

**Cytori Therapeutics, Inc.**  
**3020 Callan Road**  
**San Diego, CA 92121**

October 3, 2018

**VIA EDGAR**

Caleb French  
Division of Corporation Finance  
Securities and Exchange Commission  
100 F Street, N.E.  
Washington, D.C. 20549

**Re: Cytori Therapeutics, Inc.**  
**Registration Statement on Form S-1**  
**Filed September 21, 2018**  
**File No. 333-227485**

Dear Mr. French:

Pursuant to Rule 461 of Regulation C of the General Rules and Regulations under the Securities Act of 1933, as amended, the undersigned, on behalf of Cytori Therapeutics, Inc., respectfully requests that the effective date of the Registration Statement on Form S-1 referred to above be accelerated so that it will become effective at 4:00 P.M. Eastern Time on October 5, 2018, or as soon as practicable thereafter.

If you have any questions or require additional information, please contact Cheston J. Larson, Esq. of Latham & Watkins LLP at (858) 523-5435. Thank you for your assistance and cooperation in this matter.

Very truly yours,  
CYTORI THERAPEUTICS, INC.

By: /s/ Tiago M. Girão  
Tiago M. Girão  
Chief Financial Officer

cc: Cheston J. Larson, Esq., Latham & Watkins LLP  
Christopher G. Geissinger, Esq., Latham & Watkins LLP