August 7, 2023

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

Re: AcelRx

Pharmaceuticals, Inc. Statement on Form S-3

2023

Registration Filed August 2,

File No. 333-273589

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.

Howes at 202-551-3370 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc:

John T. McKenna, Esq.

Please contact Tyler