

November 21, 2022

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

Pharmaceuticals Inc.
Statement on Form S-3
2022

Re: AcelRx
Registration
Filed November 15,
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