

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

DIVISION OF CORPORATION FINANCE

November 22, 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 supplemental response 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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 26

1. We note your response to comment three in our letter dated November 3, 2010. Rather than revise your disclosure in future filings, we believe that you should amend your Annual Report on Form 10-K for the year-ended December 31, 2009 to reflect your proposed disclosure.

Item 11. Executive Compensation, page 66

2. We note your response to comment four in our letter dated November 3, 2010. Rather than revise your disclosure in future filings, we believe that you should amend your Annual Report on Form 10-K for the year-ended December 31, 2009 to reflect your proposed disclosure. In addition, please tell us how disclosure of the target number of

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new U-Cord and Celle units and results of the customer satisfaction surveys after the year-end could cause you competitive harm. It is not clear from your response how disclosure of this information would provide your competitors with valuable insight into your business.

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.

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