

September 22, 2014

***Via Edgarlink and Facsimile***

Mr. Martin James  
Senior Assistant Chief Accountant  
Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, DC 20549

RE: Cytori Therapeutics, Inc. ("Cytori")  
Form 10-Q for the Quarterly Period Ended June 30, 2014  
Filed August 11, 2014  
File No. 001-34375

Dear Mr. James:

This letter respond to the comment contained in your letter dated September 19, 2014, regarding our Quarterly Report on Form 10-Q for the period ended June 30, 2014.

For your convenience, we have repeated your comment and set forth our response immediately after the comment. Our response below should not be interpreted as an admission of any deficiency with respect to our Quarterly Report on Form 10-Q for the period ended June 30, 2014.

**Note 7. Revenue Recognition, Page 9**

***1. We note your response to prior comment 6. Please tell us if the change in timing for revenue recognition until cash is collected is applicable to all new customers or only to new customers within Japan. If the new timing applies to all new customers, please tell us the basis for the change in timing for customers outside Japan.***

**Cytori response:** The change in timing for revenue recognition until cash is collected is applicable to all new customers, not only to those in Japan. The basis for changing the timing of revenue recognition for customers that had not developed sufficient payment history with us (and a letter of credit was not in place) at the time of the transaction is due to our recent experience of collectability delays in multiple geographies. An example of this includes the European customer described in response to your prior comment 2. Based on the recent collectability delays experienced for new customers in and outside of Japan, we determined there was a heightened risk of collectability and it was appropriate to change the timing for revenue recognition for all customers that had not developed sufficient payment history with us (and a letter of credit was not in place) at the time of the transaction.

Our response to prior comment 6 was focused on Japan as that has been the majority of our sales activity to new customers. At June 30, 2014, we note the total revenue deferred as a result of this change in timing for revenue recognition for all non-Japanese customers in 2014 is approximately \$3,000.

As requested in your comment letter dated September 19, 2014, Cytori hereby acknowledges that:

- Cytori is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- Cytori may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

If I can facilitate the Staff's review, or if the Staff has any questions on the information set forth herein, please telephone me at (858) 875-5203 or Tiago Girao at (858) 875-5211. Thank you for your time and consideration.

Sincerely,

/s/ Marc H. Hedrick

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