



DIVISION OF
CORPORATION FINANCE

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

August 16, 2018

Evert B. Schimmelpennink
President and Chief Executive Officer
Pfenex Inc.
10790 Roselle Street
San Diego, California 92121

Re: Pfenex Inc.
Registration Statement on Form S-3
Filed August 9, 2018
File No. 333-226727

Dear Mr. Schimmelpennink:

We have limited our review of your registration statement to those issues we have addressed in our comment.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this comment, we may have additional comments.

Registration Statement on Form S-3

General

1. We note that you have a pending request for confidential treatment. Please be advised that we will not be in a position to declare your registration statement effective until we resolve any issues concerning the confidential treatment request.

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.

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Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Ada D. Sarmento at 202-551-3798 or Mary Beth Breslin at 202-551-3625 with any questions.

Sincerely,

Division of Corporation Finance
Office of Healthcare & Insurance

cc: Daniel R. Koeppen, Esq.