



DIVISION OF  
CORPORATION FINANCE

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

March 30, 2011

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

**Re: NewLink Genetics Corporation  
Amendment No. 2 to Registration Statement on Form S-1  
Filed March 18, 2011  
File No. 333-171300**

Dear Dr. Link:

We have reviewed your response and amended registration statement each filed March 18, 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 of Financial Condition and Results of Operations  
Critical Accounting Policies and Significant Judgments and Estimates  
Stock-Based Compensation  
Stock Option Valuation, page 57

1. Please tell us whether the Black-Scholes model assumptions disclosed on page 57 are related to GAAP grants in the respective periods presented. For example, the upper end of the exercise price ranges in the table appears to be related to subsequent period grants (i.e., for 2009, \$1.41 is related to a 2010 GAAP grant and for 2010, \$3.41 is related to a 2011 GAAP grant). Please revise your disclosure as appropriate, and tell us whether this 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 two. It remains unclear why the GAAP measurement date has not yet occurred for the options granted in November and December 2010. It appears the fair value of your common stock as of December 31, 2010 has already been determined per your disclosure on page 62. Please tell us how you are able to disclose the fair value of your common stock as of December 31, 2010 without the completion and approval for the December 31, 2010 common stock valuation report, and address why the GAAP measurement date has not yet occurred given the common stock fair value appears to be have already been determined.
3. Refer to your response to prior comment two. 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. Please revise your financial statements and disclosure to use the fair value of your common stock on the GAAP measurement date.

Loan Agreements  
March 2005 Iowa Department of Economic Development Loan, page 66

4. We have reviewed your response to prior comment 4. Please expand your disclosure to disclose that the Iowa Department of Economic Development has communicated to you that they have agreed to extend the project completion date from March 18, 2011 to March 18, 2012, but this agreement has not been documented in writing.

Index to Financial Statements  
Notes to Consolidated Financial Statements  
2. Significant Accounting Policies  
(j) Pro Forma Stockholders' Equity, page F-12

5. Refer to your response to prior comment eight and your disclosure that pro forma equity, pro forma net loss per share and weighted-average pro forma shares outstanding include the effect of this transaction as if it occurred on December 31, 2010. Please note that pro forma adjustments to the income statement should be reflected as of the beginning of the period presented, and therefore, your pro forma net loss per share and weighted average pro forma shares outstanding should include the pro forma related to the series E preferred shares as of January 1, 2010.
6. Refer to your response to prior comment eight. Please revise your pro forma equity at December 31, 2010 on page F-4, to reflect the pro forma adjustment for the automatic conversion of your series preferred into common stock immediately upon the closing of the IPO.

(k) Research and Development, page F-13

7. Your response to comment nine indicates legal costs were reclassified to research and development expense. ASC 730-10-55-2i states legal work in connection with patent applications or litigation, and the sale of licensing of patents are excluded from research and development. Please reclassify these costs or tell us why you believe the costs are appropriately classified as research and development. Tell us how salaries of the CEO and Chief Medical Officer were allocated to research and development for 2008 and 2009 and whether the supporting documentation was prepared contemporaneously.

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

8. With regard to your response to comment 11, it does not appear that Alexion Pharmaceuticals, Cubist Pharmaceuticals, Endo Pharmaceuticals and Sanofi-Aventis are similar entities to NewLink and BioProtection at comparable developmental stages, therapeutic area and size of company. Tell us why these companies were selected rather than other companies with a market capitalization more similar to NewLink. Explain why each company selected was considered comparable to NewLink and BioProtection including why companies with developed products being sold and companies reporting net income were considered comparable during the measurement period. Tell us what companies the underwriters used in determining the offering price of NewLink and whether those companies were used in determining volatility and if not, why not. Provide us the volatility of each similar company used in determining the volatility assumptions for NewLink and BioProtection for each period.

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.

Charles J. Link, Jr.  
NewLink Genetics Corporation  
March 30, 2011  
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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  
Brent D. Fassett  
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380 Interlocken Crescent  
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