



DIVISION OF
CORPORATION FINANCE

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

March 22, 2013

Via E-Mail

Robert J. Pelay
Chairman of the Board and Chief Executive Officer
Cellular Dynamics International, Inc.
525 Science Drive
Madison, WI 53711

**Re: Cellular Dynamics International, Inc.
Confidential Draft Registration Statement on Form S-1
Submitted February 26, 2013
CIK No. 0001482080**

Dear Mr. Pelay:

We have reviewed your confidential draft registration statement 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 by providing the requested information and either submitting an amended confidential draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended confidential draft registration statement or filed registration statement, we may have additional comments.

General

1. Please note that where we provide examples or references to portions of your filing to illustrate what we mean by our comments, they are examples and not exhaustive lists. If our comments are applicable to portions of the filings that we have not cited as examples, please make the appropriate changes elsewhere in the filing in accordance with our comments.
2. Please submit all exhibits as soon as practicable. We may have further comments upon examination of these exhibits.
3. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act,

whether or not they retain copies of the communications. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.

4. Please provide us proofs of all graphic, visual or photographic information you will provide in the printed prospectus at the time you make your next submission, if possible. We will need to examine this information prior to its use. Please note that we may have comments regarding this material.

Prospectus Cover Page

5. We note your disclosure here and elsewhere in the prospectus that you are applying to have your common stock listed on the NASDAQ Global Market. Please clarify whether you have submitted this application or you intend to submit this application.

Prospectus Summary—Risk factors, page 5

6. We note your statements on page 3 and elsewhere that you believe your products will “displace” existing models, that competitors’ technology is “poorly suited,” and that you “intend to become the industry standard.” Please include in your summary of risk factors on page 5 the risk (described on page 14) that your “products may not be meaningfully more predictive of ... behavior...than existing products.”

Summary Financial Data, page 10

7. Please expand the “Balance sheet data” to include a column setting forth these financial statement items on a pro form-as-adjusted basis reflecting the offering.

Risk Factors

“If we are unable to recruit and retain key executives and scientists...” page 18

8. Please identify any individuals, other than your executive officers, that you consider “key scientific and technical personnel.”

“We are an “emerging growth company” and we cannot be certain...” page 23

9. Please expand your statement that you “may remain an ‘emerging growth company’ for up to five years” to include a description of how and when a company may lose emerging growth company status.
10. It appears from your disclosure that you intend to take advantage of the extended transition period for complying with new or revised financial accounting standards. If so,

please revise your risk factor disclosure to indicate that as a result of your election, your future financial statements may not be comparable to those of other companies that comply with the public company effective dates. In addition, please revise your critical accounting policies, significant judgments and estimates disclosure in Management's Discussion and Analysis to clearly disclose your election and the impact on future comparability to other public companies.

Use of Proceeds, page 33

11. Please expand your disclosure to indicate the approximate amount intended to be used for each purpose.

Management's Discussion and Analysis of Financial Condition and Results of Operations Overview, page 41

12. We note your statement on page 19 that “[y]our products are currently labeled and sold...for research purposes only, and not therapeutic procedures,” and therefore “they are not subject to regulation...” Please reconcile this statement with your statement on page 41 that you “market [y]our products for use in in vitro research and development as well as applied product testing, stem cell banking and in vivo cellular therapeutics.” (Emphasis added.)

Components of Results of Operations—Revenues, page 43

13. You state on page 12 that you generate revenue from sales of your proprietary products, including your MyCell products. You also state on page 41 that you launched your MyCell product line in mid-2012. Please reconcile these statements with your statement on page 43 that “in the future, product sales will also include MyCell products...”

Results of Operations, page 46

14. We note that you secured a grant from the Wisconsin Economic Development Corporation in 2011 and, more recently, in March 2013 from the California Institute of Regenerative Medicine. Please expand your disclosure in the Business section to describe the material terms of these grants, including the amount of the grant, any conditions on funding, obligations under the grants, and the intellectual property rights of each party. Please file any written agreements between the company and the Wisconsin Economic Development Corporation or the California Institute of Regenerative Medicine as exhibits to the registration statement, as required by Item 601(b)(10) of Regulation S-K.

Product Sales, page 46

15. When more than one factor has resulted in an increase or decrease in an item within the results of operations, revise your filing to quantify the effect of each factor. For example, you disclose that the growth in product sales arose principally through increasing the number of customers and increasing unit sales to existing customers partially offset by discounts provided to customers purchasing in large volumes.

Research and Development, page 47

16. Please revise your disclosure to separately break out research and development costs by significant product for each period presented and to date.

Liquidity and Capital Resources—Investing Activities, page 51
Facilities, page 72

17. Please file your lease agreements with respect to your Madison, WI and Novato, CA locations as exhibits to your registration statement, as required by Item 601(b)(10) of Regulation S-K.

Critical Accounting Policies, Significant Judgments and Estimates
Common Stock Valuation, page 56

18. We may have additional comments on your accounting for stock compensation and related disclosure once you have disclosed an estimated offering price. Please provide quantitative and qualitative disclosures explaining the difference between the estimated offering price and the fair value of each equity issuance.

Our Products—The iCell O/S, page 65

19. Please expand your disclosure to describe the material terms of your agreement with Life Technologies Corporation, including the parties' material rights and obligations, the duration and termination provisions, and any other material terms, and file this agreement as an exhibit to the registration statement, as required by Item 601(b)(10) of Regulation S-K.

Intellectual Property, page 69

20. Please expand your description of your patent portfolio:
- to identify your material patents;
 - to specify the products, product groups, or technologies to which your material patents relate;

- to identify which of your material patents are owned or licensed from third parties and to identify any such licensors; and
 - to include the jurisdictions and expiration dates of your material patents.
21. Please expand your disclosure to describe the material terms of your material license agreements, such as your license agreement with the Wisconsin Alumni Research Foundation, as amended, including the parties' material rights and obligations, the duration and termination provisions, material payments (including aggregate amounts paid/received to date, aggregate potential milestone payments, royalty rates, and/or up-front payments), and the nature and scope of the intellectual property licensed, and file these agreements as exhibits to the registration statement, as required by Item 601(b)(10) of Regulation S-K.

Business
Customers, page 70

22. We note your disclosure on page 12 that three of your customers individually accounted for greater than 10% of your revenues. Please identify these customers, include disclosure describing the material terms of any agreement with any of these customers, and file such agreements as exhibits to the registration statement, as required by Item 601(b)(10) of Regulation S-K.

Distribution Channels, page 70

23. Please expand your disclosure to describe the material terms of your agreement with your Japanese distributor, including the parties' material rights and obligations, the duration and termination provisions, and any other material terms, and file this agreement as an exhibit to the registration statement, as required by Item 601(b)(10) of Regulation S-K.

Competitive Landscape - Other pluripotent cell manufacturers, page 71

24. Please expand your disclosure to identify the companies that have announced an interest in or begun to market products based on pluripotent stem cell technology.

Executive Compensation —2012 Director Compensation Table, page 85

25. Please clarify whether the options listed in the table on page 85 are subject to any vesting provisions.

Transactions and Relationships with Certain Individuals, page 89

26. Please expand your description of your consulting agreements with Drs. Thomson, January, and Rose to include the duration and termination provisions, the expected payments, and the nature and scope of any intellectual property licensed. In addition,

please file the consulting agreement with Dr. Rose as an exhibit to the registration statement or advise us why it is not required to be filed pursuant to Item 601(b)(10) of Regulation S-K.

Principal Shareholders, page 93

27. We note that Mr. Palay and Dr. Palay share voting and dispositive power over the shares held by the Tactics II Entities. Accordingly, please include these shares in the total attributed to each of Mr. Palay and Dr. Palay in the table.
28. Please clarify who holds voting and dispositive power over the shares held by the EGI-Fund (08-10) Investors, L.L.C. and EGI-Fund (11-13) Investors, L.L.C.

Description of Capital Stock

Common stock—Voting Rights, page 95

29. Please expand your description of your common stock to specify the vote required by security holders to take action other than to elect directors, as required by Item 202(a)(1)(v) of Regulation S-K.

Lock-up Agreement, page 105

30. Please file a form of the lock-up agreement as an exhibit to your registration statement.

Notes to Financial Statements as of and for the Years Ended December 31, 2011 and 2012

Note 2. Summary of Significant Accounting Policies

Revenue Recognition, page F-9

31. Please revise your filing to disclose your policy for accounting for deductions from gross revenue, including your volume discounts. Disclose the amount of the volume discount estimate that reduces gross revenue for each period presented. In addition, disclose the amount of changes in the estimate recognized in each period related to prior period sales.
32. Regarding your revenue recognition for collaborations, partnerships and other revenues, please address the following comments:
 - Please revise your disclosure to indicate the criteria you use to determine whether a milestone is substantive.
 - Please revise your filing to disclose each individual potential future milestone you could receive and its related contingent consideration as required by ASC 605-28-50-2b.

Segment Reporting, page F-12

33. For each period presented, please separately disclose your sales revenue by individual products including iCell Cardiomyocytes, iCell Neurons, iCell Hepatocytes, Media and iCell Endothelial Cells. Refer to ASC 280-10-50-40.

Note 4. Long-Term Debt, page F-14

34. Please file the promissory notes to the Wisconsin Economic Development Corporation as exhibits to the registration statement, as required by Item 601(b)(10) of Regulation S-K.

Note 6. Stock Options and Restricted Common Stock

Stock options issued in exchange for non-competition agreement and licenses, page F-19

35. Please file the identified agreements as exhibits to the registration statement, as required by Item 601(b)(10) of Regulation S-K.

Item 13. Other Expenses of Issuance and Distribution, page II-1

36. Please revise the table to include your estimated expenses for federal taxes, states taxes, trustees' and transfer agents' fees, and premium paid on any policy insuring or indemnifying your directors or officers against liabilities they may incur in connection with the registration statement, as required by Item 511 of Regulation S-K.

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at <http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm>.

Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (<http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm>). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

Robert J. Pelay
Cellular Dynamics International, Inc.
March 22, 2013
Page 8

You may contact Dana Hartz at (202) 551-3648 or Mark Brunhofer at (202) 551-3638 if you have questions regarding comments on 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
Godfrey & Kahn, S.C.
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Milwaukee, WI 53202