

Mail Stop 6010

August 12, 2008

Jack J. Kogut  
Senior Vice President Administration  
Northfield Laboratories Inc.  
1560 Sherman Avenue  
Suite 1000  
Evanston, Illinois 60201-4800

**Re: Northfield Laboratories Inc.  
Amendment No. 1 to  
Preliminary Proxy Statement on Schedule 14A  
Filed August 12, 2008  
File No. 0-24050**

Dear Mr. Kogut:

We have limited our review of your amended filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Executive Compensation, page 10

Summary Compensation Table, page 12

1. We note your response to our prior comment 1 and the related changes to the preliminary proxy statement. It appears that the amounts reported in the "Option Awards" column are the grant date fair values of the option awards. Item 402(c)(2)(vi) of Regulation S-K requires that you to disclose the dollar amount recognized for financial statement reporting purposes with respect to each

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applicable fiscal year in accordance with FAS 123R and not the grant date fair values of the option awards. Please revise the "Option Awards" column to reflect the dollar amounts recognized for financial statement reporting purposes with respect to each applicable fiscal year in accordance with FAS 123R.

2. For awards of options, you must include a footnote to the Summary Compensation Table disclosing all assumptions made in the valuation. Disclosure of assumptions may be made by reference to a discussion of those assumptions in the registrant's financial statements, footnotes to the financial statements, or discussion in the Management's Discussion and Analysis. Please see Instruction to Item 402(c)(2)(v) and (vi). Please revise your disclosure to provide the footnote required by Instruction to Item 402(c)(2)(v) and (vi).

\* \* \*

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

Please contact Sebastian Gomez Abero at (202) 551-3578 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey P. Riedler  
Assistant Director

cc: Craig A. Roeder  
Christopher Bartoli  
Baker & McKenzie LLP  
One Prudential Plaza, Suite 3500  
130 East Randolph Drive  
Chicago, Illinois 60601