Registration No. 333-107438

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

POST-EFFECTIVE AMENDMENT NO. 2

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

NEOSTEM, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 22-2343568 (I.R.S. Employer Identification Number)

420 Lexington Avenue, Suite 450, New York, New York 10170 (Address of Principal Executive Offices; Zip Code)

NEOSTEM, INC. 2003 EQUITY PARTICIPATION PLAN (Full title of the plan)

Catherine M. Vaczy
Vice President and General Counsel
NeoStem, Inc.
420 Lexington Avenue, Suite 450, New York, NY 10170
(212)-584-4814
(Name, address and telephone number,
including area code, of agent for service)

with a copy to:
Alan Wovsaniker, Esq.
Lowenstein Sandler PC
65 Livingston Avenue
Roseland, New Jersey 07068
(973) 597-2500

CALCULATION OF REGISTRATION FEE

Proposed Proposed

Title of securities Amount to be maximum offering maximum aggregate Amount of to be registered Registered price per share (2) offering price (2) registration fee

Common Stock, par 25,000,000 \$0.46 \$11,500,000 \$353.05(3)

value \$.001 per share shares (1)

- (1) Reflects a 1-for-10 reverse stock split of the common stock, par value \$.001 per share (the "Common Stock") of NeoStem, Inc. (the "Company") which occurred August 31, 2006, plus such additional shares of Common Stock as may be issuable pursuant to the anti-dilution provisions of the 2003 Equity Participation Plan.
- (2) Pursuant to Rule 457, the proposed maximum offering price per share is estimated solely for the purpose of computing the amount of the registration fee and is based on the average of the high and low sales price of the Common Stock of the registrant reported on the National Association of Securities Dealers OTC Electronic Bulletin Board on May 18, 2007.
- (3) \$282.44 paid herewith, reflecting the registration fee for the increase in the number of shares issuable under the 2003 Equity Participation Plan by 20,000,000 shares, from 5,000,000 shares to 25,000,000 shares. Filing fee previously paid with respect to 5,000,000 shares.

EXPLANATORY NOTE

No. 333-107438), as amended on August 19, 2005, the contents of which are hereby incorporated by reference, is being filed by the registrant, NeoStem, Inc., formerly known as Phase III Medical, Inc. (the "Company"), for the purpose of increasing the number of shares of common stock to be issued under the Company's 2003 Equity Participation Plan (the "Plan") by 20,000,000 shares, from 5,000,000 shares to 25,000,000 shares, pursuant to General Instruction E on Form S-8 (Registration of Additional Securities).

The number of shares issuable under the Plan was reduced from 50,000,000 to 5,000,000, pursuant to a 1-for-10 reverse stock split of the Company's common stock on August 31, 2006. The stockholders of the registrant approved an amendment to the Plan, for the purpose of adding an additional 20,000,000 shares following the reverse stock split, at the annual meeting of stockholders on August 29, 2006.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by the Company with the Securities and Exchange Commission (the "SEC") are hereby incorporated by reference:

- (a) the Company's Annual Report on Form 10-K for the year ended December 31, 2006 filed with the SEC on March 29, 2007.
- (b) the Company's Quarterly Report on Form 10-QSB for the three-month period ended March 31, 2007 filed with the SEC on May 10, 2007;
- (c) the Company's Definitive Proxy Statement on Schedule 14A filed with the SEC on April 30, 2007;
- (d) the Company's Current Report on Form 8-K filed with the SEC on April 30, 2007;
- (e) the Company's Current Report on Form 8-K filed with the SEC on March 16, 2007;
- (f) the Company's Current Report on Form 8-K filed with the SEC on February 28, 2007;
- (g) the Company's Current Report on Form 8-K filed with the SEC on February 12, 2007;
- (h) the Company's Current Report on Form 8-K filed with the SEC on February 1, 2007;

- (i) the Company's Current Report on Form 8-K filed with the SEC on February 12, 2007;
- (j) the Company's Current Report on Form 8-K filed with the SEC on February 28, 2007;
- (k) the description of the Common Stock of the Company contained in the Company's Form 8-A filed with the SEC on February 16, 1983.

All documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be part hereof from the date of filing of such documents. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this registration statement to the extent that such statement is modified or superseded by a subsequently filed document which also is or is deemed to be incorporated by reference herein. Any such statement so modified or superseded shall not be deemed to constitute a part of this registration statement except as so modified or superseded.

Item 8. Exhibits.

- 5.1 Opinion of Lowenstein Sandler PC.
- 23.1 Consent of Independent Registered Public Accounting Firm (Holtz Rubenstein Reminick LLP)
- 23.2 Consent of Lowenstein Sandler PC (included in Exhibit 5.1)
- 24.1 Power of Attorney (included on signature page)

Item 9. Undertakings.

- (A) The undersigned registrant hereby undertakes:
- - (i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or represent a fundamental in the aggregate, change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that Paragraphs (A)(1)(i) and (A)(1)(ii) do not apply if the registration statement is on Form S-3, Form S-8 or Form F-3, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (B) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (C) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 Post-Effective Amendment No. 2 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on May 24, 2007.

NEOSTEM, INC.

By: /s/ Robin L. Smith Robin L. Smith, Chief Executive Officer

Date

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Robin L. Smith and Catherine M. Vaczy as his or her true and lawful attorneys-in-fact and agents, with full power of substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement (or any other registration statement for the same offering that is effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933) and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact and agents, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

In accordance with the requirements of the Securities Act of 1933, this registration statement was signed by the following persons in the capacities and on the dates stated

Title

Signatures

019aca. 00	.1010		- 0	
/S/ ROBIN L SMITH	Chief Executive Officer and Chairman of the Board	May	24,	2007
Robin L. Smith	Shari man of the Board			
/S/ MARK WEINREB	President and Director	May	24,	2007
Mark Weinreb				
/S/ LARRY A. MAY	Chief Financial Officer (Principal Financial and Accounting Officer)	May	24,	2007
Larry A. May				
/S/ RICHARD BERMAN	Director	May	24,	2007
Richard Berman				
/s/ JOSEPH D. ZUCKERMAN		May	24,	2007
Joseph D. Zuckerman				
/S/ STEVEN S. MYERS	Director	May	24,	2007
Steven S. Myers				

EXHIBIT INDEX

Description

Exhibit No.

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23.2	Consent of Lowenstein Sandler PC is included in Exhibit 5.1
24.1	Power of Attorney (included on signature page)

Exhibit 5.1

[LETTERHEAD OF LOWENSTEIN SANDLER PC]

May 24, 2007

NeoStem, Inc. 420 Lexington Avenue Suite 450 New York, NY 10170

Gentlemen:

You have requested our opinion in connection with the registration with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Act"), of 25,000,000 shares of Common Stock, par value \$.001 per share ("Common Stock"), of NeoStem, Inc. (the "Company") on Post-Effective Amendment No. 2 to a Registration Statement on Form S-8 (the "Post-Effective Amendment"). The shares of Common Stock to which the Post-Effective Amendment relates are issuable pursuant to the Company's 2003 Equity Participation Plan (the "Plan").

We have examined and relied upon originals or copies, authenticated or certified to our satisfaction, of all such corporate records of the Company, communications or certifications of public officials, certificates of officers, directors and representatives of the Company, and such other documents as we have deemed relevant and necessary as the basis of the opinions expressed herein. In making such examination, we have assumed the genuineness of all signatures, the authenticity of all documents tendered to us as originals, and the conformity to original documents of all documents submitted to us as certified or photostatic copies.

Based upon the foregoing and relying upon statements of fact contained in the documents which we have examined, we are of the opinion that the shares of Common Stock offered by the Company pursuant to the Plan, when registered pursuant to the Act and paid for in full by the participants in accordance with the Plan, will be, when issued, legally issued, fully paid and non-assessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and any amendment thereto.

Very truly yours,

/s/ LOWENSTEIN SANDLER PC

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Post-Effective Amendment No. 2 to the Registration Statement on Form S-8 of our report dated March 27, 2007, relating to the consolidated financial statements of NeoStem, Inc., formerly known as Phase III Medical, Inc. appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2006.

/s/ Holtz Rubenstein Reminick LLP

Holtz Rubenstein Reminick LLP Melville, New York May 24, 2007