



DIVISION OF  
CORPORATION FINANCE

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

March 29, 2017

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

**Re: Cytori Therapeutics, Inc.  
Registration Statement on Form S-3  
Filed March 27, 2017  
File No. 333-216947**

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 Brian Soares at (202) 551-3580 with any questions.

Sincerely,

/s/ Brian Soares for

Amanda Ravitz  
Assistant Director  
Office of Electronics and Machinery

cc: Chester J. Larson, Esq.  
Latham & Watkins LLP