

October 3, 2018

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 September 21, 2018  
File No. 333-227485

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 Caleb French at 202-551-6947 with any questions.

Sincerely,

Division of

Office of

Corporation Finance

Electronics and Machinery

cc: Cheston J. Larson, Esq.