Time, on December 22, 2022, or as soon as practicable thereafter.

Very truly yours,

SYROS PHARMACEUTICALS, INC.

By: /s/ Gerald E. Quirk

Name: Gerald E. Quirk

Title: Chief Legal Officer