DIVISION OF CORPORATION FINANCE

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

Mail Stop 3030

May 18, 2018

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

Re: Cytori Therapeutics, Inc.

Registration Statement on Form S-1

Filed April 27, 2018 File No. 333-224502

Dear Dr. Hedrick:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Tom Jones at (202) 551-3602 with any questions.

Sincerely,

/s/ Tom Jones for

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Cheston J. Larson, Esq.