



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

DIVISION OF  
CORPORATION FINANCE

Mail Stop 4720

March 31, 2016

Dr. Ian Massey  
President and Chief Executive Officer  
StemCells, Inc.  
7707 Gateway Blvd.  
Newark, CA 94560

**Re: StemCells, Inc.  
Form PRE 14A  
Filed March 14, 2016  
File No. 000-19871**

Dear Dr. Massey:

We have reviewed your filing 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Proposal Number 3, page 36

1. Rule 14a-4(a)(3) under the Securities Exchange Act of 1934 requires you to identify clearly and impartially each separate matter upon which you intend to act, whether or not related to or conditioned on the approval of other matters. In this regard, we note that you have combined two matters in Proposal 3. Please revise to unbundle Proposal 3 so that the reverse stock split of your common stock and the disproportionate decrease in the number of authorized shares of common stock following the reverse stock split are two separate proposals. If any of the proposals are mutually conditioned, please revise the proxy statement accordingly and provide appropriate disclosure regarding the effect of a negative vote on the related proposals. In the alternative, please provide your analysis as to why you do not believe that the reverse stock split and disproportionate decrease in authorized shares should be presented as separate proposals. For guidance, refer to Exchange Act Release 34-31326 (October 16, 1992) at Section II.H.

Proposal Number 4, page 44

2. We refer to your descriptions regarding the terms of the proposed transaction. Please revise your disclosure to identify the investor and disclose whether the investor is a pre-existing investor. Additionally, we note you have provided some disclosure about the anticipated terms of the transaction, including how the price per share will be set for the initial purchase on the Commencement date; the issuance of shares equal to approximately 2% of the total dollar value of the equity line; and the 9.99% limitation on issuance. Please revise to clarify that these terms are subject to change and discuss the consequences if they do change.
3. We refer to your disclosure on page 46 that you have outstanding warrants with “full ratchet” price protection which could result in additional dilution. Please define the term “full ratchet” and provide additional disclosure to explain the potential effects of such provisions on current stockholders.
4. Please revise your disclosure on page 46 to provide additional information regarding your expected use of proceeds from any sales under the Purchase Agreement. See Item 11(c) of Schedule 14A.

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.

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.

Dr. Ian Massey  
StemCells, Inc.  
March 31, 2016  
Page 3

Please contact Dorrie Yale at 202-551-8776 or me at 202-551-3675 with any other questions.

Sincerely,

/s/ Suzanne Hayes

Suzanne Hayes  
Assistant Director  
Office of Healthcare and Insurance