

June 16, 2014

Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: Zafgen, Inc.
Registration Statement on Form S-1 (SEC File No. 333-195391)

Ladies and Gentlemen:

In connection with the above-referenced Registration Statement, and pursuant to Rule 461 under the Securities Act of 1933, as amended (the "Act"), we hereby join in the request of Zafgen, Inc. that the effective date of the Registration Statement be accelerated so that it will be declared effective at 5:00 p.m., Eastern time, on June 18, 2014 or as soon thereafter as practicable.

Pursuant to Rule 460 under the Act, please be advised that we have distributed approximately 1,315 copies of the Preliminary Prospectus dated June 5, 2014 (the "Preliminary Prospectus") through the date hereof, to underwriters, dealers, institutions and others.

In connection with the Preliminary Prospectus distribution for the above-referenced issue, the prospective underwriters have confirmed that they are complying with the 48-hour requirement as promulgated by Rule 15c2-8 under the Securities Exchange Act of 1934, as amended.

Very truly yours,

LEERINK PARTNERS LLC
COWEN AND COMPANY, LLC

As Representatives

By: LEERINK PARTNERS LLC

By: /s/ Jon Civitarese
Name: Jon Civitarese
Title: Managing Director

By: COWEN AND COMPANY, LLC

By: /s/ Jason Fenton
Name: Jason Fenton
Title: Managing Director