



DIVISION OF
CORPORATION FINANCE

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

September 7, 2017

Steven Gullans
Interim President and Chief Executive Officer
Gemphire Therapeutics Inc.
17199 N. Laurel Park Drive, Suite 401
Livonia, Michigan 48152

**Re: Gemphire Therapeutics Inc.
Registration Statement on Form S-3
Filed September 1, 2017
File No. 333-220315**

Dear Dr. Gullans:

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: Meredith Ervine, Esq. - Honigman Miller Schwartz
and Cohn LLP