November 29, 2023

Vincent J. Angotti Chief Executive Officer AcelRx Pharmaceuticals, Inc. 1850 Gateway Drive, Suite 175 San Mateo, CA 94404

Re: AcelRx

Pharmaceuticals, Inc.

Registration

Statement on Form S-3

Filed November 22,

2023

File No. 333-275721

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 Daniel

Crawford at 202-551-7767 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc: John T. McKenna, Esq.