

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

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 OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,  
Section 17(a) of the Public Utility Holding Company Act of 1935 or Section  
30(h) of the Investment Company Act of 1940

OMB Number: 3235-0287

Expires: January 31, 2005

Estimated average burden hours per response... 0.5

1. Name and Address of Reporting Person \*  
TSUKAMOTO ANN

2. Issuer Name **and** Ticker or Trading Symbol  
STEMCELLS INC [STEM]

### 5. Relationship of Reporting Person(s) to Issuer

(Last)                      (First)                      (Middle)

3. Date of Earliest Transaction  
(Month/Day/Year)

(Check all applicable)

C/O STEMCELLS, INC., 7707  
GATEWAY BLVD, STE 140

01/27/2013

\_\_\_\_ Director                      \_\_\_\_ 10% Owner  
 \_\_X\_\_ Officer (give title        \_\_\_\_ Other (specify  
 below)                               below)

EVP, Research and Development

(Street)

4. If Amendment, Date Original  
Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check  
Applicable Line)

NEWARK, CA 94560

  X   Form filed by One Reporting Person  
      Form filed by More than One Reporting Person

(City) (State) (Zip)

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) |        |                  | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 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 |                                                                                               |                                                          |                                                       |
| Common Stock                    | 01/27/2013                           |                                                    | <u>F(1)</u>                    |                                                                   | 22,868 | D \$ 1.69        | 162,341 <u>(2)</u>                                                                            | D                                                        |                                                       |
| Common Stock                    |                                      |                                                    |                                |                                                                   |        |                  | 3,643                                                                                         | I                                                        | family trust <u>(3)</u>                               |
| Common Stock                    |                                      |                                                    |                                |                                                                   |        |                  | 15,302                                                                                        | I                                                        | By 401(k) Plan <u>(4)</u>                             |

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

**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 control**

SEC 1474  
(9-02)

number.

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of<br>Derivative<br>Security<br>(Instr. 3) | 2. Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date, if<br>any<br>(Month/Day/Year) | 4. Transaction<br>Code<br>(Instr. 8) | 5. Number<br>of<br>Derivative<br>Securities<br>Acquired<br>(A) or<br>Disposed<br>of (D)<br>(Instr. 3,<br>4, and 5) | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) | 7. Title and<br>Amount of<br>Underlying<br>Securities<br>(Instr. 3 and 4) | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | 9. Nu<br>Deriv<br>Secur<br>Bene<br>Own<br>Follo<br>Repor<br>Trans<br>(Instr |
|-----------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------|
|                                                     |                                                                    |                                         |                                                             | Code                                 | V (A) (D)                                                                                                          | Date<br>Exercisable                                            | Expiration<br>Date                                                        | Title                                               | Amount<br>or<br>Number<br>of<br>Shares                                      |

## Reporting Owners

| Reporting Owner Name / Address                                                         | Relationships |           |                               |       |
|----------------------------------------------------------------------------------------|---------------|-----------|-------------------------------|-------|
|                                                                                        | Director      | 10% Owner | Officer                       | Other |
| TSUKAMOTO ANN<br>C/O STEMCELLS, INC.<br>7707 GATEWAY BLVD, STE 140<br>NEWARK, CA 94560 |               |           | EVP, Research and Development |       |

## Signatures

/s/ Ken Stratton,  
attorney-in-fact

01/29/2013

\_\_Signature of Reporting Person

Date

## Explanation of Responses:

- \* 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).
- (1) This is recorded as a Code F disposition because the shares were used by the reporting person to pay a tax liability incurred by her from the delivery of shares incident to the vesting of restricted stock units.
- (2) Includes (1) 86,666 restricted stock units, with 43,333 vesting on each of January 27, 2014 and January 27, 2015; (2) 23,333 restricted stock units vesting on June 1, 2013; and (2) 2,333 restricted stock units vesting on May 15, 2013.
- (3) 3,643 shares held in trust as to which Dr. Tsukamoto disclaims beneficial ownership.
- (4) Shares held in 401(k) account in accordance with issuer's employer-match policies.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.