



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

DIVISION OF  
CORPORATION FINANCE

Mail Stop 3030

May 31, 2016

Philippe Deschamps  
President and Chief Executive Officer  
Helius Medical Technologies, Inc.  
Suite 400, 41 University Drive  
Newtown, Pennsylvania 18940

**Re: Helius Medical Technologies, Inc.  
Registration Statement on Form S-1  
Filed May 4, 2016  
File No. 333-211129**

Dear Mr. Deschamps:

We have limited our review of your registration statement to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Use of Proceeds, page 34

1. We note that you intend to use the proceeds from warrant exercises for various enumerated purposes. Please disclose whether the proceeds are expected to be sufficient to complete clinical trials and/or other enumerated uses necessary to reach commercialization of your products. If they are not expected to be sufficient, please prioritize the enumerated uses and discuss how much additional capital you will need to complete those steps toward commercial readiness.

Principal Stockholders, page 85

2. It appears that Messers Deschamps and Sackier may have beneficial ownership of the shares held by MPJ Healthcare, LLC. Revise the table accordingly or advise.

3. Refer to footnote (11). Clarify whether you know the identities of the natural persons who have control over the A&B entities.

Exhibit 5.1

4. We note that counsel limits its opinion to the laws of the State of Wyoming, but that the warrants are governed by the laws of British Columbia. Please file an opinion of counsel that the warrants are binding obligations under the laws of British Columbia.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement, please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it 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 refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Philippe Deschampes  
Helius Medical Technologies, Inc.  
May 31, 2016  
Page 3

You may contact me at 202-551-3528 with any questions.

Sincerely,

/s/ Amanda Ravitz

Assistant Director  
Office of Electronics and Machinery