



DIVISION OF
CORPORATION FINANCE

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

July 9, 2013

Via E-Mail

Thomas M. Palay, Ph.D.
President and Vice Chairman of the Board
Cellular Dynamics International, Inc.
525 Science Drive
Madison, WI 53711

**Re: Cellular Dynamics International, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed July 1, 2013
SEC File No. 333-189049**

Dear Dr. Palay:

We have reviewed your amended registration statement filed July 1, 2013 and correspondence dated July 3, 2013 and we have the following comment. Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies 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 this comment, we may have additional comments.

Prospectus Summary

Recent developments—Preliminary financial results, page 5

1. You include disclosure whereby you intend to disclose your anticipated range of revenue for the second quarter of 2013. Please note that when you include this range it should be sufficiently narrow to be meaningful and that we may have additional comments after you provide such range. You should also disclose why you are not able to disclose a preliminary number rather than a range.

Also, please revise your intended disclosure to explain why the presentation of anticipated revenues without any other measure is relevant to investors. Please add disclosure to put this single measure into context, and explain the extent to which your anticipated revenue is indicative of any trends and whether you anticipate other income statement items will or will not follow those trends.

Please also note that if second quarter interim financial statements become available prior to the date of effectiveness of the registration statement, you must include them in the filing pre-effectively.

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 comment, 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;
- 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.

You may contact Mark Brunhofer at (202) 551-3638 if you have questions regarding the financial statements and related matters. Please contact Amy Reischauer at (202) 551-3793 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler
Assistant Director

cc: Via E-Mail
Anna M. Geyso