UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

Form 10-Q

(Mark One)

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Quarterly Period Ended March 31, 2018

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF SECURITIES EXCHANGE ACT OF 1934

For the transition period from ____ to ____

Commission file number 001-37809

Gemphire Therapeutics Inc.
(Exact name of Registrant as specified in its charter)

Delaware	**47-2389984**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
17199 N. Laurel Park Drive, Suite 401, Livonia, MI	**48152**
(Address of principal executive offices)	(Zip Code)

(734) 245-1700
(Registrant's telephone number, including area code)

Not Applicable
(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☒
Emerging growth company ☒	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12(b)-2 of the Exchange Act). Yes ☐ No ☒

The number of outstanding shares of the registrant's common stock, $0.001 par value, as of May 4, 2018 was 14,232,313.

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Gemphire Therapeutics Inc.
Condensed Balance Sheets
(in thousands, except share amounts and par value)

	March 31, 2018 (unaudited)	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 34,461	$ 18,473
Prepaid expenses	300	490
Deferred offering costs	—	21
Other assets	68	25
Total current assets	34,829	19,009
Deposits	8	8
Total assets	$ 34,837	$ 19,017
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 2,848	$ 4,025
Accrued liabilities	1,054	1,010
Term loan - current portion	2,355	1,355
Total current liabilities	6,257	6,390
Long-term liabilities:		
Term loan	7,760	8,683
Other liabilities	3	3
Total liabilities	14,020	15,076
Commitments and contingencies (Note 5)		
Stockholders' equity:		
Preferred stock, $0.001 par value; 10,000,000 shares authorized as of March 31, 2018 and December 31, 2017, no shares issued or outstanding as of March 31, 2018 and December 31, 2017.	—	—
Common stock, $0.001 par value; 100,000,000 shares authorized as of March 31, 2018 and December 31, 2017, 14,232,313 and 10,633,042 shares issued and outstanding at March 31, 2018 and December 31, 2017, respectively.	22	18
Additional paid–in capital	88,493	64,397
Accumulated deficit	(67,698)	(60,474)
Total stockholders' equity	20,817	3,941
Total liabilities and stockholders' equity	$ 34,837	$ 19,017

See accompanying notes to condensed financial statements.

Gemphire Therapeutics Inc.
Condensed Statements of Comprehensive Loss
(in thousands, except share and per share amounts)
(unaudited)

	For the Three Months Ended March 31,	
	2018	2017
Operating expenses:		
General and administrative	$ 2,087	$ 2,223
Research and development	4,977	5,280
Total operating expenses	7,064	7,503
Loss from operations	(7,064)	(7,503)
Interest (expense) income	(160)	12
Other expense	—	(5)
Loss before income taxes	(7,224)	(7,496)
Provision (benefit) for income taxes	—	—
Net loss	(7,224)	(7,496)
Other comprehensive loss, net of tax	—	—
Comprehensive loss	$ (7,224)	$ (7,496)
Net loss per share:		
Basic and diluted (Note 9)	$ (0.58)	$ (0.79)
Number of shares used in per share calculations:		
Basic and diluted	12,439,591	9,521,224

See accompanying notes to condensed financial statements.

Gemphire Therapeutics Inc.
Condensed Statements of Changes in Stockholders' Equity
(in thousands, except share amounts)
(unaudited)

	Preferred Stock		Common Stock		Additional Paid–In Capital	Accumulated Deficit	Total Equity
	Shares	Amount	Shares	Amount			
Balance at January 1, 2017	—	$ —	9,270,255	$ 17	$ 47,674	$ (27,059)	$ 20,632
Issuance of common stock from private placement	—	—	1,324,256	1	8,978	—	8,979
Issuance of detachable stock warrants in connection with private placement	—	—	—	—	3,562	—	3,562
Issuance costs of private placement	—	—	—	—	(1,219)	—	(1,219)
Exercise of stock options	—	—	2,327	—	3	—	3
Share–based compensation — employee	—	—	—	—	829	—	829
Share–based compensation — non–employee	—	—	—	—	7	—	7
Net loss	—	—	—	—	—	(7,496)	(7,496)
Balance at March 31, 2017	—	$ —	10,596,838	$ 18	$ 59,834	$ (34,555)	$ 25,297
Balance at January 1, 2018	—	$ —	10,633,042	$ 18	$ 64,397	$ (60,474)	$ 3,941
Issuance of common stock	—	—	3,592,858	4	25,146	—	25,150
Issuance costs	—	—	—	—	(2,093)	—	(2,093)
Exercise of stock options	—	—	6,413	—	23	—	23
Share–based compensation — employee	—	—	—	—	1,019	—	1,019
Share–based compensation — non–employee	—	—	—	—	1	—	1
Net loss	—	—	—	—	—	(7,224)	(7,224)
Balance at March 31, 2018	—	$ —	14,232,313	$ 22	$ 88,493	$ (67,698)	$ 20,817

See accompanying notes to condensed financial statements.

Gemphire Therapeutics Inc.
Condensed Statements of Cash Flows
(in thousands)
(unaudited)

	For the Three Months Ended March 31,	
	2018	**2017**
Operating activities		
Net loss	$ (7,224)	$ (7,496)
Adjustments to reconcile net loss to net cash used in operating activities:		
Share-based compensation	1,020	836
Non-cash discount amortization on term loan	77	—
Change in assets and liabilities:		
Prepaid expenses and other assets	168	161
Accounts payable	(1,304)	1,473
Accrued and other liabilities	27	(1,197)
Net cash used in operating activities	(7,236)	(6,223)
Investing activities		
Net cash provided by (used in) investing activities	—	—
Financing activities		
Exercise of stock options	23	3
Proceeds from sale of common stock	25,150	12,541
Offering costs	(1,949)	(1,072)
Net cash provided by financing activities	23,224	11,472
Net increase in cash and cash equivalents	15,988	5,249
Cash and cash equivalents at beginning of period	18,473	24,033
Cash and cash equivalents at end of period	$ 34,461	$ 29,282
Supplemental disclosure of cash flow information:		
Cash paid for income taxes	$ —	$ —
Cash paid for interest	$ 112	$ —
Supplemental non-cash financing transactions:		
Offering costs in accounts payable and accrued liabilities	$ 144	$ 147

See accompanying notes to condensed financial statements.

1. The Company and Basis of Presentation

On November 10, 2008, Michigan Life Therapeutics, LLC (MLT) was organized as a limited liability company (LLC) in Michigan. On October 30, 2014, Gemphire Therapeutics Inc. (Gemphire or the Company) was incorporated as a C corporation in the state of Delaware. On November 1, 2014, MLT entered into a merger agreement with Gemphire whereby MLT was merged with and into Gemphire with Gemphire as the surviving entity; all outstanding membership interests of MLT were exchanged for shares of Gemphire's common stock. The purpose of the merger was to change the jurisdiction of MLT from Michigan to Delaware and to convert from an LLC to a corporation. The Company's headquarters are located in Livonia, Michigan.

The Company is a clinical-stage biopharmaceutical entity focused on developing and commercializing therapies for the treatment of dyslipidemia, a serious medical condition that increases the risk of life threatening cardiovascular disease, and NAFLD/NASH (nonalcoholic fatty liver disease). The Company's primary activities to date have been conducting research and development activities, planning and conducting clinical trials, performing business and financial planning, recruiting personnel and raising capital. The Company is subject to certain risks, which include the need to research, develop, and clinically test potentially therapeutic products, initially one product candidate gemcabene (also known as CI-1027); obtain regulatory approval for its products and commercialize them around the world; expand its management scientific staff; finance its operations; and, find collaboration partners to further advance development and commercial efforts.

Initial Public Offering

On August 4, 2016, the Company's Registration Statement on Form S-1 (File No 333-210815) relating to its initial public offering (IPO) of its common stock was declared effective by the Securities and Exchange Commission (SEC). Pursuant to such Registration Statement, on August 10, 2016, the Company closed its IPO whereby 3,000,000 shares of its common stock were issued and sold at a public offering price of $10.00 per share. On September 8, 2016, the Company closed the sale of 27,755 shares of its common stock at the public offering price of $10.00 per share, representing a partial exercise of the underwriters' over-allotment option, following which, the IPO terminated. The Company received net proceeds of approximately $26.1 million after deducting underwriting discounts and commissions of $2.1 million and other offering expenses of $2.1 million.

Immediately prior to the IPO, the Company amended and restated its certificate of incorporation and bylaws to, among other things, change its authorized capital stock to consist of (i) 100,000,000 shares of common stock and (ii) 10,000,000 shares of undesignated preferred stock. Both the common stock and the preferred stock have a par value of $0.001 per share.

Private Placement Offering

On March 10, 2017, the Company entered into a securities purchase agreement for a private placement (the Private Placement) with a select group of accredited investors whereby, on March 15, 2017 the Company issued and sold 1,324,256 units at a price of $9.47 per unit for gross proceeds of approximately $12.5 million. Each unit consists of one share of the Company's common stock and a warrant to purchase 0.75 shares of common stock. The warrants have an exercise price of $10.40 per share and are exercisable for a period of five years from the date of issuance. On April 20, 2017, the registration statement on Form S-1 (File No 333-217296) for the resale of the shares of common stock issued in the Private Placement and the shares of common stock to be issued upon exercise of the warrants issued in the Private Placement was declared effective by the SEC.

Follow-On Public Offering

On February 12, 2018, the Company completed an underwritten public offering (the Follow-On Offering) of 3,142,858 shares of common stock at the public offering price of $7.00 per share. As part of such offering, the Company issued 450,000 additional shares of common stock representing partial exercise of the underwriters' overallotment option. The

Company received net proceeds of approximately $23.1 million after deducting underwriting discounts and commissions and offering expenses.

Capital Requirements

The Company has sustained operating losses since inception and expects such losses to continue over the next several years. Management plans to continue financing the Company's operations with equity issuances. The Company's management believes the cash and cash equivalents on hand are adequate to fund the Company's operations for at least the next 12 months. If adequate funds are not available, the Company may be required to delay, reduce the scope of, or eliminate part or all of its research and development programs.

Basis of Presentation

The accompanying condensed financial statements have been prepared by the Company, without audit, pursuant to the rules and regulations of the SEC. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles (GAAP) have been condensed or omitted pursuant to such rules and regulations. The condensed financial statements may not include all disclosures required by U.S. GAAP; however, the Company believes that the disclosures are adequate to make the information presented not misleading. These unaudited condensed financial statements should be read in coniunction with the audited financial statements and the notes thereto for the fiscal vear ended December 31, 2017 included in the Company's Annual Report on Form 10-K filed with the SEC on March 20, 2018. The condensed balance sheet at December 31, 2017 was derived from the audited financial statements.

In the opinion of management, all adjustments, consisting of only normal recurring adjustments that are necessary to present fairly the financial position, results of operations, and cash flows for the interim periods, have been made. The results of operations for the interim periods are not necessarily indicative of the operating results for the full fiscal year or any future periods.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of condensed financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the condensed financial statements and accompanying notes. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of 90 days or less at the time of deposit to be cash equivalents. The Company invests excess cash in readily available checking and savings accounts and highly liquid investments in money market accounts.

Fair Value of Financial Instruments

The Company's condensed financial instruments include principally cash and cash equivalents, other current assets, accounts payable, accrued liabilities and debt. The carrying amounts for these condensed financial instruments reported in the balance sheets approximate their fair values. See Note 10 — Fair Value Measurements, for further discussion of fair value.

General and Administrative Expenses

General and administrative expenses consist primarily of personnel-related costs, including salaries and share-based compensation costs, for personnel in functions not directly associated with research and development activities. Other

significant costs include legal fees related to intellectual property and corporate matters and professional fees for accounting and other services.

Research and Development Expenses

Research and development expenses consist of costs incurred in performing research and development activities, including compensation for research and development employees, costs associated with preclinical studies and trials, regulatory activities, manufacturing activities to support clinical activities, license fees, non-legal patent costs, fees paid to external service providers that conduct certain research and development, clinical costs and an allocation of overhead expenses. Research and development costs are expensed as incurred.

Income Taxes

The Company utilizes the liability method of accounting for income taxes as required by Accounting Standards Codification (ASC) 740, *Income Taxes*. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and the tax basis of assets and liabilities and are measured using enacted tax rates and laws that will be in effect when the differences are expected to reverse. Currently, there is no provision for income taxes, as the Company has incurred operating losses to date, and a full valuation allowance has been provided on the net deferred tax assets.

Share-Based Compensation

The Company accounts for share-based compensation in accordance with the provisions of ASC 718, *Compensation — Stock Compensation* (ASC 718). Accordingly, compensation costs related to equity instruments granted are recognized at the grant-date fair value. The Company records forfeitures when they occur. Share-based compensation arrangements to non-employees are accounted for in accordance with the applicable provisions of ASC 718 and ASC 505, *Equity*, using a fair value approach. The compensation costs of these arrangements are subject to re-measurement as the equity instruments vest and are recognized as expense over the related service period (typically the vesting period of the awards).

Segment Information

Operating segments are components of an enterprise for which separate financial information is available and is evaluated regularly by the Company's chief operating decision maker in deciding how to allocate resources and assessing performance. The Company's chief operating decision maker is its Chief Executive Officer. The Company's Chief Executive Officer views the Company's operations and manages its business in one operating segment, which is the business of development and commercialization of therapeutics for the treatment of dyslipidemia, a serious medical condition that increases the risk of life threatening cardiovascular disease and NAFLD/NASH. Accordingly, the Company has a single reporting segment.

Jumpstart Our Business Startups Act Accounting Election

As an emerging growth company under the Jumpstart Our Business Startups Act (JOBS Act), the Company is eligible to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies. The Company has irrevocably elected not to avail itself of this exemption and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Recently Adopted Accounting Pronouncements

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*. The objective of this ASU is to eliminate the diversity in practice related to the classification of restricted cash or restricted cash equivalents in the statement of cash flows. For public business entities, this ASU is effective for annual and interim reporting periods beginning after December 15, 2017, with early adoption permitted. The amendments in this update

should be applied retrospectively to all periods presented. The Company adopted this standard on January 1, 2018 and it did not have a material impact on the Company's financial statements.

In May 2017, the FASB issued ASU 2017-09, *Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting* (ASU 2016-09), which provides guidance about which changes to the terms or conditions of a share-based payment awards require an entity to apply modification accounting in Topic 718. This pronouncement is effective for annual reporting periods beginning after December 15, 2017, with early adoption permitted. The Company has adopted this standard on January 1, 2018 and it did not have a material impact on the Company's financial statements.

In March 2018, the FASB issued ASU 2018-05, *Income Taxes (Topic 740)*, that codified the SEC Staff Accounting Bulletin 118 (SAB 118) issued on December 22, 2017, which provides guidance on accounting for the tax effects of the Tax Cuts and Jobs Act (the TCJA). SAB 118 provides a measurement period that should not extend beyond one year from the enactment date for companies to complete the accounting under ASC 740. In accordance with SAB 118, a company must reflect the income tax effects of those aspects of the TCJA for which the accounting under ASC 740 is complete. To the extent that a company's accounting for certain income tax effects of the TCJA is incomplete but for which they are able to determine a reasonable estimate, it must record a provisional amount in the financial statements. Provisional treatment is proper in light of anticipated additional guidance from various taxing authorities, the SEC, the FASB, and even the Joint Committee on Taxation. If a company cannot determine a provisional amount to be included in the financial statements, it should continue to apply ASC 740 on the basis of the provisions of the tax laws that were in effect immediately before the enactment of the TCJA. The Company has applied this guidance to its financial statements.

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers — Topic 606*, which supersedes the revenue recognition requirements in FASB ASC 605. The new guidance primarily states that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods and services. In January 2017 and September 2017, the FASB issued several amendments to ASU 2014-09, including updates stemming from SEC Accounting Staff Announcement in July 2017. The amendments and updates included clarification on accounting for principal versus agent considerations (i.e., reporting gross versus net), licenses of intellectual property and identification of performance obligations. These amendments and updates do not change the core principle of the standard but provide clarity and implementation guidance. The Company has adopted this standard on January 1, 2018 and selected the modified retrospective transition method. The Company modified its accounting policies to reflect the requirements of this standard; however, the planned adoption will not affect the Company's financial statements and related disclosures for these periods or future periods until the Company generates revenues.

Recent Accounting Pronouncements Not Yet Adopted

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments — Overall: Recognition and Measurement of Financial Assets and Financial Liabilities.* The guidance affects the accounting for equity investments, financial liabilities under the fair value option and the presentation and disclosure requirements of financial instruments. The guidance is effective in the first quarter of fiscal 2019. Early adoption is permitted for the accounting guidance on financial liabilities under the fair value option. The Company is currently evaluating the impact of the new guidance on its financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* and subsequently amended the guidance relating largely to transition considerations under the standard in January 2017. The objective of this update is to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. This ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within those annual periods and is to be applied utilizing a modified retrospective approach. The Company is currently evaluating the new guidance to determine the impact it may have on its financial statements.

In July 2017, the FASB issued ASU No. 2017-11, *Earnings Per Share, Distinguishing Liabilities from Equity and Derivatives and Hedging*, which changes the accounting and earnings per share for certain instruments with down round

features. The amendments in this ASU should be applied using a cumulative-effect adjustment as of the beginning of the fiscal year or retrospective adjustment to each period presented and is effective for annual periods beginning after December 15, 2018, and interim periods within those periods. The Company is currently evaluating the requirements of this new guidance and has not yet determined its impact on the Company's financial statements.

3. Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	March 31, 2018	December 31, 2017
Accrued compensation and other payroll liabilities	$ 293	$ 306
Legal costs	253	91
Accrued interest	39	38
Other research and development expenses	427	522
Other general and administrative expenses	42	53
Total	$ 1,054	$ 1,010

4. Debt

Term Loan

On July 24, 2017, the Company entered into a Loan and Security Agreement (the Loan Agreement) with Silicon Valley Bank (SVB) for a term loan of up to $15.0 million (the Term Loan), subject to funding in several tranches. The Company drew the initial tranche of $10.0 million on July 24, 2017. Conditioned on the occurrence of certain clinical and pre-clinical milestones, an additional tranche of $5.0 million may be available to be drawn by the Company through July 31, 2018. The Company is in compliance with the Loan Agreement covenants as of March 31, 2018.

All amounts advanced under the Term Loan mature on February 1, 2021 and have an interest-only monthly payment period through August 1, 2018; the interest-only period may be extended to February 1, 2019 conditioned on the occurrence of such clinical and pre-clinical milestones referenced above. Following the interest-only payment period, the Company will begin making monthly payments of principal and interest until the maturity date. Interest will accrue on the unpaid principal balance at a floating per annum rate equal to the prime rate, except that, following an event of default, interest will accrue at a rate up to 5% above the rate that is otherwise applicable. The prime rate in effect for the first quarter ending March 31, 2018 ranged from 4.5% to 4.75%. Lastly, debt issue costs in the amount of $0.1 million were incurred as of March 31, 2018 and December 31, 2017 and were recorded as a discount to the Term Loan and are being amortized ratably to interest expense over the term of the loan.

The Loan Agreement requires the Company to pay the following fees: (i) upon the maturity, acceleration or prepayment of the Term Loan, a final payment fee of 10% of the funded principal amount of the Term Loan which was recorded as a liability upon issue and then discounted to be subsequently amortized ratably to interest expense over the term of the loan, (ii) a success fee of 3.5% of the funded principal amount of the Term Loan in the event any of the following occur prior to 5:00 pm Eastern Time on July 24, 2024: (a) the Company receives FDA approval for any new drug application for gemcabene, (b) a sale or other transfer of all or substantially all of the assets of the Company occurs, (c) a merger or consolidation of the Company with or into another person or entity occurs where the holders of the Company's outstanding voting equity securities immediately prior to such merger or consolidation hold less than a majority of the issued and outstanding voting equity securities of the successor immediately following such transaction or (d) any sale by the holders of the Company's outstanding voting equity securities where such holders do not continue to hold at least a majority of the Company's issued and outstanding voting equity securities, and (iii) upon termination of the Loan Agreement prior to the maturity date for any reason, a prepayment fee equal to 2% (if such prepayment occurs prior to the first anniversary of the Effective Date) or 1% (if such prepayment occurs thereafter) of the funded principal amount of the Term Loan.

In the event a positive clinical trial event as defined in the Loan Agreement does not occur by March 31, 2018, on such date, the Company must either (i) provide cash security and maintain a cash balance in a restricted account at SVB in an amount of at least 50% of the amounts the Company owes to SVB or (ii) prepay the Term Loan in its entirety. On November 10, 2017, the Company provided SVB evidence of a positive clinical trial event. In the event a pre-clinical event does not occur by July 31, 2018, on such date, the Company must either (i) provide cash security and maintain a cash balance in a restricted account at SVB in an amount of at least 100% of the amounts the Company owes to SVB or (ii) prepay the Term Loan in its entirety. In each case, if the Company chooses to prepay the Term Loan, in addition to the repayment of the outstanding principal and accrued and unpaid interest, the Company is required to pay the final payment fee and, if applicable, the success fee, but not the prepayment fee.

The Company recorded $0.2 million and zero in interest expense related to the Term Loan for the three months ended March 31, 2018.

As of March 31, 2018, the minimum aggregate future payments under the Term Loan are as follows (in thousands):

	March 31,
2018	$ 2,009
2019	4,297
2020	4,105
2021	1,333
Total minimum payments	11,744
Amount representing interest and discounts	(1,629)
Present value of minimum payments	10,115
Current portion	(2,355)
Long-term portion	$ 7,760

Future minimum interest payments under the Term Loan are assumed at a 4.75% per annum rate.

5. Commitments and Contingencies

Pfizer License Agreement

In April 2011, the Company and Pfizer Inc. (Pfizer) entered into an exclusive license agreement (the Pfizer Agreement) for the clinical product candidate gemcabene. In exchange for this worldwide exclusive right and license to certain patent rights to make, use, sell, offer for sale and import the clinical product gemcabene, the Company agreed to certain milestone and royalty payments on future sales (See Note 6 — *License Agreement)*. As of March 31, 2018, there was sufficient uncertainty with regard to both the outcome of the clinical trials and the ability to obtain sufficient funding to support any of the cash milestone payments under the license agreement, and as such, no liabilities were recorded related to the license agreement.

Other Agreements

In May 2016, the Company entered into a non-cancellable lease agreement for its headquarters location, commencing in the third quarter of 2016. The initial term of the agreement is 3 years with an initial monthly base rent of approximately $8,400 and increasing to approximately $8,900 during the last year of the lease term. In conjunction with entering into the new lease agreement, the Company cancelled its original Northville, Michigan lease agreement, as amended, effective August 31, 2016 and renegotiated a new cancellable lease agreement for limited use of office space in the Northville location that expired in September 2017 that had nominal rent. The total rent expense was $26,000 during both of the three month periods ended March 31, 2018 and 2017.

Future minimum lease payments under the fixed non-cancellable operating lease through the August 2019 expiration date consist of the following (in thousands):

	March 31,
2018	$ 78
2019	71
Total	$ 149

Other Commitments and Contingencies

In the ordinary course of business, from time to time, the Company may be subject to a broad range of claims and legal proceedings that relate to contractual allegations, patent infringement, employment-related matters and other claims. The Company establishes accruals for matters which it believes that losses are probable and can be reasonably estimated. Although it is not possible to predict with certainty the outcome of these matters, the Company is of the opinion that the ultimate resolution of these matters will not have a material adverse effect on its results of operations or financial position.

6. License Agreement

In April 2011, the Company entered into the Pfizer Agreement for a worldwide exclusive license to certain patent rights to make, use, sell, offer for sale and import the clinical product candidate gemcabene. In exchange for this license, the Company agreed to issue shares of its common stock to Pfizer representing 15% of the Company's fully diluted capital at the close of its first arms-length Series A financing, which occurred on March 31, 2015.

The Company agreed to make milestone payments totaling up to $37 million upon the achievement of certain milestones, including the first regulatory submission in any country, regulatory approval in each of the United States, Europe and Japan, the first anniversary of the first regulatory approval in any country, and upon achieving certain aggregate sales levels of gemcabene or any product containing gemcabene. Future milestone payments under the Pfizer Agreement, if any, are not expected to begin for at least several years and extend over a number of subsequent years.

The Company also agreed to pay Pfizer tiered royalties on a country-by-country basis based upon the annual amount of net sales, as specified in the Pfizer Agreement until expiration of the last valid claim of the licensed patent rights including any patent term extensions or supplemental protection certificates. Under the Pfizer Agreement, the Company is obligated to use commercially reasonable efforts to develop and commercialize gemcabene.

On March 31, 2015, upon the closing of the Series A preferred stock financing, the Company issued 675,250 shares of its common stock, at a fair market value of $0.9 million, to Pfizer in connection with the first equity payment, pursuant to which Pfizer became the owner of more than 5% of the Company's capital stock. The transaction was recorded as acquired in-process research and development expenses based on the fair market value of the common shares issued since no processes or activities that would constitute a "business" were acquired and none of the rights and underlying assets acquired had alternative future uses or reached a stage of technological feasibility. None of the other milestone or royalty payments were triggered as of March 31, 2018.

The Pfizer Agreement will expire upon expiration of the last royalty term. Either party may terminate the Pfizer Agreement for the other party's uncured material breach or upon specified bankruptcy events. Pfizer may terminate the Pfizer Agreement if the Company or any of its sublicenses challenge the validity, enforceability or ownership of the licensed patents. Upon termination of the license agreement for cause by Pfizer, the Company must grant Pfizer a non-exclusive license to use any intellectual property rights arising from the development or commercialization of gemcabene. Additionally, Pfizer may revoke the license if the Company is unable to adequately commercialize gemcabene by April 2021.

Pfizer has a non-exclusive, sub licensable, royalty-free right and license for non-commercial research or development purposes to intellectual property rights relating to gemcabene that are developed by the Company after the effective date of the license with Pfizer.

7. Stockholders' Equity

Common Stock

The Company had 14,232,313 and 10,633,042 shares of its common stock issued and outstanding as of March 31, 2018 and December 31, 2017, respectively. Voting, dividend and liquidation rights of the holders of the common stock are subject to the Company's articles of incorporation, corporate bylaws and underlying shareholder agreements.

In the first quarter of 2018, the Company completed the Follow-On Offering of 3,592,858 shares of common stock which includes 450,000 shares of common stock purchased by the underwriters upon the partial exercise of their overallotment option, at the public offering price of $7.00 per share. The Company received net proceeds of approximately $23.1 million after deducting underwriting discounts and commissions and offering expenses. The costs incurred related to the Follow-On Offering were $2.1 million through March 31, 2018.

On March 15, 2017, the Company issued and sold 1,324,256 units at a price of $9.47 per unit for gross proceeds of approximately $12.5 million in connection with the Private Placement. Each unit consisted of one share of the Company's common stock and a warrant to purchase 0.75 shares of common stock. The Company received net proceeds of approximately $11.2 million after deducting underwriting discounts and commissions and offering expenses. Offering costs incurred related to the 2017 Private Placement were $1.3 million through December 31, 2017 and March 31, 2018.

Warrants

In connection with the Private Placement, the Company issued warrants to the investors participating in the financing to purchase an additional 993,204 shares of common stock. The warrants have a term of five years and were exercisable immediately upon issuance with an exercise price equal to $10.40 per share. The warrants were classified as additional paid-in capital and recorded based on their relative fair value to the underlying common shares issued in the Private Placement. The fair market value of the warrants was approximately $4.9 million. The warrants were valued using the Black-Scholes method with the following assumptions: a risk-free interest rate of 2.0%, a contractual term of five years, zero dividend yield and a volatility factor of 65.1%. During the three month periods ending March 31, 2018 and 2017, no warrant shares were exercised. As of March 31, 2018, 978,204 warrant shares were outstanding.

Dividend Rights

Common stock holders are entitled to receive dividends at the sole discretion of the board of directors of the Company. There have been no dividends declared on common stock as of March 31, 2018.

Voting Rights

The holders of common stock are entitled to one vote for each share of common stock along with all other classes and series of stock of the Company on all actions to be taken by the stockholders of the Company, including actions that would amend the certificate of incorporation of the Company to increase the number of authorized shares of the common stock.

Liquidation Rights

In the event of any liquidation, dissolution, or winding-up of the Company, the holders of common stock shall be entitled to share in the remaining assets of the Company available for distribution post preferential distributions made to preferred stockholders, if any.

8. Share-Based Compensation

Share-based compensation expense was included in general and administrative and research and development expenses as follows in the accompanying condensed statements of comprehensive loss (in thousands):

	Three Months Ended March 31,	
	2018	2017
General and administrative	$ 711	$ 569
Research and development	309	267
Total share-based compensation	$ 1,020	$ 836

Restricted Stock Awards

During the three months ended March 31, 2018 and 2017, the Company did not grant any restricted stock awards (RSAs). The RSAs previously granted were subject to various vesting schedules and generally vested ratably over a six to 24 month period coinciding with their respective service periods. During the three months ended March 31, 2018 and 2017, zero and 4,009 RSAs vested, respectively. No RSAs were forfeited during the three months ended March 31, 2018 or 2017.

Stock Options

In April 2015, the Company adopted a 2015 Equity Incentive Plan (the 2015 Plan) under which 320,615 shares of the Company's common stock were reserved for issuance to employees, directors and consultants. The 2015 Plan permits the grant of incentive and non-statutory stock options, appreciation rights, restricted stock, restricted stock units, performance stock and cash awards, and other stock-based awards.

Amended and Restated 2015 Equity Incentive Plan

In April 2016, the Company's board of directors approved the Company's amended and restated 2015 Plan (the A&R 2015 Plan). The Company's stockholders also approved the A&R 2015 Plan in April 2016 and the A&R 2015 Plan became effective immediately upon the execution and delivery of the underwriting agreement related to the IPO. The A&R 2015 Plan provides for the grant of stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards and other forms of equity awards, as well as performance cash awards. The Company initially reserved 2,400,000 shares of common stock for issuance under the A&R 2015 Plan.

Under the A&R 2015 Plan, the number of shares of common stock reserved for issuance thereunder automatically increases on January 1st of each year, for a period of 10 years commencing on January 1, 2017 and ending on (and including) January 1, 2026, to an amount equal to 20% of the Company's fully-diluted shares as of December 31st of the preceding calendar year. Notwithstanding the foregoing, the Company's board of directors may act prior to January 1st of a given year to provide that there will be no January 1st increase in the shares reserved for such year, or that the increase in shares reserved for such year will be less than would have otherwise been allowed under the provision. Effective January 1, 2018, 415,077 shares were added to the A&R 2015 Plan under the share reserve provision for a total share reserve of 2,815,077 shares as of March 31, 2018.

Inducement Plan

In September 2016, the Company's board of directors approved the Company's Inducement Plan (the Inducement Plan). The Company initially reserved 300,000 shares of its common stock to be used exclusively for grants of awards to individuals who were not previously employees or directors of the Company, as an inducement material to the individual's entry into employment with the Company within the meaning of Rule 5635(c)(4) of the NASDAQ Listing Rules. The Plan was approved by the Company's board of directors without stockholder approval pursuant to

Rule 5635(c)(4), and the terms and conditions of the Plan are substantially similar to the Company's stockholder-approved A&R 2015 Plan.

2016 Employee Stock Purchase Plan

In April 2016, the Company's board of directors approved the 2016 Employee Stock Purchase Plan (the ESPP) in order to enable eligible employees to purchase shares of the Company's common stock at a discount following the effective date of the IPO. The Company's stockholders also approved the ESPP in April 2016 and the ESPP became effective immediately upon the execution and delivery of the underwriting agreement related to the IPO. The Company initially reserved 150,000 shares of common stock for issuance under the ESPP. As of March 31, 2018, no shares were purchased under the ESPP.

During the three months ended March 31, 2018 and 2017, the Company granted an aggregate of 472,000 and 123,500 stock options, respectively, under the A&R 2015 Plan and the Inducement Plan to its officers, directors, employees and consultants, generally vesting over a four-year period with a weighted average grant date fair value of $10.18 and $6.32 per share, respectively.

The Company measures the fair value of stock options with service-based and performance-based vesting criteria to employees, consultants and directors on the date of grant using the Black-Scholes option pricing model. The fair value of equity instruments issued to non-employees is re-measured as the award vests. The Company does not have history to support a calculation of volatility and expected term. As such, the Company has used a weighted-average volatility considering the volatilities of several guideline companies.

For purposes of identifying similar entities, the Company considered characteristics such as industry, length of trading history, and stage of life cycle. The assumed dividend yield was based on the Company's expectation of not paying dividends in the foreseeable future. The average expected life of the options was determined based on the mid-point between the vesting date and the end of the contractual term according to the "simplified method" as described in Staff Accounting Bulletin 110. The risk-free interest rate is determined by reference to implied yields available from U.S. Treasury securities with a remaining term equal to the expected life assumed at the date of grant. The Company records forfeitures when they occur.

The weighted-average assumptions used in the Black-Scholes option-pricing model are as follows:

	Three Months Ended March 31,	
	2018	2017
Expected stock price volatility	66.5 %	65.1 %
Expected life of options (years)	5.8	6.1
Expected dividend yield	0 %	0 %
Risk free interest rate	2.5 %	2.1 %

During the three months ended March 31, 2018 and 2017, 180,348 and 136,353 stock options vested, respectively, and 3,500 and 3,250 were forfeited, respectively. As of March 31, 2018, 2,926,227 stock options were outstanding, and 158,906 shares in the aggregate were available for future issuance under the A&R 2015 and Inducement Plans.

Unrecognized share-based compensation cost for stock options issued under the A&R 2015 Plan and the Inducement Plan was $8.8 million as of March 31, 2018. The non-employee portion of the unrecognized compensation cost was estimated utilizing the Company's fair market value for its common stock as of March 31, 2018. The unrecognized share-based expense is expected to be recognized over a weighted average period of 2.3 years for the stock options. There was no remaining unrecognized stock-based compensation related to the RSAs as of March 31, 2018.

9. Net Loss Per Common Share

Basic earnings or loss per share of common stock is computed by dividing net loss by the weighted average number of shares of common stock outstanding during the period. Diluted earnings or loss per share of common stock is computed similarly to basic earnings or loss per share except the weighted average shares outstanding are increased to include additional shares from the assumed exercise of any common stock equivalents, if dilutive. The Company's RSAs, stock options and warrants are considered common stock equivalents while outstanding for this purpose. Diluted earnings are computed utilizing the treasury method for the RSAs, stock options and warrants. No incremental common stock equivalents were included in calculating diluted loss per share because such inclusion would be anti-dilutive given the net loss reported for the three months ended March 31, 2018 and 2017. The following table sets forth the computation of basic and diluted loss per share as of March 31, 2018 and 2017 (in thousands, except share and per share amounts):

	Three Months Ended	
	2018	2017
Numerator:		
Net loss	$ (7,224)	$ (7,496)
Denominator:		
Basic and diluted weighted average common shares outstanding	12,439,591	9,521,224
Basic and diluted net loss per share	$ (0.58)	$ (0.79)

The following potential common shares were not considered in the computation of diluted net loss per share as their effect would have been anti-dilutive during the three months ended March 31, 2018 and 2017:

	Three Months Ended	
	2018	2017
Stock options	2,926,227	2,360,723
Warrants	978,204	993,204

10. Fair Value Measurements

The Company follows accounting guidance that emphasizes that fair value is a market-based measurement, not an entity specific measurement. Fair value is defined as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date." Fair value measurements are defined on a three level hierarchy:

Level 1 inputs: Unadjusted quoted prices for identical assets or liabilities in active markets;

Level 2 inputs: Quoted prices for similar assets and liabilities in active markets, quoted prices in markets that are not active, or inputs which are observable, weather directly or indirectly, for substantially the full term of the asset or liability;

Level 3 inputs: Unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability in which there is little, if any, market activity for the asset or liability at the measurement date.

As of March 31, 2018 and December 31, 2017, the fair values of cash and cash equivalents, other assets, accounts payable and accrued liabilities approximated their carrying values because of the short-term nature of these assets or liabilities. The estimated fair value of the Company's Term Loan was based on amortized cost which was deemed to approximate fair value. There were no transfers between fair value hierarchy levels during the three months ended March 31, 2018 and 2017.

There were no instruments measured on a recurring fair value basis as of March 31, 2018 and December 31, 2017. In addition, no financial instruments were measured on a non-recurring basis for any of the periods presented.

11. Income Taxes

On December 22, 2017, the Tax Cuts and Jobs Act (the TCJA), which significantly modified U.S. corporate income tax law, was signed into law by President Trump. The TCJA contains significant changes to corporate income taxation, including but not limited to the reduction of the corporate income tax rate from a top marginal rate of 35% to a flat rate of 21%, limitation of the tax deduction for interest expense to 30% of earnings (except for certain small businesses), limitation of the deduction for net operating losses to 80% of current year taxable income and generally eliminating net operating loss carrybacks, allowing net operating losses to carryforward without expiration, one-time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, elimination of U.S. tax on foreign earnings (subject to certain important exceptions), immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modifying or repealing many business deductions and credits (including changes to the orphan drug tax credit and changes to the deductibility of research and experimental expenditures that will be effective in the future). Notwithstanding the reduction in the corporate income tax rate, the overall impact of the new federal tax law is uncertain, including to what extent various states will conform to the newly enacted federal tax law.

The Company has recorded the necessary provisional adjustments in the financial statements in accordance with its current understanding of the TCJA and guidance currently available as of this filing and recorded a provisional reduction of $6.8 million to its gross deferred tax assets in the fourth quarter of 2017, the period in which the legislation was enacted. The provisional reduction was fully offset by an equal reduction in the Company's valuation allowance given the Company's historical net losses, resulting in no net income tax expense being recorded. The Company may adjust these provisional amounts in future periods if its interpretation of the TCJA changes or as additional guidance becomes available. Any subsequent adjustment to these amounts is not expected to have a significant impact due to the valuation allowance.

The effective tax rate for the three months ended March 31, 2018 and 2017 was zero percent. As a result of the analysis of all available evidence as of March 31, 2018 and December 31, 2017, the Company recorded a full valuation allowance on its net deferred tax assets. Consequently, the Company reported no income tax benefit for the three month periods ended March 31, 2018 and 2017. If the Company's assumptions change and the Company believes that it will be able to realize these deferred tax assets, the tax benefits relating to any reversal of the valuation allowance on deferred tax assets will be recognized as a reduction of future income tax expense. If the assumptions do not change, each period the Company could record an additional valuation allowance on any increases in the deferred tax assets.

12. Defined Contribution Plan

The Company adopted a 401(k) defined contribution plan on September 5, 2017, effective as of January 1, 2017, for all employees over age 21. Employees can defer up to 100% of their compensation through payroll withholdings into the plan subject to federal law limits. Effective January 1, 2018, the Company began matching contributions on deferrals at 100% of deferrals up to 3% of one's contributions and 50% on deferrals over 3%, but not exceeding 5% of one's contributions in order to satisfy certain non-discrimination tests required by the Internal Revenue Code. Employee contributions and any employer matching contributions made to satisfy certain non-discrimination tests required by the Internal Revenue Code are 100% vested upon contribution. Discretionary employer matches vest over a six-year period beginning on the second anniversary of an employee's date of hire. The amount of matching contributions made during the three month period ended March 31, 2018 was $25,000.

13. Related Party Transactions

The Company rented an office in Northville, Michigan from an LLC owned by one current and one former officer under short-term agreements during the three period ended March 31, 2017. The original facility lease, as amended, was cancelled and replaced with a cancellable lease agreement in the third quarter of 2016 for limited use of office space in the same Northville location. The new lease agreement became effective in the third quarter of 2016 and expired in September 2017 with a nominal base rent over its term. There was no rent expense under the related party agreements during the three months ended March 31, 2018.

In the first quarter of 2018, in connection with an underwritten public offering of 3,592,858 shares of common stock, the offering included 14,286 shares sold to 1 officer, for aggregate proceeds totaling approximately $0.1 million and 71,429

shares sold to 1 investor who is an affiliate of 1 officer and board member, for proceeds totaling approximately $0.5 million.

The Private Placement in 2017 included 56,678 units sold to three board members, for aggregate proceeds totaling approximately $0.5 million, and 52,798 units sold to one investor who was related to one board member, for proceeds totaling approximately $0.5 million.

14. Subsequent Events

On April 9, 2018, the Company's board of directors approved an amendment to the Inducement Plan to increase the number of shares reserved under the Inducement Plan by 150,000 shares, bringing the total amount of authorized shares reserved under the Inducement Plan to 450,000 shares. The Company's board of directors also approved an amendment to the A&R 2015 Plan to increase the number of shares reserved under the A&R 2015 Plan by 300,000 shares to make such shares available for grant in 2018; such amendment is subject to approval by the Company's stockholders.

Gemphire Therapeutics Inc.
Form 10-Q

ITEM 2 MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read in conjunction with the financial statements and notes included in Part I "Financial Information", Item I "Financial Statements" of this Quarterly Report on Form 10-Q and the audited financial statements and related footnotes included in our Annual Report on Form 10-K filed on March 20, 2018.

Forward-Looking Statements

Certain statements contained in this Quarterly Report on Form 10-Q are not statements of historical fact and are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements give current expectations or forecasts of future events or our future financial or operating performance. We may, in some cases, use words such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "will," "would" or the negative of those terms, and similar expressions that convey uncertainty of future events or outcomes to identify these forward-looking statements.

These forward-looking statements reflect our management's beliefs and views with respect to future events, are based on estimates and assumptions as of the date of this report and are subject to risks and uncertainties, many of which are beyond our control, that could cause our actual results to differ materially from those in these forward-looking statements. We discuss many of these risks in greater detail under Part I, Item 1A "Risk Factors" in our Annual Report on Form 10-K filed on March 20, 2018 and subsequent reports filed with or furnished to the SEC. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

Any forward-looking statement made by us in this report speaks only as of the date hereof or as of the date specified herein. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by applicable laws or regulations.

Overview

We are a clinical-stage biopharmaceutical company focused on developing and commercializing therapies for the treatment of dyslipidemia, a serious medical condition that increases the risk of life threatening cardiovascular disease, and nonalcoholic fatty liver disease (NAFLD/NASH). Dyslipidemia is generally characterized by an elevation of LDL-C, or bad cholesterol, triglycerides, or fat in the blood, as well as inflammation, especially in diabesity patients. We are developing our product candidate gemcabene, a novel, once-daily, oral therapy, for high risk cardiovascular patients who are unable to achieve normal levels of LDL-C or triglycerides with currently approved therapies, primarily statin therapy, and for those patients who present with NASH. Gemcabene's mechanism of action is designed to enhance the clearance of VLDLs in the plasma and inhibit the production of fatty acids and cholesterol in the liver. In addition, gemcabene has been shown to markedly lower C-reactive protein and improve insulin sensitization. Gemcabene has been tested as monotherapy and in combination with statins and other drugs in nearly 1,100 subjects, which we define as healthy volunteers and patients, across 23 Phase 1 and Phase 2 clinical trials and has demonstrated promising evidence of efficacy, safety and tolerability.

We are pursuing gemcabene in the following indications as a treatment in addition to maximally tolerated statin therapy for patients who are unable to reach their lipid-lowering goals: HoFH, HeFH, ASCVD, SHTG and NASH. We believe we can design an efficient development plan to provide a new treatment alternative for HoFH patients while

demonstrating gemcabene's potential ability to treat patients in the most severe segment of the dyslipidemia market, which can further enhance brand awareness among key thought leaders and physicians. We are developing in parallel gemcabene for HeFH, ASCVD, SHTG and NASH given gemcabene's: (1) promising clinical data and mechanism in these indications; (2) cost-effective manufacturing process; (3) convenient oral dosing; (4) viability as adjunct combination therapy; and (5) large commercial potential. During 2016, we initiated three Phase 2b clinical trials for gemcabene in HoFH, hypercholesterolemia, including HeFH and ASCVD patients on maximally tolerated statins, and SHTG. We reported top line data from our 8 patient trial for HoFH (COBALT-1) in the second quarter of 2017 and top line data from our 105 patient trial for hypercholesterolemia on high-intensity statin therapy including HeFH and ASCVD patients (ROYAL-1) in the third quarter of 2017, and we expect to report top line data from our 91 patient trial in SHTG patients (INDIGO-1) in the second quarter of 2018. We initiated a proof-of-concept clinical trial in the fourth quarter of 2017 to study gemcabene in NASH with top line data expected in the second half of 2018. We also initiated a Proof-of-Concept clinical trial in the first quarter of 2018 to study gemcabene in pediatric NAFLD with top line data expected in the first half of 2019. Upon completion of one or more of these clinical trials, we intend to request an End of Phase 2 (EOP2) meeting with the FDA to reach an agreement on the design of Phase 3 registration trials and long term safety exposure for our target indications, which we expect to be scheduled upon the FDA's review of our two year carcinogenicity studies. We intend to pursue similar discussions with Canadian and European health authorities.

To date, our primary activities have been conducting research and development activities, planning and conducting clinical trials, performing business and financial planning, recruiting personnel and raising capital. We do not have any products approved for sale and have not generated any revenue. We do not expect to generate revenue until, and unless, the FDA or other regulatory authorities approve gemcabene and we successfully commercialize gemcabene. Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity and debt financings as well as collaborations, strategic alliances and licensing arrangements. Our net losses were $7.2 million and $7.5 million during the three months ended March 31, 2018 and 2017, respectively. As of March 31, 2018, we had an accumulated deficit of $67.7 million. We anticipate that our expenses will increase substantially as we:

- continue clinical trials for gemcabene and for any other product candidate in our future pipeline;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- contract to manufacture our product candidates;
- establish on our own or with partners, a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain regulatory approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional staff, including clinical, scientific, operational and financial personnel, to execute our business plan;
- add operational, financial and management information systems and personnel, including personnel to support our product development and potential future commercialization efforts; and
- to enable us to operate as a public company.

Our net losses may fluctuate significantly from quarter-to-quarter and year-to-year, depending on the timing of our preclinical studies, clinical trials and our expenditures on other research and development activities.

Gemphire Therapeutics Inc.
Form 10-Q

Our Company was co-founded in November 2008 as a limited liability company under the name Michigan Life Therapeutics, LLC (MLT) by former Pfizer Inc. employees, including Dr. Charles Bisgaier, who were responsible for licensing exclusive worldwide rights to gemcabene from Pfizer in April 2011. In October 2014, we incorporated a new entity under the name Gemphire Therapeutics Inc. in Delaware. In November 2014, we entered into a merger agreement with Gemphire whereby MLT was merged with and into Gemphire, with Gemphire as the surviving entity and all outstanding units of membership interest in MLT were exchanged for shares of common stock of Gemphire. The purpose of the merger was to change the jurisdiction of our incorporation from Michigan to Delaware and to convert from a limited liability company to a corporation.

In August 2016, we consummated the initial public offering (our IPO) of our common stock pursuant to a registration statement on Form S-1. We sold an aggregate of 3,027,755 shares of our common stock, including 27,755 shares of our common stock purchased by the underwriters upon the partial exercise of their overallotment option, at a public offering price of $10.00 per share. We received net proceeds of approximately $26.1 million after deducting underwriting discounts and commissions and offering expenses.

On March 15, 2017, we closed a private placement of 1,324,256 units at a price of $9.47 per unit for net proceeds of approximately $11.3 million after deducting offering expenses. Each unit consisted of one share of our common stock and a warrant to purchase 0.75 shares of common stock. The warrants have an exercise price of $10.40 per share and are exercisable for a period of five years from the date of issuance.

In the first quarter of 2018, we closed an underwritten public offering of 3,592,858 shares of our common stock, including 450,000 shares of our common stock purchased by the underwriters upon the partial exercise of their overallotment option, at the public offering price of $7.00 per share. We received net proceeds of approximately $23.1 million after deducting underwriting discounts and commissions and offering expenses.

We have funded our operations to date primarily through the issuance and sale of common stock and warrants in public offerings and a private placement, the proceeds of our term loan facility with Silicon Valley Bank and, prior to our IPO, the issuance of preferred stock and convertible notes. As of March 31, 2018, we had cash and cash equivalents of $34.5 million.

Financial Operations Overview

Revenue

To date, we have not generated any revenue. We do not expect to generate revenue unless or until we obtain regulatory approval of and commercialize gemcabene. If we fail to complete the development of gemcabene, or any other product candidate we may pursue in the future, in a timely manner, or fail to obtain regulatory approval, our ability to generate future revenue would be compromised.

Operating Expenses

Our operating expenses are classified into two categories: general and administrative and research and development.

General and Administrative

General and administrative expenses consist primarily of personnel-related costs, including salaries and share-based compensation costs, for personnel in functions not directly associated with research and administrative activities. Other significant costs include legal fees relating to intellectual property and corporate matters and professional fees for accounting and other services. We anticipate that our on-going general and administrative expenses will fluctuate with clinical trial activity and generally trend near or above comparable prior period levels in the future to support our research and development activities, potential commercialization of gemcabene, if approved, and any future product

candidates we may develop and the costs of operating as a public company, including costs related to personnel, fees for legal and professional services, as well as other public-company related costs.

Research and Development

To date, our research and development expenses have related primarily to the clinical stage development of gemcabene. Research and development expenses consist of costs incurred in performing research and development activities, including compensation for research and development employees, costs associated with preclinical studies and trials, regulatory activities, manufacturing activities to support clinical activities, license fees, nonlegal patent costs, fees paid to external service providers that conduct certain research and development, clinical costs and an allocation of overhead expenses. Research and development costs are expensed as incurred and costs incurred by third parties are expensed as the contracted work is performed. We accrue for costs incurred as the services are being provided by monitoring the status of the study or project, and the invoices received from our external service providers. We adjust our accrual as actual costs become known. Research and development activities are central to our business model.

We expect that gemcabene will have higher development costs during its later stages of clinical development, as compared to costs incurred during its earlier stages of development, primarily due to the increased size and duration of the later-stage clinical trials, so we expect our research and development expenses to fluctuate relative to the number and size of ongoing clinical trials in any given period and generally trend near or above comparable prior period levels in the future as we continue to conduct preclinical studies and clinical trials for gemcabene and potentially develop other product candidates. However, it is difficult to determine with certainty the duration, costs and timing to complete our current or future preclinical programs and clinical trials of gemcabene. The duration, costs and timing of clinical trials and development of gemcabene will depend on a variety of factors that include, but are not limited to, the following:

- per patient trial costs;
- the number of patients that participate in the trials;
- the number of sites included in the trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;
- the number of doses that patients receive;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring or other studies requested by regulatory agencies;
- the duration of patient follow-up;
- the phase of development of the product candidate for the indication;
- arrangements with contract research organizations and other service providers; and
- the efficacy and safety profile of the product candidate for the indication.

Interest (Expense) Income

Interest (expense) income consists of cash and non-cash interest expense attributed to our Term Loan issued in 2017 based on the prime rate in effect, as well as cash interest income from short term, highly liquid money market accounts from proceeds received from the IPO, Private Placement, Term Loan and Follow-On Offering as applicable during the periods presented.

We expect to continue to incur cash and non-cash interest expense related on our Term Loan and to earn interest income from the investment of the net proceeds from our financing activities in future periods.

Other Expense

Other expense relates to foreign currency exchange net losses over gains. Foreign currency exchange gains and losses relate to transactions and monetary asset and liability balances denominated in currencies other than the U.S. dollar. Foreign currency gains and losses may continue to fluctuate in the future due to changes in foreign currency exchange rates.

Provision for Income Taxes

Provision for income taxes consists of federal and state income taxes in the United States, as well as deferred income taxes and changes in related valuation allowance reflecting the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Currently, there is no provision for income taxes, as we have incurred operating losses to date, and a full valuation allowance has been provided on the net deferred tax assets as of March 31, 2018 and December 31, 2017.

Results of Operations

The following table summarizes our operating results for the periods indicated:

	For the Three Months Ended March 31,		
	2018	2017	Change
	(in thousands)		
Operating expenses:			
General and administrative	$ 2,087	$ 2,223	$ (136)
Research and development	4,977	5,280	(303)
Total operating expenses	7,064	7,503	(439)
Loss from operations	(7,064)	(7,503)	439
Interest (expense) income	(160)	12	(172)
Other expense	—	(5)	5
Loss before income taxes	(7,224)	(7,496)	272
Provision (benefit) for income taxes	—	—	—
Net loss	$ (7,224)	$ (7,496)	$ 272

Comparison of Three Months Ended March 31, 2018 and 2017

General and Administrative

General and administrative expenses for the three months ended March 31, 2018 decreased to $2.1 million compared to $2.2 million for the three months ended March 31, 2017. Timing of costs related to infrastructure supporting our ongoing

clinical trials, and public company requirements, focused primarily on personnel costs and professional services, were the primary drivers of the activity during both quarterly periods in 2018 and 2017.

Research and Development

Research and development expenses for the three months ended March 31, 2018 were $5.0 million compared to $5.3 million for the three months ended March 31, 2017. The $0.3 million decrease was primarily attributable to reduced clinical trial activities in the first quarter of 2018 versus the comparable period in 2017.

Interest (Expense) Income

Interest (expense) income for the three months ended March 31, 2018 and 2017 was $(0.2) million and $12,000, respectively. Interest (expense) income for the three months ended March 31, 2018 included interest expense in connection with our Term Loan offset in part by interest income of $30,000. Interest (expense) income for the three months ended March 31, 2017 represented only interest income as there was no outstanding debt.

Liquidity and Capital Resources

Capital Resources

As of March 31, 2018, our principal sources of liquidity consisted of cash and cash equivalents of approximately $34.5 million. Our cash and cash equivalents are invested in cash deposits and money market accounts.

We have not generated any revenue, and we anticipate that we will continue to incur losses for the foreseeable future. We have funded our operations to date primarily through the issuance and sale of common stock and warrants in public offerings and a private placement, proceeds from our term loan facility with Silicon Valley Bank and, prior to our IPO, the issuance of preferred stock and convertible notes in private placements. See Note 4 — Debt, included in "Item 8 — Financial Statements and Supplementary Data" included in our Annual Report on Form 10-K filed on March 20, 2018 for a description of the convertible notes we issued prior to our IPO.

- In the first quarter of 2018, we completed the Follow-On Offering of 3,592,858 shares of our common stock, including 450,000 shares of our common stock purchased by the underwriters upon the partial exercise of their overallotment option, at the public offering price of $7.00 per share. We received net proceeds of approximately $23.1 million after deducting underwriting discounts and commissions and offering expenses.

- On July 24, 2017, we entered into a Loan and Security Agreement (the Loan Agreement) with Silicon Valley Bank (SVB). The Loan Agreement established a term loan facility in the aggregate principal amount of up to $15.0 million (the Term Loan) to be funded in several tranches. We drew $10.0 million under the Loan Agreement on July 24, 2017. Conditioned on the occurrence of certain clinical and pre-clinical milestones, an additional tranche of $5.0 million may be available to be drawn by us in the future through July 31, 2018. See "—Liquidity and Capital Resource Requirements" below for a description of the repayment terms and certain other material terms of the Loan Agreement.

- On March 15, 2017, we completed a private placement of 1,324,256 units at a price of $9.47 per unit for net proceeds of approximately $11.3 million after deducting offering expenses. Each unit consisted of one share of our common stock and a warrant to purchase 0.75 shares of common stock. The warrants have an exercise price of $10.40 per share and are exercisable for a period of five years from the date of issuance. On April 20, 2017, the registration statement on Form S-1 (File No 333-217296) for the resale of the shares of common stock issued in the private placement and the shares of common stock to be issued upon exercise of the warrants issued in the private placement was declared effective by the SEC.

- In August 2016, we closed our IPO. We sold an aggregate of 3,027,755 shares of our common stock, including 27,755 shares of our common stock purchased by the underwriters upon the partial exercise of their overallotment option, at a public offering price of $10.00 per share. We received net proceeds of approximately $26.1 million after deducting underwriting discounts and commissions and offering expenses. All of our outstanding preferred stock and convertible notes outstanding prior to our IPO converted into shares of our common stock immediately prior to the closing of the IPO.

We anticipate that our expenses will increase substantially as we:

- continue clinical trials for gemcabene and for any other product candidate in our future pipeline;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- contract to manufacture our product candidates;
- establish on our own or with partners, a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain regulatory approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional staff, including clinical, scientific, operational and financial personnel, to execute our business plan;
- add operational, financial and management information systems and personnel, including personnel to support our product development and potential future commercialization efforts; and
- continue to operate as a public company.

Cash Flows

The following table summarizes our cash flows for the periods indicated:

	For the Three Months Ended March 31,	
	2018	2017
	(in thousands)	
Net cash used in operating activities	$ (7,236)	$ (6,223)
Net cash provided by (used in) investing activities	—	—
Net cash provided by financing activities	23,224	11,472
Net increase in cash	$ 15,988	$ 5,249

Cash Flow from Operating Activities

For the three months ended March 31, 2018, cash used in operating activities of $7.2 million was attributable to a net loss of $7.2 million offset by $1.0 million in share-based compensation and non-cash interest expense of $0.1 million offset by a net change of $1.1 million in our operating assets and liabilities and was primarily attributable to a decrease in accounts payable. The change in operating assets and liabilities was primarily attributable to a net decrease in our accounts payable offset in part by an increase in other liabilities and prepaid expenses associated with fluctuations in our operating activities.

For the three months ended March 31, 2017, cash used in operating activities of $6.2 million was attributable to a net loss of $7.5 million coupled with $0.8 million in non-cash expense adjustments and a net change of $0.4 million in our net operating assets and liabilities. The non-cash expenses consisted of $0.8 million of share-based compensation. The change in operating assets and liabilities was primarily attributable to a decrease in our accrued liabilities offset in part by an increase in accounts payable associated with fluctuations in our operating expense payments.

Cash Flow from Investing Activities

There were no sources or uses of funds from investing activities for all periods presented.

Cash Flow from Financing Activities

Net cash provided by financing activities during the three months ended March 31, 2018 of $23.2 million related to proceeds received from our Follow-On Offering, net of discounts, commissions and other costs totaling $1.9 million paid through March 31, 2018.

Net cash provided by financing activities during the three months ended March 31, 2017 was $11.5 million related to the proceeds from our Private Placement, net of discounts, commissions and other costs totaling $1.1 million paid through March 31, 2017.

Liquidity and Capital Resource Requirements

We had $10.1 million outstanding under our Term Loan with SVB on March 31, 2018. See "—Term Loan" below.

We have no current source of revenue to sustain our present activities, and we do not expect to generate revenue until, and unless, the FDA or other regulatory authorities approve gemcabene and we successfully commercialize gemcabene. Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity and debt financings as well as collaborations, strategic alliances and licensing arrangements. Under our Loan Agreement, an additional tranche of $5.0 million may be available to be drawn by us through July 31, 2018 conditioned on the occurrence of both a positive clinical trial event and a pre-clinical event. We do not have any other committed external source of funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Similar to the restrictions described above under our Loan Agreement, additional debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaborations, strategic alliances or licensing arrangements with pharmaceutical partners, we may have to relinquish valuable rights to our technologies, future revenue streams or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or through collaborations, strategic alliances or licensing arrangements when needed, we may be required to delay, limit, reduce or terminate our product development, future commercialization efforts, or grant rights to develop and market gemcabene that we would otherwise prefer to develop and market ourselves.

Based on current operating plans, we believe the approximately $34.5 million of cash on hand will be sufficient to fund our operations through completion of the INDIGO-1 Phase2b study in 2018, the initiation of our Phase 3 program in dyslipidemia in the second half of 2018 and the completion of the two NASH/NAFLD Phase 2a studies in the first half of 2019. The development of gemcabene is subject to numerous uncertainties, and we have based these estimates on assumptions that may prove to be substantially different than we currently anticipate and could use our cash resources sooner than we expect. Additionally, the process of advancing early-stage product candidates and testing product candidates in clinical trials is costly, and the timing of progress in these clinical trials is uncertain. Our ability to

successfully transition to profitability will be dependent upon achieving a level of product sales adequate to support our cost structure. We cannot assure that we will ever be profitable or generate positive cash flow from operating activities.

Furthermore, we will need to raise additional capital to continue to fund the further development of gemcabene and other potential product candidates, our operations, and commercialization of gemcabene and other potential product candidates, if approved.

Term Loan

Pursuant to our Loan Agreement described above, all amounts advanced under the Term Loan mature on February 1, 2021 and have an interest-only monthly payment period through August 1, 2018, which may be extended to February 1, 2019 upon the occurrence of both a positive clinical trial event and a pre-clinical event. Following the interest-only payment period, we will begin making monthly payments of principal and interest until the maturity date. Interest will accrue on the unpaid principal balance at a floating per annum rate equal to the prime rate, except that, following an event of default, interest will accrue at a rate up to 5% above the rate that is otherwise applicable. Our obligations under the Loan Agreement may be accelerated by SVB upon the occurrence of an event of default. An event of default includes customary events for a financing arrangement of this type, including, without limitation, payment defaults, defaults in the performance of affirmative or negative covenants, bankruptcy or related defaults, defaults on certain other indebtedness, defaults under certain other agreements, the imposition of judgments or penalties, the material inaccuracy of representations or warranties, material adverse changes and revocations of government approvals.

The Loan Agreement requires us to pay the following fees: (i) upon the maturity, acceleration or prepayment of the Term Loan, a final payment fee of 10% of the funded principal amount of the Term Loan, (ii) a success fee of 3.5% of the funded principal amount of the Term Loan upon the occurrence of certain contingent events as defined in the Loan Agreement, and (iii) upon termination of the Loan Agreement prior to the maturity date for any reason, a prepayment fee equal to 2% (if such prepayment occurs prior to the first anniversary of July 24, 2017) or 1% (if such prepayment occurs thereafter) of the funded principal amount of the Term Loan.

In the event a positive clinical trial event does not occur by March 31, 2018, on such date, we must either (i) provide cash security and maintain a cash balance in a restricted account at SVB in an amount of at least 50% of the amounts we owe to SVB or (ii) prepay the Term Loan in its entirety. On November 10, 2017, we provided SVB evidence of a positive clinical trial event. In the event a pre-clinical event does not occur by July 31, 2018, on such date, we must either (i) provide cash security and maintain a cash balance in a restricted account at SVB in an amount of at least 100% of the amounts we owe to SVB or (ii) prepay the Term Loan in its entirety. In each case, if we choose to prepay the Term Loan, in addition to the repayment of the outstanding principal and accrued and unpaid interest, we are required to pay the final payment fee and, if applicable, the success fee, but not the prepayment fee.

Subject to certain exceptions, the Loan Agreement contains covenants prohibiting us from, among other things: (a) disposing of our properties or assets; (b) liquidating or dissolving; (c) engaging in any business other than the business currently engaged in by us or reasonably related thereto; (d) engaging in business combinations or acquisitions or permitting or suffering any change in control; (e) incurring any additional indebtedness; (f) allowing any lien or encumbrance on any of our property; (g) paying any dividends or distributions; (h) entering into transactions with affiliates; and (i) making payment on subordinated debt.

Critical Accounting Policies and Estimates

Our financial statements are prepared in accordance with GAAP. These accounting principles require us to make estimates and judgments that can affect the reported amounts of assets and liabilities as of the date of the financial statements as well as the reported amounts of revenue and expense during the periods presented. We believe that the estimates and judgments upon which we rely are reasonably based upon information available to us at the time that we make these estimates and judgments. To the extent that there are material differences between these estimates and actual

results, our financial results will be affected. The accounting policies that reflect our more significant estimates and judgments and which we believe are the most critical to aid in fully understanding and evaluating our reported financial results are described in Note 2 — "Summary of Significant Accounting Policies" to our condensed financial statements included in "Part 1, Item 1 – Financial Statements" in this Report.

During the three months ended March 31, 2018, there were no material changes to our critical accounting policies or estimates disclosed in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Annual Report on Form 10-K filed on March 20, 2018.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements as defined under the rules and regulations of the Securities and Exchange Commission.

Recent Accounting Pronouncements

Refer to Note 2— *"Summary of Significant Accounting Policies"* to our condensed financial statements included in "Part 1, Item 1 – Financial Statements" in this Report for a discussion of recently issued accounting pronouncements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information we are required to disclose in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

We designed and evaluate our disclosure controls and procedures recognizing that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance and not absolute assurance of achieving the desired control objectives. Also, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. The design of any system of controls is based, in part, upon certain assumptions about the likelihood of future events and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Under the supervision of and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of our disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15(d)- 15(e) promulgated under the Exchange Act as of March 31, 2018. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of March 31, 2018.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) during the quarter ended March 31, 2018, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II — OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

The Company may be subject to claims and lawsuits that arise primarily in the ordinary course of business. The Company believes that the disposition or ultimate resolution of any such claims and lawsuits will not have a material adverse effect on the financial position, results of operations or cash flows of the Company.

ITEM 1A. RISK FACTORS

In addition to the other information set forth elsewhere in this report, you should carefully consider the factors discussed in Part I, Item 1A "Risk Factors" of the Company's Annual Report on Form 10-K for the year ended December 31, 2017. Those factors, if they were to occur, could cause our actual results to differ materially from those expressed in our forward-looking statements in this report, and materially adversely affect our financial condition or future results. Although we are not aware of any other factors that we currently anticipate will cause our forward-looking statements to differ materially from our future actual results, or materially affect the Company's financial condition or future results, additional risks and uncertainties not currently known to us or that we currently deem to be immaterial might materially adversely affect our actual business, financial condition and/or operating results.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

USE OF PROCEEDS

(a) *Sales of Unregistered Securities*
None.

(b) Stock Repurchases

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Not Applicable.

Gemphire Therapeutics Inc.
Form 10-Q

ITEM 6. EXHIBITS

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
1.1	Underwriting Agreement by and between Gemphire Therapeutics Inc. and Piper Jaffray & Co. dated February 8, 2018 (incorporated by reference to Exhibit 1.1 to the Registrant's Current Report on Form 8-K, File No. 001-37809, filed on February 12, 2018).
10.1	Amendment No. 1 to the Gemphire Therapeutics Inc. Inducement Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, File No. 001-37809, filed on April 12, 2018).
10.2	Employment Agreement between Gemphire Therapeutics Inc. and Dr. Steven Gullans dated May 1, 2018 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, File No. 001-37809, filed on May 3, 2018).
31.1	Certification of Principal Executive Officer Pursuant to Exchange Act Rule 13a-14(a) or 15d-14(a), as Adopted Pursuant to Section 302 of The Sarbanes Oxley Act of 2002.
31.2	Certification of Principal Financial Officer Pursuant to Exchange Act Rule 13a-14(a) or 15d-14(a), as Adopted Pursuant to Section 302 of The Sarbanes Oxley Act of 2002.
32.1	Certifications of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

Gemphire Therapeutics Inc.
Form 10-Q

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Registrant: Gemphire Therapeutics Inc.

SIGNATURE	TITLE	DATE
/s/ STEVEN GULLANS Steven Gullans	President and Chief Executive Officer (Principal Executive Officer)	May 8, 2018
/s/ JEFFREY S. MATHIESEN Jeffrey S. Mathiesen	Chief Financial Officer (Principal Financial and Accounting Officer)	May 8, 2018

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO EXCHANGE ACT RULE 13a-14(a) OR 15d-14(a), AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES OXLEY ACT OF 2002

I, Steven Gullans, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Gemphire Therapeutics Inc. for the quarterly period ended March 31, 2018;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2018

/s/ STEVEN GULLANS
Name: Steven Gullans
Title: President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO EXCHANGE ACT RULE 13a-14(a) OR 15d-14(a), AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES OXLEY ACT OF 2002

I, Jeffrey S. Mathiesen, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Gemphire Therapeutics Inc. for the quarterly period ended March 31, 2018;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2018

/s/ JEFFREY S. MATHIESEN
Name: Jeffrey S. Mathiesen
Title: Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER AND PRINCIPAL FINANCIAL OFFICER, PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002*

Pursuant to the requirement set forth in Rule 13a-14(b) or Rule 15d-14(b) of the Securities and Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code, Steven Gullans, Interim President and Chief Executive Officer of Gemphire Therapeutics Inc. (the "Company"), and Jeffrey S. Mathiesen, Chief Financial Officer of the Company, each hereby certify that, to the best of their knowledge:

1. The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2018, to which this Certification is attached as Exhibit 32.1 (the "Quarterly Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act, and

2. The information contained in the Quarterly Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Quarterly Report and results of operations of the Company for the period covered by the Quarterly Report.

/s/ STEVEN GULLANS	/s/ JEFFREY S. MATHIESEN
President and Chief Executive Officer	Chief Financial Officer
Dated: May 8, 2018	Dated: May 8, 2018

 This certification accompanies the report to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Gemphire Therapeutics Inc. under the Securities Act of 1933, as amended, or the Exchange Act made before or after the date of the report, irrespective of any general incorporation language contained in such filing.