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. 2 to

Preliminary Proxy Statement on Schedule 14A

Filed August 13, 2008

File No. 0-24050

Dear Mr. Kogut:

We have limited our review of your amended filing to the issue we have addressed in our comment. Where indicated, we think you should revise your document in response to this comment. 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 comment 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

We note your response to our prior comment 1 and the related changes to the preliminary proxy statement. With respect to the compensation for the year 2006, you must either disclose all amounts in accordance with the new rules or omit all information relating to that year. You may not disclose some amounts in accordance with the new rules (for

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example, salary and bonus) and omit others (option awards). Please revise the Summary Compensation Table accordingly.

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As appropriate, please amend your filing and respond to this comment 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 response to our comment. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and response to our comment.

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