

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

Mail Stop 3030

October 4, 2016

Marc H. Hedrick, MD President and Chief Executive Officer Cytori Therapeutics, Inc. 3020 Callan Road San Diego, CA 92121

Re: Cytori Therapeutics, Inc.

Form 10-K for Fiscal Year Ended December 31, 2015

Filed March 11, 2016 File No. 001-34375

Dear Dr. Hedrick:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filing and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Jeremy Hayden, Esq. General Counsel