

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

DIVISION OF CORPORATION FINANCE

January 28, 2021

Anish Bhatnagar, M.D. Chief Executive Officer Soleno Therapeutics, Inc. 203 Redwood Shores Parkway, Suite 500 Redwood City, CA 94065

> Re: Soleno Therapeutics, Inc. Registration Statement on Form S-3 Filed January 14, 2021 File No. 333-252108

Dear Dr. Bhatnagar:

We have limited our review of your registration statement to those issues we have addressed in our comment.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this comment, we may have additional comments.

Registration Statement on Form S-3 filed January 14, 2021

Cover Page

1. It appears that you are relying on General Instruction I.B.6 of Form S-3. If true, please revise your prospectus cover page to disclose the calculation of the aggregate market value of your outstanding voting and nonvoting common equity and the amount of all securities offered pursuant to General Instruction I.B.6 during the prior 12 calendar month period that ends on, and includes, the date of the prospectus. Refer to Instruction 7 to General Instruction I.B.6. Otherwise, please provide us your analysis demonstrating your eligibility to use Form S-3.

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. Anish Bhatnagar, M.D. Soleno Therapeutics, Inc. January 28, 2021 Page 2

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Jeffrey Gabor at 202-551-2544 or Laura Crotty at 202-551-7614 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Jesse Schumaker, Esq.