



6,765,463 Shares of Common Stock
Warrants to Purchase up to 7,692,307 Shares of Common Stock
Pre-Funded Warrants to Purchase up to 926,844 Shares of Common Stock

This prospectus supplement updates and should be read in conjunction with the prospectus dated January 8, 2021, or the Prospectus, relating to the offering of up to 6,765,463 shares of our common stock, warrants to purchase up to 7,692,307 shares of our common stock and pre-funded warrants to purchase 926,844 shares of our common stock, as well as an option to the underwriter in the offering to purchase up to an additional 1,153,846 shares of common stock and/or warrants to purchase up to 1,153,846 shares of our common stock, in any combination thereof. To the extent that there is any conflict between the information contained herein and the information contained in the Prospectus, the information contained herein supersedes and replaces such information.

Current Report

This prospectus supplement incorporates into the Prospectus the information contained in our attached current report on Form 8-K that we filed with the Securities and Exchange Commission on February 9, 2021, or the Form 8-K. The Form 8-K, as filed, is set forth below.

The information contained in this Prospectus Supplement No. 3 supplements and supersedes, in relevant part, the information contained in the Prospectus, as amended and supplemented to date. This Prospectus Supplement No. 3 is incorporated by reference into, and should be read in conjunction with, the Prospectus, as amended and supplemented to date, and is not complete without, and may not be delivered or utilized except in connection with, the Prospectus, as amended and supplemented to date.

The Prospectus, together with Prospectus Supplement No.1, Prospectus Supplement No. 2 and this Prospectus Supplement No. 3, constitutes the prospectus required to be delivered by Section 5(b) of the Securities Act of 1933, as amended, with respect to offers and sales of the securities as set forth in the Prospectus, as amended and supplemented. All references in the Prospectus to “this prospectus” are amended to read “this prospectus (as supplemented and amended to date).”

Our common stock is traded on the Nasdaq Capital Market under the symbol “KMPH.” The last reported sale price of our common stock on February 8, 2021 was \$9.44 per share. You are urged to obtain current market quotations for our common stock.

Investing in our securities is highly speculative and involves a significant degree of risk. See “Risk Factors” beginning on page 9 of the Prospectus and the Risk Factors identified in our Annual Report for the year ended December 31, 2019, as amended, and in our Quarterly Report for the quarter ended September 30, 2020 for a discussion of information that should be considered before making a decision to purchase our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is February 9, 2021.

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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported): February 9, 2021 (February 8, 2021)

KemPharm, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of Incorporation)

001-36913
(Commission File Number)

20-5894398
(IRS Employer Identification No.)

1180 Celebration Boulevard, Suite 103,
Celebration, FL
(Address of Principal Executive Offices)

34747
(Zip Code)

Registrant's Telephone Number, Including Area Code: (321) 939-3416

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	KMPH	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

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.

Item 1.02 Termination of a Material Definitive Agreement.

On February 8, 2021, KemPharm, Inc. (the “Company”) entered into a payoff letter with Deerfield Private Design Fund III, L.P., Deerfield Special Situations Fund, L.P., Deerfield Street Capital Master Fund, L.P., Delaware Street Capital Master Fund, L.P. and M. Kingdon Offshore Master Fund, L.P. (collectively, the “Lenders”), pursuant to which the Company agreed to pay off and thereby terminate its Facility Agreement, dated as of June 2, 2014, as amended, with the Lenders (the “Credit Agreement”).

Pursuant to the payoff letter, the Company paid a total of \$8.0 million to the Lenders, representing the principal balance, accrued interest outstanding and a prepayment fee in repayment of the Company’s outstanding obligations under the Credit Agreement.

Pursuant to the payoff letter, all outstanding indebtedness and obligations of the Company owing to the Lenders under the Credit Agreement have been paid in full. The Credit Agreement and the notes thereunder, as well as the security interests in the assets of the Company securing the Credit Agreement and note obligations, have been terminated. The Lenders will retain the warrants previously issued to them by the Company.

A full description of the Credit Agreement, as amended, is contained in the Company’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, as filed with the U.S. Securities and Exchange Commission on October 29, 2020, and such description is incorporated herein by reference.

The description of the payoff letter contained herein does not purport to be complete and is qualified in its entirety by reference to the payoff letter, a copy of which is attached hereto as Exhibit 10.1 and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

Exhibit No.	Description
10.1	<u>Payoff letter, dated as of February 8, 2021, by and among the Company and the lenders named therein.</u>

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.

KemPharm, Inc.

Date: February 9, 2021

By: /s/ R. LaDuane Clifton

R. LaDuane Clifton, CPA

Chief Financial Officer, Secretary and Treasurer

February 8, 2021

KemPharm, Inc.

1180 Celebration Blvd.

Suite 103

Celebration, FL 34747

Fax: [Intentionally Omitted]

E-mail: [Intentionally Omitted]

Attention: R. LaDuane Clifton, Chief Financial Officer

Re: Payoff Letter

Ladies and Gentlemen:

Reference is made to (i) the Facility Agreement, dated as of June 2, 2014 (as amended, restated, supplemented or otherwise modified to date, the "Credit Agreement"), between KemPharm, Inc., a Delaware corporation (the "Borrower" or a "Credit Party"), and Deerfield Private Design Fund III, L.P., a Delaware limited partnership (the "DPDF Lender"), Deerfield Special Situations Fund, L.P., a Delaware limited partnership ("DSS"), Delaware Street Capital Master Fund, L.P., a Cayman Islands limited partnership ("DSCM"), and the other lenders from time to time party thereto (the "Other Lenders"; the Other Lenders together with the DPDF Lender, DSS and DSCM, collectively, the "Lenders", individually each a "Lender"), and (ii) the other Transaction Documents (as defined in the Credit Agreement) and all other documents and instruments relating thereto (together with the Credit Agreement, collectively, the "Credit Documents"). The Lenders understand that at the Payoff Effective Time (as hereinafter defined), the Borrower expects to repay in full all of the Obligations of the Borrower and the other Credit Parties to the Lenders under or in respect of the Credit Documents (other than Surviving Obligations (as hereinafter defined)). All undefined capitalized terms used herein shall have the meanings set forth in the Credit Agreement.

Upon written confirmation by the Lenders or their counsel (which may be by email) of each Lender's receipt (or, in the case of clause (ii) below, receipt by the Deerfield Lenders' outside counsel) on February 8, 2021 (the "Payoff Date") before 3:00 p.m. New York City time of (i) a federal funds wire transfer to the accounts of each Lender specified on Schedule I hereto in the amount set forth opposite such Lender's name on such Schedule I (collectively, the "Payoff Amount"; provided, in the event any Lender has not received payment of its Pro Rata Share of the Payoff Amount by 3:00 p.m. New York City time on the Payoff Date, the Payoff Amount shall be increased by an amount equal to \$1,476.73 (representing per diem interest and fees) for each day the Payoff Amount remains unpaid (including the Payoff Date if such payment is not received by 3:00 p.m. New York City time on such date) and each Lender shall receive its Pro Rata Share of such increased amount), which amount represents all Obligations outstanding under or in respect of the Credit Documents, (ii) a federal funds wire transfer to the account of Katten Muchin Rosenman LLP, counsel to the Deerfield Lenders specified on Schedule I hereto in the amount of \$13,432.50 (the "Legal Fees"), which amount represents the estimated legal fees and expenses of the Lenders' outside counsel as of the date hereof, and (iii) a fully executed counterpart of this letter agreement (this "Agreement") signed by the Borrower and each other Credit Party (the time at which all of the conditions in the foregoing clauses (i), (ii) and (iii) shall first be satisfied is herein referred to as the "Payoff Effective Time"), the Payoff Effective Time shall occur. If the Payoff Effective Time has not occurred on or prior to 3:00 p.m. on February 12, 2021 (the "Expiration Time"), this Agreement shall be of no further force and effect.

The Borrower hereby represents, warrants, acknowledges and agrees that it has previously publicly disclosed any material non-public information (if any) that had been provided or made available to any Lender (or any Lender's agents or representatives) on or prior to the date hereof, including all material information regarding the payoff of the Obligations as contemplated hereby. Notwithstanding anything contained in this Agreement to the contrary, and without implication that the contrary would otherwise be true, the Borrower expressly acknowledges and agrees that no Lender nor any affiliate of any Lender has or shall have (unless expressly agreed to by such particular Lender after the date hereof in a written definitive and binding agreement executed by the Borrower and such particular Lender or customary oral (confirmed by e-mail) "wall cross" agreement (it being understood and agreed that no Lender may bind any other Lender with respect thereto)), any duty of trust or confidence with respect to, or a duty not to trade in any securities while aware of, any information regarding the Borrower.

As used herein, the term "Surviving Obligations" means (i) those obligations under the Credit Documents (including contingent reimbursement obligations and indemnity obligations) which, by their express terms, survive termination of the Credit Agreement or such other Credit Documents, as the case may be, (ii) to the extent not paid at or prior to the Payoff Effective Time, the reasonable and documented out-of-pocket fees and expenses of outside counsel to the Lenders in connection with the termination of the Credit Documents and release of all liens thereunder and (iii) the obligations of the Borrower pursuant to the December 2020 Exchange Agreement (as defined in the Credit Agreement), the A&R Certificate of Designation (as defined the December 2020 Exchange Agreement), the Exchange Warrants (as defined in the December 2020 Exchange Agreement) and the Warrants (as defined in the Credit Agreement) together with together with any and all other obligations of the Borrower in respect of the Exchange Warrants, the Warrants, the Series B-2 Preferred Stock of the Borrower and any shares of Common Stock issuable upon the exercise or conversion thereof.

Upon the Payoff Effective Time, the Lenders (i) agree and acknowledge that (A) all outstanding indebtedness (including, without limitation, principal, interest and fees) and other obligations (including the Obligations) of the Borrower or the other Credit Parties under or relating to the Credit Documents (other than the Surviving Obligations), including, for the avoidance of doubt, all Notes, shall be paid and satisfied in full and irrevocably discharged in full, terminated and released, (B) all security interests and other Liens granted to or held by the Lenders in any Property as security for such indebtedness shall be forever and irrevocably satisfied, released and discharged, (C) the Credit Documents shall terminate and be of no further force or effect other than those provisions therein that specifically survive termination and (D) the Borrower and the other Credit Parties (or their respective designees) shall be automatically authorized to file the UCC termination statements attached hereto as Exhibit A and subject to the Collateral Agent's review and comment, prepare and file intellectual property releases and other instruments, releases and documents evidencing the release of the Lenders' security interests and other Liens in all of the assets and property of the Borrower and the other Credit Parties that secure the Obligations under the Credit Documents (the "Property"). Further, upon and after the Payoff Effective Time, the Lenders agree to take all reasonable additional steps requested by the Borrower as may be necessary to release its security interests in the Property and execute and deliver any additional instruments, releases or documents reasonably requested by the Borrower to evidence such release and discharge. The Borrower agrees to pay the Collateral Agent and the Lenders for all out-of-pocket costs and expenses incurred by the Lenders in connection with the matters referred to in the previous sentence, and acknowledges that the Collateral Agent's and the Lenders' execution of and/or delivery of any documents releasing any security interest or claim in any Property of the Borrower or the other Credit Parties as set forth herein is made without recourse, representation, warranty or other assurance of any kind by the Collateral Agent or such Lender as to the Lenders' rights in any collateral security for amounts owing under the Credit Documents, the condition or value of any Collateral, or any other matter.

The Borrower hereby agrees not to request additional Loans under the Credit Agreement on or after the date hereof through the Expiration Time. Furthermore, the Borrower hereby confirms that the commitments of the Lenders to make Loans under the Credit Documents are terminated as of the Payoff Effective Time, and, as of the Payoff Effective Time, none of the Lenders shall have any further obligation under the Credit Documents to make Loans to the Borrower or any other Credit Party. Notwithstanding anything to the contrary contained herein or in any of such releases or other documents, the obligations and liabilities of the Borrower and the other Credit Parties to the Lenders and the Collateral Agent under or in respect of the Credit Documents insofar as such obligations and liabilities, by their express terms, survive termination of the Credit Documents shall continue in full force and effect in accordance with their terms.

Notwithstanding any terms of this Agreement or the Credit Documents to the contrary, if any of the Lenders determines after the Payoff Effective Time that an amount that was due and payable under the Credit Documents was mistakenly excluded from the Payoff Amount, the Borrower agrees to promptly pay such amount after such Lender provides evidence that such amount is due and payable.

If at any time on or after the Payoff Effective Time, all or any portion of the Payoff Amount paid to any of the Lenders is voided or rescinded or must otherwise be returned by any of the Lender upon the Borrower's or any other Credit Party's insolvency, bankruptcy or reorganization or otherwise, all as though such payment had not been made, the obligation to pay such amount so voided, rescinded or returned shall be reinstated.

In addition, the Borrower and the other Credit Parties agree that, upon the Payoff Effective Time, such Credit Parties release the Collateral Agent and each of the Lenders and their respective affiliates and subsidiaries and their respective officers, directors, employees, shareholders, agents, attorneys and representatives as well as their respective successors and assigns from any and all claims, obligations, rights, causes of action, and liabilities, of whatever kind or nature, whether known or unknown, whether foreseen or unforeseen, arising on or before the date hereof, which such Credit Parties ever had, now have or hereafter can, shall or may have for, upon or by reason of any matter, cause or thing whatsoever, which are based upon, arise under or are related to the Credit Documents (other than obligations of the Lenders expressly set forth in this Agreement) (collectively, the “Released Matters”). Without limiting the generality of the foregoing, the Borrower hereby waives the provisions of any statute or doctrine to the effect that a general release does not extend to claims which a releasing party does not know or suspect to exist in its favor at the time of executing the release, which if known by such releasing party would have materially affected the releasing party’s settlement with the party being released. The Borrower acknowledges that the agreements in this paragraph are intended to be in full satisfaction of all or any alleged injuries or damages arising in connection with the Released Matters. The Borrower acknowledges that the release contained herein constitutes a material inducement to the Lenders to enter into this Agreement and that the Lenders would not have done so but for the Lenders’ expectation that such release is valid and enforceable in all events.

This Agreement shall be governed by the internal laws of the State of New York. No party may assign its rights, duties or obligations under this Agreement without the prior written consent of the other parties. This Agreement may be executed in any number of separate counterparts (including by electronic means, such as a “.pdf” or “.tif” attachment), each of which shall, collectively and separately, constitute one agreement. The undersigned parties have signed below to indicate their consent to be bound by the terms and conditions of this Agreement.

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If you need additional information, please do not hesitate to contact us.

Very truly yours,

LENDERS:

DEERFIELD PRIVATE DESIGN FUND III, L.P.

By: Deerfield Mgmt III, L.P., its General Partner

By: J.E. Flynn Capital III, LLC, its General Partner

By: /s/ David J. Clark

Name: David J. Clark

Its: Authorized Signatory

DEERFIELD SPECIAL SITUATIONS FUND, L.P.

By: Deerfield Mgmt, L.P., its General Partner

By: J.E. Flynn Capital, LLC, its General Partner

By: /s/ David J. Clark

Name: David J. Clark

Its: Authorized Signatory

DELAWARE STREET CAPITAL MASTER FUND, L.P.

By: /s/ Andrew Bluhm

Name: Andrew Bluhm

Title: Principal

M. KINGDON OFFSHORE MASTER FUND, LP

By: KINGDON CAPITAL MANAGEMENT, LLC, as an agent and investment advisor

By: /s/ William Walsh

Name: William Walsh

Title: Chief Financial Officer

ACCEPTED and AGREED:

KEMPHARM, INC.

By: /s/ R. LaDuane Clifton

Name: R. LaDuane Clifton

Title: Chief Financial Officer

Schedule I

Payoff Amount as of the Payoff Date

Lender	Principal	Interest	Prepayment Premium	Accrued Expenses	Total Payoff Amount as of the Payoff Date	Wire Instructions
Deerfield Private Design Fund III, L.P.	\$5,364,314.58	\$26,784.83	\$269,554.97	-	\$5,660,654.38	[Intentionally Omitted]
Deerfield Special Situations Fund, L.P.	\$906,517.01	\$4,526.38	\$45,552.17	-	\$956,595.56	[Intentionally Omitted]
Delaware Street Capital Master Fund, L.P.	\$979,165.58	\$4,889.12	\$49,202.74	-	\$1,033,257.44	[Intentionally Omitted]
M. Kingdon Offshore Master Fund, LP	\$355,038.38	\$1,772.76	\$17,840.56	-	\$374,651.70	[Intentionally Omitted]

The Legal Fees referred to in the Payoff Letter should be sent by federal funds wire transfer to [Intentionally Omitted].

Exhibit A

UCC Terminations

See attached