

February 12, 2014

Via EDGAR

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, DC 20549-4561

Attn: Mr. Jay Mumford

**Re: Cytori Therapeutics, Inc.
Registration Statement on Form S-3
File No. 333-192409**

Dear Mr. Mumford:

Pursuant to Rule 461 of the Securities Act of 1933, as amended, Cytori Therapeutics, Inc. (the “**Company**”) hereby requests that the Securities and Exchange Commission (the “**Commission**”) accelerate the effectiveness of the above-referenced Registration Statement to 10:00 a.m., Eastern Standard Time, on Thursday, February 13, 2014, or as soon thereafter as practicable.

The Company acknowledges that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, such declaration does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the Company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Jeffrey T. Baglio of DLA Piper LLP (US) with any questions or comments at (858) 677-1458. Thank you for your assistance with this filing.

Very truly yours,

Cytori Therapeutics, Inc.

By: /s/ Mark E. Saad

Name: Mark E. Saad

Title: Chief Financial Officer