



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

August 30, 2017

Via E-mail
Wes Brazell
Chief Financial Officer
TearLab Corporation
9980 Huennekens St., Suite 100
San Diego, CA 92121

**Re: TearLab Corporation
Registration Statement on Form S-1
Filed August 21, 2017
File No. 333-220080**

Dear Mr. Brazell:

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 Heather Percival at (202) 551-3498 with any questions.

Sincerely,

/s/ Heather Percival for

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Daniel Horwood
Wilson Sonsini Goodrich & Rosati