FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| Washington, | D.C. | 20549 |
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| Check this box if no longer subject to | STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP |
|--|--|
| Section 16. Form 4 or Form 5 | |
| obligations may continue. See | |
| Instruction 1(b). | Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 |

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| 1. Name and Address of Reporting Person* MCGLYNN MARTIN M | | | | | | 2. Issuer Name and Ticker or Trading Symbol STEMCELLS INC [STEM] | | | | | | | | | | | all app Dired | | ng Pers | 10% C | wner | |
|--|--|--|--|--|------------------------------|--|---|-------|------------|---|--------------|--------|------|---------------------------------|----------|----------------------------|---|--|---|--|---|--|
| | | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 03/11/2011 | | | | | | | | | | | Offic below | | | | (specify | |
| (Street) PALO A | | | 94304 Zip) | | 4. If | | | | | | | | | | | 6. Indiv _ine) X | Forn Forn | al or Joint/Group Filing (Check Applicable orm filed by One Reporting Person orm filed by More than One Reporting erson | | | | |
| | | Tabl | e I - Noi | n-Deriv | ative | Se | curit | es Ac | qui | ired, | Disp | osed o | f, o | r Be | nefic | ially | Owne | ed | | | | |
| 1. Title of Security (Instr. 3) | | | | 2. Transaction Date (Month/Day/Year) | | ar) | 2A. Deemed Execution Date, if any (Month/Day/Year) | | T | 3. Transaction Code (Instr. 8) | | | | | | 4 and Secu Bene Owne | | cially I Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | | 7. Nature of Indirect Beneficial Ownership | |
| | | | | | | | | | C | Code | v | Amount | | (A) or (D) | r Pric | e | Reported Transaction(s) (Instr. 3 and 4) | | | | (Instr. 4) | |
| Common | Stock | | | 03/11 | 03/11/2011 | | | | | F | | 50,435 | 5 | D | \$0.8 | | 1,500,213(1) | | D | | | |
| Common Stock | | | | | | | | | | | | | | | | | | 41,132 | | I | By 401(k) plan ⁽²⁾ | |
| | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deem Execution if any (Month/Da | Date, | 4. Transa Code (8) | | on of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | Exp (Mo | piratior onth/Da | n Dateay/Yea | | | of s ng e (Instr. 3 | nt er | | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | O Fe Di Oi (I) | 0. Dwnership orm: birect (D) r Indirect) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | | |

Explanation of Responses:

- 1. Includes (1) 1,200,000 restricted stock units, with 400,000 of this grant vesting on each of June 25, 2011, June 25, 2012 and June 25, 2013 and (2) 176,000 restricted stock units, with 58,667 of this grant vesting on each of May 15, 2011, May 15, 2012 and May 15, 2013.
- 2. Shares held in 401(k) account in accordance with issuer's employer-match policies.

Remarks:

/s/ Ken Stratton, attorney-in-

03/15/2011

fact

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.