



DIVISION OF
CORPORATION FINANCE

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

September 24, 2020

Sanjay S. Shukla, M.D., M.S.
President and Chief Executive Officer
aTYR Pharma, Inc.
3545 John Hopkins Court, Suite 250
San Diego, CA 92121

Re: aTYR Pharma, Inc.
Registration Statement on Form S-1
Filed September 18, 2020
File No. 333-248905

Dear Dr. Shukla:

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 Alan Campbell at 202-551-4224 with any questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Sean M. Clayton