FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL

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Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

MATHIESEN JEFFREY S	2. Date of Ever Requiring State (Month/Day/Ye 08/04/2016	ement	3. Issuer Name and Ticker or Trading Symbol Gemphire Therapeutics Inc. [GEMP]					
(Last) (First) (Middle) 43334 SEVEN MILE ROAD			Relationship of Reporting Persi (Check all applicable) Director	10% Owner	r (Mo	5. If Amendment, Date of Original Filed (Month/Day/Year)		
SUITE 1000			X Officer (give title below) Chief Financial (Other (spec below) Officer	App	licable Line)	Group Filing (Check One Reporting Person	
(Street) NORTHVILLE MI 48167						-	/ More than One	
(City) (State) (Zip)								
Table I - Non-Derivative Securities Beneficially Owned								
1. Title of Security (Instr. 4)			2. Amount of Securities Beneficially Owned (Instr. 4)			Nature of Indirect Beneficial Ownership str. 5)		
Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)								
1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securiti Underlying Derivative Security		4. Conversion or Exercise Price of	Form:	6. Nature of Indirect Beneficial Ownership (Instr. 5)	
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares	Derivative Security	Direct (D) or Indirect (I) (Instr. 5)		
Employee Stock Option (right to buy)	(1)	09/24/2025	Common Stock	51,300	3.587	D		
8% Convertible Subordinated Promissory Note	(2)	(2)	Common Stock	\$25,000(2)	6.7059	D		

Explanation of Responses:

- 1. The options were granted on September 25, 2015. 3,207 options immediately vested on the grant date, and the remaining options vest in 36 equal monthly increments on the last day of each month, except for the last vesting period ending on August 31, 2018, where 1,333 options will vest.
- 2. The note was issued in the original principal amount of \$25,000. The outstanding principal and accrued interest on such note will automatically convert into shares of common stock, par value \$0.001 per share, of Gemphire Therapeutics Inc. (the "Company") immediately prior to the closing of the Company's initial public offering. The note bears interest at a rate of 8% per annum. The note has accrued interest of \$1.304 to date and will continue to accrue interest until conversion.

Remarks:

Exhibit 24, Power of Attorney, is attached.

<u>Stephanie Swan, by Power of</u> Attorney

08/04/2016

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 5 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

POWER OF ATTORNEY

Know all men by these presents, that the undersigned hereby constitutes and appoints each of David Lowenschuss, Amy Rabourn, Meredith Ervine, Gabrielle Sims, and Stephanie Swan, signing singly, and with full power of substitution, his or her true and lawful attorney-in-fact to:

- (1) execute for and on behalf of the undersigned, with respect to the undersigned's position as an officer and/or director of Gemphire Therapeutics Inc. (the "Company"), Form ID and Forms 3, 4, and 5 in accordance with Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder;
- do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form ID or Forms 3, 4, or 5, complete and execute any amendment or amendments thereto, and timely file such form with the United States Securities and Exchange Commission and any stock exchange, stock market or similar authority; and
- (3) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, and in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this power of attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4, and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 28th day of April, 2016.

/s/ Jeffrey S. Mathiesen Jeffrey S. Mathiesen