



DIVISION OF  
CORPORATION FINANCE

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

September 18, 2014

Via E-mail

Edward Myles

Interim President, Chief Operating Officer and Chief Financial Officer

Advanced Cell Technology, Inc.

33 Locke Drive

Marlborough, Massachusetts 01752

**Re: Advanced Cell Therapeutics, Inc.  
Preliminary Proxy Statement on Schedule 14A  
Filed September 10, 2014  
File No. 000-50295**

Dear Mr. Myles:

We have limited our review of your filing to the issue addressed in the following comment.

Please respond to this letter by amending your filing and providing the requested information. If you do not believe our comment applies 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 filing and the information you provide in response to our comment, we may have additional comments.

Actions to Be Taken at the Meeting

Proposal 2—Amendment to Certificate of Incorporation to Increase Authorized Common Stock, page 40

1. We note your proposal to shareholders to approve an amendment to the certificate of incorporation to increase the amount of authorized common shares from 37,500,000 to 60,000,000, resulting in additional authorized but unissued shares that may be issued by your Board of Directors in its discretion. Please also disclose whether you currently have, or do not have, any specific plans with respect to these additional authorized but unissued shares. If such plans exist, please disclose all material information.

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 Exchange Act of 1934 and all applicable Exchange 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.

Edward Myles  
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In responding to our comments, please provide a written statement from the company acknowledging that:

- the company 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
- the company 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.

Please contact Christina De Rosa at (202) 551-3577 or me at (202) 551-3715 with any questions.

Sincerely,

*/s/ Daniel Greenspan for*

Jeffrey P. Riedler  
Assistant Director

cc: Via E-mail  
William D. Collins, Esq.  
Goodwin Procter LLP  
Exchange Place  
53 State Street  
Boston, MA 02109