

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

November 3, 2010

Mercedes Walton Chief Executive Officer Cryo-Cell International, Inc. 700 Brooker Creek Blvd Suite 1800 Oldsmar, FL 34677

Re: Cryo-Cell International, Inc.

Form 10-K

Filed March 1, 2010 File No. 000-23386

Dear Ms. Walton:

We have reviewed your filings 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.

Item 1. Business, page 4

- 1. Tell us about your Upromise plan. Tell us the company's role in promoting the savings plan, and how the company is compensated for its role.
- 2. Provide us with support for your claims about the "potential benefits" of U-Cord stem cells. Also, provide us with support for your claims concerning the "strong potential value" of C'elle menstrual stem cells.

<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 26</u>

3. We note that your revenues have been declining since 2008. Although your disclosure mentions the decline, there is no indication of why you are selling less plans and whether

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this is an indication of a negative trend for which management is taking affirmative steps to correct. Please expand your disclosure to explain why sales have continued to decline and what is being done to reverse this trend.

Item 11. Executive Compensation, page 66

4. We note that all your named executive officers received bonus awards in 2009. It is not clear whether these payments were discretionary or tied to specific performance targets. If they were discretionary, they are properly reported under "Bonus" in the summary compensation table; however, if they are tied to a formula involving performance targets, the amounts should be reported under "Non-Equity Incentive Plan Compensation." Please confirm. Also, expand your discussion under "Compensation Philosophy" to explain how your compensation committee used the performance targets to determine the awards.

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 and 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 that 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.

You may contact Dean Suehiro, accountant, at (202) 551-3384 or Kyle Moffatt, accountant branch chief, at (202) 551-3836 if you have questions regarding comments on the financial statements and related matters. Please contact Brandon Hill, attorney-advisor, at (202) 551-3268 or me at (202) 551-3810 with any other questions.

Sincerely,

/s/ Larry Spirgel Larry Spirgel Assistant Director