



POWER OF ATTORNEY

Know all by these presents that the undersigned hereby constitutes and appoints each of Travis Mickle, Gordon Johnson, James C.T. Linfield and Matthew P. Dubofsky, signing individually, the undersigned's true and lawful attorneys-in fact and agents to:

(1) execute for and on behalf of the undersigned, an officer, director or holder of 10% or more of a registered class of securities of KemPharm, Inc. (the "Company"), Forms 3, 4 and 5 in accordance with Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the rules thereunder;

(2) do and perform any and all acts for and on behalf of the undersigned that may be necessary or desirable to complete and execute such Forms 3, 4 or 5, complete and execute any amendment or amendments thereto, and timely file such forms or amendments with the United States Securities and Exchange Commission and any stock exchange or similar authority; and

(3) take any other action of any nature whatsoever in connection with the foregoing that, in the opinion of such attorney-in-fact, may be of benefit, 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 Exchange Act.

This Power of Attorney shall remain in full force and effect until the earliest to occur of (a) 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, (b) revocation by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact or (c) as to any attorney-in-fact individually, until such attorney-in-fact shall no longer be employed by the Company or Cooley LLP, as applicable.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 3rd day of March, 2015.

/s/ Joseph B. Saluri  
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Joseph B. Saluri