

LIMITED POWER OF ATTORNEY
FOR SECTION 16 REPORTING OBLIGATIONS

Know all by these presents, that the undersigned hereby makes, constitutes and appoints each of Oliver S. Fetzer, Ph.D., Christopher D.T. Guiffre and Karen L. Roberts, signing singly and each acting individually, as the undersigned's true and lawful attorney in fact with full power and authority as hereinafter described to:

- (1) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of Cerulean Pharma Inc. (the "Company"), Forms 3, 4, and 5 (including any amendments thereto) in accordance with Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder (the "Exchange Act");
- (2) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to prepare, complete and execute any such Form 3, 4, or 5, prepare, complete and execute any amendment or amendments thereto, and timely deliver and file such form with the United States Securities and Exchange Commission and any stock exchange or similar authority;
- (3) seek or obtain, as the undersigned's representative and on the undersigned's behalf, information regarding transactions in the Company's securities from any third party, including brokers, employee benefit plan administrators and trustees, and the undersigned hereby authorizes any such person to release any such information to such attorney in fact and approves and ratifies any such release of information; and
- (4) 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, 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 relieving, nor is the Company assuming nor relieving, any of the undersigned's responsibilities to comply with Section 16 of the Exchange Act. The undersigned acknowledges that neither the Company nor the foregoing attorneys in fact assume (i) any liability for the undersigned's responsibility to comply with the requirement of the Exchange Act, (ii) any liability of the undersigned for any failure to comply with such requirements, or (iii) any obligation or liability of the undersigned for profit disgorgement under Section 16(b) of the Exchange Act.

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 3rd day of April, 2014.

/s/ Robert I. Tepper
Signature

Robert I. Tepper, M.D.
Print Name