



DIVISION OF
CORPORATION FINANCE

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

August 21, 2013

Via E-Mail

Edward Myles
Chief Financial Officer
Advanced Cell Technology, Inc.
33 Locke Drive
Marlborough, Massachusetts 01752

**Re: Advanced Cell Technology, Inc.
Preliminary Proxy Statement on Schedule 14A
Filed August 12, 2013
File No. 000-50295**

Dear Mr. Myles:

We have reviewed your filing and have the following comments. Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. 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 filing and the information you provide in response to these comments, we may have additional comments.

Proposal 2

Amendment to Certificate of Incorporation to Increase Authorized Common Stock, page 33

You state that your currently authorized common stock is not sufficient to comply with the terms of dispute settlement agreements and your other outstanding rights or obligations to issue common stock. Please revise your disclosure to clarify your plans to issue authorized shares under the dispute settlement agreements, including the nature of the disputes, the terms of the settlements, and the number of shares issuable. In addition, please revise your disclosure to state whether you currently have, or do not have, any additional plans with respect to the increased number of authorized shares of common stock available for issuance. 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.

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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 Amy Reischauer at (202) 551-3793, Daniel Greenspan at (202) 551-3623 or me at (202) 51-3715 with any other questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey P. Riedler
Assistant Director