

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

August 27, 2018

Jeffrey S. Mathiesen Chief Financial Officer Gemphire Therapeutics Inc. 17199 N. Laurel Park Dr. Suite 401 Lavonia, MI 48152

> Re: Gemphire Therapeutics Inc. Form 10-K for the Fiscal year Ended December 31, 2017 Filed March 20, 2018 File No. 001-37809

Dear Mr. Mathiesen:

We have completed our review of your filing. 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.

Sincerely,

Division of Corporation Finance Office of Healthcare & Insurance