

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

November 21, 2022

Vincent J. Angotti Chief Executive Officer AcelRx Pharmaceuticals Inc. 25821 Industrial Boulevard, Suite 400 Hayward, CA 94545

Re: AcelRx Pharmaceuticals Inc.
Registration Statement on Form S-3
Filed November 15, 2022
File No. 333-268396

Dear Vincent J. 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 Christine Westbrook at 202-551-5019 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences