As filed with the Securities and Exchange Commission on February 28, 2020

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

KemPharm, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

1180 Celebration Boulevard, Suite 103 Celebration, FL 34747

(Address of Principal Executive Offices) (Zip Code)

2014 Equity Incentive Plan

(Full Title of the Plan)

R. LaDuane Clifton, CPA Chief Financial Officer, Secretary and Treasurer KemPharm, Inc. 1180 Celebration Boulevard, Suite 103 Celebration, FL 34747 (321) 939-3416

(Name and Address of Agent for Service) (Telephone Number, Including Area Code, of Agent for Service)

Copies to:

Brent B. Siler Matthew P. Dubofsky Cooley LLP 380 Interlocken Crescent, Suite 900 Broomfield, CO 80021 (720) 566-4000

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 🗆 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 7(a)(2)(B) of the Securities Act.

20-5894398 (I.R.S. Employer Identification No.)

CALCULATION OF REGISTRATION FEE

		Proposed	Proposed	Amount of
	Amount to be	Maximum Offering	Maximum Aggregate	Registration
Title of Securities to be Registered	Registered (1)	Price Per Share (2)	Offering Price (2)	Fee
Common Stock, par value \$0.0001 per share	1,454,031 shares	\$0.29	\$421,668.99	\$54.73

- (1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "*Securities Act*"), this Registration Statement shall also cover any additional shares of the Registrant's common stock, par value \$0.0001 (the "*Common Stock*") that become issuable under the 2014 Equity Incentive Plan (the "*2014 Plan*") by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of the Registrant's outstanding shares of Common Stock.
- (2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) and Rule 457(c) promulgated under the Securities Act. The offering price per share and the aggregate offering price are based upon the average high and low prices of the Registrant's Common Stock as reported on the Nasdaq Capital Market on February 26, 2020. The chart below details the calculations of the registration fee:

Securities	Number of Shares	Offering Price Per Share (3)	Aggregate Offering Price
Additional shares reserved for future grant under the 2014 Plan	1,454,031	\$0.29	\$421,668.99
Proposed Maximum Aggregate Offering Price			\$421,668.99
Registration Fee			\$54.73

(3) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) and Rule 457(c) promulgated under the Securities Act. The offering price per share and the aggregate offering price are based upon the average high and low prices of the Registrant's Common Stock as reported on the Nasdaq Capital Market on February 26, 2020.

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EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed for the purpose of registering an additional 1,454,031 shares of the Registrant's Common Stock to be issued pursuant to the Registrant's 2014 Plan.

INCORPORATION BY REFERENCE OF CONTENTS OF REGISTRATION STATEMENT ON FORM S-8

The Registrant is hereby registering an additional 1,454,031 shares of the Registrant's Common Stock to be issued pursuant to the Registrant's 2014 Plan. The contents of the Registration Statement on Form S-8 (File No. 333-203703), as filed with the Securities and Exchange Commission (the "*Commission*") on April 29, 2015, are incorporated herein by reference and made a part of this Registration Statement.

ITEM 8. EXHIBITS

Exhibit

	L'AIIIDIU				
1	Number	Description			
	4.1(1)	Amended and Restated Certificate of Incorporation, as currently in effect.			
	4.2(2)	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock			
	4.3(3)	Certificate of Designation of Preferences, Rights and Limitations of Series B-1 Convertible Preferred Stock			
	4.4(4)	Certificate of Designation of Preferences, Rights and Limitations of Series B-2 Convertible Preferred Stock			
	4.5(5)	Amended and Restated Bylaws, as currently in effect.			
	4.6(6)	Specimen stock certificate evidencing shares of Common Stock.			
	4.7(7)	<u>2014 Equity Incentive Plan.</u>			
	4.8(8)	Form of Stock Option Grant Notice and Stock Option Agreement under 2014 Equity Incentive Plan.			
	4.8(8)	Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit Award Agreement under 2014 Equity Incentive Plan.			
	5.1	Opinion of Cooley LLP.			
	23.1	Consent of RSM US LLP, independent registered public accounting firm.			
	23.2	<u>Consent of Cooley LLP (included in Exhibit 5.1).</u>			
	24.1	<u>Power of Attorney (included on the signature page of this Form S-8).</u>			
(1)		Previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-36913), filed with the Commission on April 21, 2015, and			
(\mathbf{r})	incorporated by reference herein.				
(2)					
(2)	and incorporated by reference herein.				
(3)	Previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-36913), filed with the Commission on September 4, 2019,				
(A)	and incorporated by reference herein.				
(4)	Previously filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-36913), filed with the Commission on September 4, 2019, and incorporated by reference herein.				
(5)		reviously filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-36913), filed with the Commission on April 21, 2015, and			
(-)		incorporated by reference herein.			
(6)		viously filed as Exhibit 4.2 to Amendment No. 2 to the Registrant's Registration Statement on Form S-1 (File No. 333-202660), filed with the			
. ,		Commission on April 9, 2015, and incorporated by reference herein.			

(7) Previously filed as Exhibit 4.7 to the Registrant's Registration Statement on Form S-8 (File No. 333-203703), filed with the Commission on April 29, 2015, and incorporated by reference herein.

(8) Previously filed as Exhibit 10.15 to the Registrant's Registration Statement on Form S-1 (File No. 333-202660), filed with the Commission on March 11, 2015, and incorporated by reference herein.

(9) Previously filed as Exhibit 10.16 to the Registrant's Registration Statement on Form S-1 (File No. 333-202660), filed with the Commission on March 11, 2015, and incorporated by reference herein.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Celebration, State of Florida, on this 28th day of February, 2020.

KemPharm, Inc.

By: /s/ R. LaDuane Clifton R. LaDuane Clifton, CPA Chief Financial Officer, Secretary and Treasurer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Travis C. Mickle, Ph.D. and R. LaDuane Clifton, CPA and each or any one of them, his lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date	
/s/ Travis C. Mickle			
Travis C. Mickle, Ph.D.	President, Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)	February 28, 2020	
/s/ R. LaDuane Clifton			
R. LaDuane Clifton, CPA	Chief Financial Officer, Secretary and Treasurer (Principal Financial Officer)	February 28, 2020	
/s/ Timothy J. Sangiovanni			
Timothy J. Sangiovanni, CPA	Vice President, Corporate Controller (Principal Accounting Officer)	February 28, 2020	
/s/ Matthew R. Plooster			
Matthew R. Plooster	Director	February 28, 2020	
/s/ Richard W. Pascoe			
Richard W. Pascoe	Director	February 28, 2020	
/s/ Joseph B. Saluri			
Joseph B. Saluri	Director	February 28, 2020	
/s/ David S. Tierney			
David S. Tierney	Director	February 28, 2020	
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Brent B. Siler +1 202 728 7040 bsiler@cooley.com

February 28, 2020

KemPharm, Inc. 1180 Celebration Boulevard, Suite 103 Celebration, Florida 34747

Re: Registration on Form S-8

Ladies and Gentlemen:

We have acted as counsel to KemPharm, Inc., a Delaware corporation (the "Company"), in connection with the filing of a registration statement on Form S-8 (the "Registration Statement") with the Securities and Exchange Commission covering the offering of up to 1,454,031 shares of the Company's Common Stock, \$0.0001 par value (the "Shares"), pursuant to the Company's 2014 Equity Incentive Plan (the "2014 Plan").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and related Prospectus, (b) the Company's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, each as amended and as currently in effect, (c) the 2014 Plan and (d) originals or copies certified to our satisfaction of such other records, documents, certificates, memoranda, and other instruments as we deem necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness and authenticity of all documents submitted to us as originals and the conformity to originals of all documents submitted to us as copies thereof, and we have assumed the due execution and delivery of all documents where due execution and delivery are prerequisite to the effectiveness thereof, the accuracy, completeness and authenticity of certificates of public officials; and the due authorization, execution and delivery of all documents by all persons other than the Company where due authorization, execution and delivery are a prerequisite to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued in accordance with the 2014 Plan, the Registration Statement and related Prospectus, will be validly issued, fully paid, and nonassessable (except as to shares issued pursuant to certain deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).

We consent to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely,

COOLEY LLP

By: <u>/s/ Brent B. Siler</u> Brent B. Siler

> Cooley LLP 1299 Pennsylvania Avenue, NW, Suite 700 Washington, DC 20004-2400 t: (202) 842-7800 f: (202) 842-7899 cooley.com

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-8 of KemPharm, Inc. of our report dated February 28, 2020, relating to the financial statements of KemPharm, Inc., appearing in the Annual Report on Form 10-K of KemPharm, Inc. for the year ended December 31, 2019.

/s/ RSM US LLP

Orlando, Florida February 28, 2020