



DIVISION OF
CORPORATION FINANCE

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

May 10, 2011

Charles J. Link, Jr.
Chief Executive Officer
NewLink Genetics Corporation
2503 South Loop Drive
Ames, IA 50010

**Re: NewLink Genetics Corporation
Registration Statement on Form S-1, as amended
Response Letter Filed May 3, 2011
File No. 333-171300**

Dear Dr. Link:

We have reviewed your response filed May 3, 2011 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 amending your registration statement and providing the requested information. 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 registration statement and the information you provide in response to these comments, we may have additional comments.

Management's Discussion and Analysis
Critical Accounting Policies and Significant Judgments and Estimates
Stock-Based Compensation
Stock Option Valuation, page 57

1. Refer to your response to prior comment one, and please revise your proposed tabular disclosure to include an exercise price range for grants in the year ended December 31, 2010 that is consistent with the weighted average exercise price disclosed on page F-29 of Note 12. Your disclosure in Note 12 reflects a weighted average exercise price of \$1.38, and your proposed disclosure reflects a range of \$1.41 - \$1.91 for the year ended December 31, 2010. In addition, please tell us whether this inconsistency has any impact on your compensation expense recorded in the periods presented in accordance with GAAP.

Common Stock Fair Value
Fair Value Estimates, page 61

2. Refer to your response to prior comment three. We continue to believe the assumptions utilized in your Black-Scholes model in order to determine compensation expense should be timely, including the fair value of your common stock. It is unclear how you calculated the amount of additional compensation expense for 2009 and 2010 based on revised assumptions. Please confirm the revised assumptions used in your materiality analysis and revise your financial statements and disclosure to use the fair value of your common stock as of the GAAP measurement date.

Index to Financial Statements, page F-1

3. Please note that your financial statements will be stale after Friday, May 13, 2011.

Notes to Consolidated Financial Statements

2. Significant Accounting Policies

(j) Pro Forma Stockholders' Equity, page F-12

4. Refer to your response to prior comment five. Please include your proposed disclosure within your Form S-1/A.
5. Refer to your response to prior comment six. Please include your proposed disclosure within your Form S-1/A, and confirm the pro forma column for your capitalization table will be consistent with your proposed pro forma equity disclosure.
6. Please note we will not complete our review of your pro forma adjustments until you have reflected the IPO price in your filing, including the use of the midpoint of the range, once it is established, in order to estimate the number of shares of NewLink Common Stock issuable upon conversion of the NewLink Series E preferred stock.

(k) Research and Development, page F-13

7. Refer to your response to prior comment seven. Please include your proposed disclosure with your Form S-1/A.

Note 12 Common Stock Equity Incentive Plan, page F-22

8. With regard to your response to prior comment eight we have the following observations:
 - It is not clear why Dendreon was removed because it successfully completed its clinical trials and filed for approval of its lead candidate when that is the development that Newlink expects to occur during the 5 to 7.5 years following the option grants. Please explain further.

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- More fully explain how Celgene, Sanofi, Aceto and Endo were considered similar in market capitalization and revenues during the 5 to 7.5 years following the option grants. Provide us your projections of Newlink's market capitalization and revenues demonstrating how they are comparable. Aceto does not appear to perform research and development of pharmaceuticals. Similar companies should either have 1) no approved products and several candidates in clinical trials or 2) have their first product approved during the relevant period.
- Volatility assumptions used in recent Form S-1 filings of similar companies were much higher than the assumptions being used by Newlink.
- Tell us if you considered any of the companies listed on page 130 of your Form S-1.
- If it is appropriate to not have any comparable company used for all three years in the case of Newlink's options.

Please revise your volatility factors as necessary or explain why no revision is necessary.

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.

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 Staci Shannon at (202) 551-3374 or Lisa Vanjoske at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Jennifer Riegel at (202) 551-3575, Daniel Greenspan at (202) 551-3623 or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: James C.T. Linfield
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