



DIVISION OF
CORPORATION FINANCE

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

August 14, 2018

Joseph J. Ferra, Jr.
Chief Financial Officer
Syros Pharmaceuticals, Inc.
6200 Memorial Drive, Suite 300
Cambridge, MA 02139

Re: Syros Pharmaceuticals, Inc.
Form 10-K for the fiscal year ended December 31, 2017
Filed March 12, 2018
Form 10-Q for the quarterly period ended June 30, 2018
Filed August 7, 2018
File No. 001-37813

Dear Mr. Ferra:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response and any amendment you may file in response to these comments, we may have additional comments.

Form 10-K for the fiscal year ended December 31, 2017

Item 9A. Controls and Procedures

Internal Control Over Financial Reporting, page 139

1. You disclose that you have not included a report of management's assessment regarding internal control over financial reporting or an attestation report of the company's registered public accounting firm due to a transition period established by rules of the SEC for newly public companies. Please note that although you are not required to have an attestation report done by your independent public accounting firm, you are required to include a report of management's assessment regarding internal control over financial

Joseph J. Ferra, Jr.
Syros Pharmaceuticals, Inc.
August 14, 2018
Page 2

reporting in your Form 10-K due to the passage of time since your initial registration statement and the number of Form 10-Ks filed since that initial registration statement. Please revise by amending your Form 10-K for the year ended December 31, 2017 to include this report as required by Item 308 of Regulation S-K.

Form 10-Q for the quarterly period ended June 30, 2018

Item 6. Exhibits, page 32

2. Please amend your filing to provide new certifications filed as Exhibits 31.1 and 31.2 to conform exactly to that provided in Item 601(b)(31) of Regulation S-K as it relates to internal controls over financial reporting (ICFR). In this regard, the introductory sentence in paragraph 4 should refer to ICFR as defined in the Exchange Act and certification 4(b) should discuss your obligations related to ICFR.

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.

You may contact Vanessa Robertson at 202-551-3649 or Kevin Vaughn at 202-551-3494 if you have any questions.

Sincerely,

Division of Corporation Finance
Office of Healthcare & Insurance