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

DIVISION OF
CORPORATION FINANCE

August 8, 2011

Via E-Mail
Mark Weinreb, Chief Executive Officer
Stem Cell Assurance, Inc.
555 Heritage Drive
Jupiter, FL 33458

Re: Stem Cell Assurance, Inc.
Amendment No. 1 to Form 10
Filed July 11, 2011
File No. 000-54402

Dear Mr. Weinreb:

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 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.

General

Overview, page 1

1. We reissue comment one of our letter dated June 6, 2011. Please provide a more detailed discussion of your business plan. Clearly disclose the milestones for each part of your business plan, including the estimated time frame for each milestone, the estimated costs and the intended sources of funding. In response to our prior comment you have instead provided very general disclosure of the business plan, rather than the various milestones that are needed to implement each phase of your business plan.

2. While we note the general statement on page one that the implementation of the business plan will require sufficient equity or debt financing to fund your operations, please revise the disclosure to clearly state the intended source(s) of funding, whether you have any

funding sources to date, and the impact on your business plan if you are unable to obtain such funding. In addition, we note the estimated costs and time frame for implementing parts of your business plan. Given the significant funding needed, please explain how you determined the time frame and discuss whether you currently have the funding for that particular part of your business plan.

Strategy, page 1

1. We note your response to comment six of our letter dated June 6, 2011, and we reissue it. It is unclear why you provide disclosure of a strategy that is "[s]ubject to the relaxation of strict domestic regulatory restrictions." Please revise to clarify whether you have a basis for believing the regulatory restrictions that prevent you from operating parts of your business in the United States may be changed in the near future. Otherwise this statement and your contingent plans for U.S. locations for your stem cell therapy clinic and other products appear speculative.

Brown Adipose (Fat) Program, page 2

2. Please revise to clarify what you mean by "platform technology that involves the use of brown fat cell-based therapeutic/cosmetic program." It is unclear if this is a HCT/P that would be subject to FDA regulations as described on page 7. Further, it is unclear if this is a product that has already been developed or would be developed by your Jupiter laboratory.

Stem Pearls, page 5

3. We note your response to comment nine of our letter dated June 6, 2011, and we reissue it in part. Please revise to clarify what steps the Company has performed in its Stem Pearls line of business. For example, please clarify whether you have developed Stem Pearls products, whether you are in the design phase, whether you have prototype products, etc. Please discuss in greater detail this proposed product. See Item 101(h)(4)(i) of Regulation S-K.

Customers, page 6

4. We note that your website www.stemcellassurance.com is operational. Please disclose this website as well.

Government Regulation, page 7

5. We note your responses to comments 12 and 13 of our letter dated June 6, 2011 and we reissue them in part. Please revise to clarify why your HCT/P products would be considered "practice of medicine" and exempt from FDA regulation. Also, please clarify

whether any of your competitors with similar products and services are subject to FDA regulation. Also, please revise this section to provide details, timing, and cost of receiving FDA approval for your products.

6. In addition, please provide a detailed discussion of the governmental regulations that will apply to you in the foreign jurisdiction(s) where you plan to begin your operations. This would include the Cayman Islands. See Item 101(h)(4)(viii) and (ix) of Regulation S-K.

Foreign Government Regulation, page 14

7. We note your response to comment 15 of our letter dated June 6, 2011 and we reissue it in part. Please revise the disclosure here and in your Medical Tourism section on page nine to clarify whether your Cayman clinic or the licensing of your technology to a third party foreign clinic is a long term project dependent on future financing. If you intend to establish this part of your business in the next 12 months, please provide further disclosure of your anticipated timeline, the funding necessary to establish this business, and anticipated source of funding for this business. Also, if any clinics will be in operation in the next 12 months, please provide further details of the steps necessary to establish this business. We note, for example, you reference licensing your technology, but you previously disclosed that you do not have any proprietary technology or patents at this time.

Availability of Funds, page 36

8. We note your response to comment 18 of our letter dated June 6, 2011, and we reissue it in part. Please revise to disclose the material terms and conditions of all material debt financing on an individual basis.

Directors and Executive Officers, page 35

9. We reissue comment 22 of our letter dated June 6, 2011. Please note that the disclosure in the Form 10 is as of the date of filing. Therefore, since Mr. Proodian was an executive officer at the time of the filing of the Form 10, please add back the disclosure regarding Mr. Proodian. In addition, as previously requested, we note the statement that Mr. Proodian has more than 35 years serving as an officer, director and committee member for several public companies. Please disclose whether Mr. Proodian is currently a director of any public companies. We direct your attention to Item 401(e)(2) of Regulation S-K.

10. We note your response to comment 23 of our letter dated June 6, 2011. Please provide clear disclosure in the registration statement.

11. We note your response to comment 25 of our letter dated June 6, 2011 regarding “a

pending action" against Mr. Silva. Please revise this section to provide a brief description of the "pending action" (i.e. that it relates to the enforceability of a non-compete agreement with DaVinci Biosciences, LLC). Also, your cross-reference to the risk factors section should include a specific page number to the relevant risk factor. In addition, as previously requested, please provide more specific disclosure regarding the impact this action may have upon your business.

Executive Compensation, page 44

12. We note the shares to be reissued to Ms. McConnell as part of the termination agreement. Please explain why the grant date fair value of this award is not included in the summary compensation table.

Certain Relationships and Related Party Transactions, page 46

13. We note your response to comment 31 of our letter dated June 6, 2011, and we reissue it in part. Please revise to clarify Mr. Berger's relationship with Stem Cell Research Company, LLC and why his termination agreement directed Stem Cell Research to receive $180,000 and why Stem Cell Research agreed to the voting proxy for its shares in connection with Mr. Berger's termination.

Recent Sales of Unregistered Securities, page 50

14. We note your response to comment 33 of our letter dated June 6, 2011, and we reissue it in part. Please revise to clarify whether your investors are sophisticated and discuss the scope of the information you provided to investors of your unregistered securities.

15. We note your response to comment 34 of our letter dated June 6, 2011, and we reissue it. Please revise to describe the nature of the "consulting services" provided for each sale of securities.

16. We note your response to comment 35 of our letter dated June 6, 2011, and we reissue it in part. Please revise your footnote disclosure to clarify how non-cash dollar amounts were determined or what they represent (i.e. whether the dollar values presented for note (5) represents the fair market value of consulting services provided). Also, for notes (1), (2), (3), and (4), please include a description of the consideration that the purchasers provided to receive these shares or the nature of the transaction and the value of the consideration.

Exhibits

17. We note your response to comment 37 of our letter dated June 6, 2011 regarding your amended articles of incorporation. Your revised Exhibit 3.1 appears to have altered the

original articles of incorporation filed with the Nevada Secretary of State, as it still contains a stamp and notary signature dated June 1997. Since your amendments and revisions occurred after June 1997, please revise Exhibit 3.1 to provide an appropriate amended and restated articles of incorporation.

Questions may be directed to Edwin S. Kim at (202) 551-3297 or Pam Howell, Special Counsel, at (202) 551-3357.

Sincerely,

/s/ Pamela Howell
for

John Reynolds
Assistant Director