FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| Check this box if no longer subject to |
|----------------------------------------|
| Section 16. Form 4 or Form 5 |
| obligations may continue. See |
| Instruction 1(b). |

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| 0287 |
|------|
| |
| 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* GREER R SCOTT | | | | | | 2. Issuer Name and Ticker or Trading Symbol STEMCELLS INC [STEM] | | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner | | | | | |
|---------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------|---------|-----------------------------|---------------------------------------------------------------------------|--------------------------------------------------------|--------|------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------|-------|--------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------------|----------|
| | | | | | | | | | | | | | | _ | X | | er (give title | c | ther | (specify |
| (Last) C/O STE | | 3. Date of Earliest Transaction (Month/Day/Year) 06/03/2012 | | | | | | | | | | | belov | v) | b | elow) | | | | |
| 3155 PO | RTER DRI | VE | | | 4. If | Ame | endment, | Date o | f Origina | l Filed | d (Month/Da | ay/Ye | ar) | | 6. Individual or Joint/Group Filing (Check Applicab Line) | | | | | |
| (Street) PALO ALTO CA 94304 | | | | | | | | | | | | | | | X Form filed by One Reporting Person | | | | | |
| PALO ALTO CA 94304 | | | | | | | | | | | | | | Form filed by More than One Reporting Person | | | | | orting | |
| (City) | (S | tate) (| Zip) | | | | | | | | | | | | | | | | | |
| | | Tabl | e I - No | n-Deriv | ative | Se | curitie | s Acc | quired, | , Dis | posed o | f, o | r Bene | eficia | ally | Owne | ed | | | |
| 1. Title of Security (Instr. 3) 2. Trans Date (Month/I | | | | | | ur) E | A. Deemed execution Date, any Month/Day/Year) | | Code | Transaction Disposed Code (Instr. 5) | | | ties Acquired (A) I Of (D) (Instr. 3, 4 | | | Securi Benefi | cially I Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | | Code | v | Amount | | (A) or (D) | Price | e | Transaction(s) (Instr. 3 and 4) | | | | (1130.4) | | | |
| Common | Stock | | | 06/03 | 3/2012 | | | | A | | 10,000 | (1) | A | A \$0.00 31,000 ⁽²⁾ D | | | | | | |
| | | Та | | | | | | | | | sed of, onvertib | | | | y Ov | vned | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deem Executior if any (Month/Da | n Date, | Date, Transaction Code (Ins | | | | 6. Date E Expiratio (Month/I | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) | | | | vative urity r. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transactions (Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | D) ect | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | Code | v | (A) | | Date Exercisa | | Expiration Date | Title | or Nun of | ount nber res | | | | | | |

Explanation of Responses:

- 1. Anniversary equity grant of 10,000 restricted stock units, vesting 100% on June 3, 2013, the one year anniversary of the grant.
- 2. Includes 15,000 restricted stock units vesting on June 3, 2013.

Remarks:

/s/ Ken Stratton, attorney-in-

06/05/2012

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.