



DIVISION OF  
CORPORATION FINANCE

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

August 14, 2017

Thomas E. Hughes  
President and Chief Executive Officer  
Zafgen, Inc.  
175 Portland Street, 4th Floor  
Boston, Massachusetts 02114

**Re: Zafgen, Inc.**  
**Registration Statement on Form S-3**  
**Filed August 9, 2017**  
**File No. 333-219834**

Dear Dr. Hughes:

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 Irene Paik at (202) 551-6553 with any questions.

Division of Corporation Finance  
Office of Healthcare & Insurance

cc: Laurie A. Burlingame - Goodwin Procter LLP