NORTHFIELD LABORATORIES INC /DE/ Form S-8 February 20, 2009

Table of Contents

As filed with the Securities and Exchange Commission on February 20, 2009

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

NORTHFIELD LABORATORIES INC.

(Exact name of registrant as specified in its charter)

Delaware 36-3378733

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

1560 Sherman Avenue Suite 1000 Evanston, Illinois 60201-4800

(Address of registrant s principal executive offices)

NORTHFIELD LABORATORIES INC. 2003 EQUITY COMPENSATION PLAN

(Full title of the Plan)

JACK J. KOGUT

Senior Vice President Administration Northfield Laboratories Inc. 1560 Sherman Avenue Suite 1000 Evanston, Illinois 60201-4800 (847) 864-3500

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Craig A. Roeder, Esq. Baker & McKenzie LLP One Prudential Plaza 130 East Randolph Drive Chicago, Illinois 60601 (312) 861-8000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated Accelerated filer o Non-accelerated filer o Smaller reporting filer o company þ

(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Title of Plan	Amount to be registered	Proposed maximum offering price pershare	Proposed maximum aggregate offering price	Amount of registration fee
Common Stock of	Northfield				
Northfield Laboratories	Laboratories Inc.				
Inc., par value \$.01 per	2003 Equity				
share					
	Compensation Plan	1,750,000	\$0.94*	\$1,645,000*	\$64.65

Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457 of the Securities Act of 1933, and is based upon the average of the high and low sale prices for the registrant s Common Stock reported on the Nasdaq Global Market on February 10, 2009.

TABLE OF CONTENTS

Item 8. Exhibits
SIGNATURES

EXHIBIT INDEX

EX-5.1

EX-10.1

EX-15.1

EX-23.1

Table of Contents

Explanatory Note

On October 30, 2003, Northfield Laboratories Inc. (the Registrant) filed a Registration Statement on Form S-8 (File No. 333-110110)

(the 2003 Registration Statement) which registered 750,000 shares of the Registrant s common stock, par value \$0.01 per share

(Common Stock), reserved for issuance under the Northfield Laboratories Inc. 2003 Equity Compensation Plan (the Plan).

At the Registrant s 2005 Annual Meeting of Stockholders, the Registrant s stockholders approved and adopted an amendment to the Plan to increase by 1,500,000 the number of shares of Common Stock authorized under the Plan. On October 3, 2005, the Registrant filed a Registration Statement on Form S-8 (File No. 333-128787) (the 2005 Registration Statement) which registered an additional 1,500,000 shares of Common Stock reserved for issuance under the Plan.

At the Registrant s 2008 Annual Meeting of Stockholders, the Registrant s stockholders approved and adopted an amendment to the Plan to increase the number of Shares authorized under the Plan by an additional 1,750,000 Shares. By this Registration Statement, the Registrant hereby registers an additional 1,750,000 Shares under the Plan. The contents of the 2003 Registration Statement and 2005 Registration Statement and the are hereby incorporated by reference into this Registration Statement.

2

Table of Contents

Item 8. Exhibits

- 5.1 Opinion of Baker & McKenzie LLP.
- 10.1 Northfield Laboratories Inc. 2003 Equity Compensation Plan (as amended and restated as of August 1, 2008).
- 15.1 Letter Re: Unaudited interim financial information.
- 23.1 Consent of KPMG LLP.
- Consent of Baker & McKenzie LLP (contained in their opinion filed as Exhibit 5.1 to this Registration Statement).

3

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Evanston, State of Illinois, on February 13, 2009.

NORTHFIELD LABORATORIES INC.

By: /s/ Steven A. Gould, M.D.
Steven A. Gould, M.D.
Chairman and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons on behalf of the Company in the capacities indicated on February 13, 2009.

Signature	Title				
/s/ Steven A. Gould, M.D.	Chairman of the Board and Chief Executive Officer				
Steven A. Gould, M.D.	(principal executive officer)				
/s/ Jack J. Kogut	Senior Vice President Administration				
Jack J. Kogut	(principal financial officer and principal accounting officer)				
/s/ John F. Bierbaum	Director				
John F. Bierbaum					
/s/ Bruce S. Chelberg	Director				
Bruce S. Chelberg					
/s/ Alan L. Heller	Director				
Alan L. Heller					
/s/ Paul M. Ness, M.D.	Director				
Paul M. Ness, M.D.					
/s/ David A. Savner	Director				
David A. Savner					

Table of Contents 7

Director

/s/ Edward C. Wood, Jr.

Edward C. Wood, Jr.

4

Table of Contents

EXHIBIT INDEX

Exhibit No.	Description
5.1	Opinion of Baker & McKenzie LLP.
10.1	Northfield Laboratories Inc. 2003 Equity Compensation Plan (as amended and restated as of August 1, 2008).
15.1	Letter Re: Unaudited interim financial information.
23.1	Consent of KPMG LLP.
23.2	Consent of Baker & McKenzie LLP (contained in their opinion filed as Exhibit 5.1 to this Registration Statement).