January 19, 2021 Mark J. Rosenblum Chief Financial Officer Salarius Pharmaceuticals, Inc. 2450 Holcombe Blvd., Suite X Houston, TX 77021 Re: Salarius Pharmaceuticals, Inc. Registration Statement on Form S-3 Filed January 15, 2021 File No. 333-252169 Dear Mr. Rosenblum: 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 Tim Buchmiller at (202) 551-3635 with any questions.

Division of Corporation Finance Office of Life Sciences cc: Andrew L. Strong, Esq.

Sincerely,