

DIVISION OF CORPORATION FINANCE

June 17, 2020

Vincent J. Angotti Chief Executive Officer Acelrx Pharmaceuticals Inc. 351 Galveston Drive Redwood City, CA 94063

> Re: Acelrx Pharmaceuticals Inc. Registration Statement on Form S-3 Filed June 12, 2020 File No. 333-239156

Dear Mr. Angotti:

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 Paul Fischer at 202-551-3415 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: David Ambler, Esq.