



DIVISION OF
CORPORATION FINANCE

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

November 3, 2010

Avi Barak
Chief Executive Officer and Director
BioCancell Therapeutics Inc.
Beck Science Center
8 Hartom St, Har Hotzvim
Jerusalem 97775
Israel 972-2-548-6555

**Re: BioCancell Therapeutics Inc.
Registration Statement on Form S-1, Amendment No. 7
Filed October 29, 2010
File No. 333-162088**

Dear Mr. Barak:

We have reviewed your registration statement and have the following 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.

General

1. We note your supplemental response filed November 1, 2010 states that you, "may need to adjust the [price] range prior to its inclusion in the Registration Statement." Please note that we may have further comments based on any changes in your price range.
2. We note your response to our prior comment 1. Rule 15c2-4(b) requires that the funds be placed in escrow for the benefit of investors until all contingencies have been satisfied. In the case of a minimum maximum offering, funds must be held in escrow until proceeds representing the minimum offering size have been received. The agreement with Clal Batucha specifies that the funds shall be released for the underlying units but it does not clarify that the funds cannot be released until all proceeds representing the minimum size of the offering have been received. Therefore, it does not appear that your agreement with Clal Batucha meets the requirements of Rule 15c2-4(b).

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3. We note your response to our prior comment 4. Please tell us when you will file the current report on Form 8-K that will include the detailed timeline for the offering. We may have additional comments once we have reviewed your proposed timeline.
4. We note your disclosure that bids will become irrevocable, “shortly before the termination of the period in which bids can be submitted.” Please disclose how long before the close of the auction these bids will become irrevocable, and when you plan to close the auction.
5. You disclose that, “Chardan is under no obligation to sell any of the units and will not be obligated to purchase any of the units.” However, in your agreement with Chardan, attached as Exhibit 10.28, you state, “BioCancell Therapeutics Inc. has engaged Chardan Capital Markets to act as the Company’s lead managing US placement agent and US financial advisor in connection with a planned placement of the Company’s Tel Aviv listed public equity or public equity-linked...and is expected to provide gross proceeds to the Company of approximately \$5,000,000.” Please explain this expectation given your disclosure that Chardan is not obligated to purchase or sell any of the units. Additionally, we note your statement that you bear sole responsibility for the accuracy of the information provided by you or your representatives in connection with the offering. This statement may lead some potential investor to believe that Chardan and Clal Finance do not have liability as underwriters. Please revise the statement accordingly.
6. We note your revised disclosure that, “In addition, our officers and directors might participate in the offering.” Please tell us whether your officers and directors may purchase securities in the offering.

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;

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- 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.

Please contact Mike Rosenthal at (202) 551-3674 or myself at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey P. Riedler
Assistant Director

cc: Dr. Shachar Hadar, Adv.
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