

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

**SCHEDULE 13D**

**Under the Securities Exchange Act of 1934  
(Amendment No. 5)**

International Stem Cell Corporation

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(Name of Issuer)

Common Stock, par value \$0.001 per share

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(Title of Class of Securities)

05577Y107

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(CUSIP Number)

Rouslan Semechkin, President  
X-Master, Inc.  
1 Overlook Drive, Unit 11  
Amherst, New Hampshire 03031  
Tel. (603) 672-7070

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Name, Address and Telephone Number of Person Authorized to  
Receive Notices and Communications)

Copy to:

Michael B. Tule  
McLane, Graf, Raulerson & Middleton, Professional Association  
900 Elm Street, P.O. Box 326  
Manchester, New Hampshire 03105-0326  
Tel. (603) 625-6464

October 9, 2009

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(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. ☐

CUSIP No. 05577Y107

1. Names of Reporting Persons.

X-Master, Inc.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) ☐

(b) ☒

3. SEC Use Only

4. Source of Funds (See Instructions)

WC, OO

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

☐

6. Citizenship or Place of Organization

A New Hampshire Corporation

7. Sole Voting Power

Number of Shares  
Beneficially  
Owned by  
Each Reporting  
Person With:

8. Shared Voting Power

26,771,430 <sup>(1)</sup>

9. Sole Dispositive Power

10. Shared Dispositive Power

26,771,430 <sup>(1)</sup>

11. Aggregate Amount Beneficially Owned by Each Reporting Person

26,771,430 <sup>(1)</sup>

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

☐

13. Percent of Class Represented by Amount in Row (11)

36%<sup>(2)</sup>

14. Type of Reporting Person (See Instructions)

CO

<sup>(1)</sup> Of the 26,771,430 shares of common stock, \$.001 par value ("Common Shares") reported, 12,000,000 shares are issuable upon conversion of 2,000,000 shares of Series C Preferred Stock, and 10 shares of Series D Preferred Stock issued to the Reporting Person. An additional 14,733,800 Common Shares are issuable upon conversion of 36.817 shares of Series D Preferred Stock held by A. Semechkin, and the exercise of options to purchase 7,000 Common Shares presently exercisable or which A. Semechkin has the right to exercise within 60 days, of which the Reporting Person may be deemed the indirect beneficial owner. 25,630 Common Shares are held by R. Semechkin, and an additional 12,000 Common Shares are issuable upon the exercise of options presently exercisable or which R. Semechkin has the right to exercise within 60 days, of which the Reporting Person may also be deemed the indirect beneficial owner.

<sup>(2)</sup> The calculation of the percentage is based on (i) 47,650,810 Common Shares outstanding as of August 5, 2009, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and (ii) 26,745,800 Common Shares to be issued upon the conversion of 2,000,000 shares of Series C Preferred Stock and 46.817 shares of Series D Preferred Stock, and the exercise of options to purchase 19,000 Common Shares of the Issuer.

CUSIP No. 05577Y107

1. Names of Reporting Persons.

Andrei Semechkin

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) ☐

(b) ☒

3. SEC Use Only

4. Source of Funds (See Instructions)

PF, OO

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

☐

6. Citizenship or Place of Organization

Citizen of Russia

7. Sole Voting Power

Number of Shares  
Beneficially  
Owned by  
Each Reporting  
Person With:

8. Shared Voting Power

26,771,430<sup>(3)</sup>

9. Sole Dispositive Power

10. Shared Dispositive Power

26,771,430<sup>(3)</sup>

11. Aggregate Amount Beneficially Owned by Each Reporting Person

26,771,430<sup>(3)</sup>

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

☐

13. Percent of Class Represented by Amount in Row (11)

36%<sup>(4)</sup>

14. Type of Reporting Person (See Instructions)

IN

<sup>(3)</sup> Of the 26,771,430 shares of common stock, \$.001 par value ("Common Shares") reported, 14,733,800 shares are issuable upon conversion of 36.817 shares of Series D Preferred Stock held by the Reporting Person, and exercise of options to purchase 7,000 Common Shares presently exercisable or which A. Semechkin has the right to exercise within 60 days. 12,000,000 shares are issuable upon conversion of 2,000,000 shares of Series C Preferred Stock and 10 shares of Series D Preferred Stock held by X-Master, of which the Reporting Person may be deemed the indirect beneficial owner. 25,630 Common Shares are held by R. Semechkin, and an additional 12,000 Common Shares are issuable upon the exercise of options presently exercisable or which R. Semechkin has the right to exercise within 60 days, of which the Reporting Person may also be deemed the indirect beneficial owner.

<sup>(4)</sup> The calculation of the percentage is based on (i) 47,650,810 Common Shares outstanding as of August 5, 2009, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and (ii) 26,745,800 Common Shares to be issued upon the conversion of 2,000,000 shares of Series C Preferred Stock and 46.817 shares of Series D Preferred Stock, and the exercise of options to purchase 19,000 Common Shares of the Issuer.

|  |                              |
|--|------------------------------|
| CUSIP No. 05577Y107  |                              |
| 1. Names of Reporting Persons.   |                              |
| Rouslan Semechkin  |                              |
| 2. Check the Appropriate Box if a Member of a Group (See Instructions)                   |                              |
| (a) <input type="checkbox"/>   |                              |
| (b) <input checked="" type="checkbox"/>  |                              |
| 3. SEC Use Only  |                              |
| 4. Source of Funds (See Instructions)  |                              |
| PF, OO   |                              |
| 5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)   |                              |
| <input type="checkbox"/>   |                              |
| 6. Citizenship or Place of Organization  |                              |
| Citizen of Russia  |                              |
| Number of Shares<br>Beneficially<br>Owned by<br>Each Reporting<br>Person With:           | 7. Sole Voting Power         |
|  | 8. Shared Voting Power       |
|  | 26,771,430 <sup>(5)</sup>    |
|  | 9. Sole Dispositive Power    |
|  | 10. Shared Dispositive Power |
|  | 26,771,430 <sup>(5)</sup>    |
| 11. Aggregate Amount Beneficially Owned by Each Reporting Person                         |                              |
| 26,771,430 <sup>(5)</sup>  |                              |
| 12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) |                              |
| <input type="checkbox"/>   |                              |
| 13. Percent of Class Represented by Amount in Row (11)                                   |                              |
| 36% <sup>(6)</sup>   |                              |
| 14. Type of Reporting Person (See Instructions)  |                              |
| IN   |                              |

<sup>(5)</sup> Of the 26,771,430 shares of common stock, \$.001 par value ("Common Shares") reported, 25,630 Common Shares are held by the Reporting Person and an additional 12,000 Common Shares are issuable upon the exercise of options presently exercisable or which R. Semechkin has the right to exercise within 60 days. 12,000,000 shares are issuable upon conversion of 2,000,000 shares of Series C Preferred Stock and 10 shares of Series D Preferred Stock held by X-Master, of which the Reporting Person may be deemed the indirect beneficial owner. 14,733,800 Common Shares are issuable upon conversion of 36.817 shares of Series D Preferred Stock held by A. Semechkin, and the exercise of options to purchase 7,000 Common Shares presently exercisable or which A. Semechkin has the right to exercise within 60 days, of which the Reporting Person may also be deemed the indirect beneficial owner.

<sup>(6)</sup> The calculation of the percentage is based on (i) 47,650,810 Common Shares outstanding as of August 5, 2009, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and (ii) 26,745,800 Common Shares to be issued upon the conversion of 2,000,000 shares of Series C Preferred Stock and 46.817 shares of Series D Preferred Stock, and the exercise of options to purchase 19,000 Common Shares of the Issuer.

## Amendment No. 5 to Schedule 13D

This Amendment No. 5 to Schedule 13D ("Amendment") amends and supplements the Schedule 13D filed with the Securities and Exchange Commission on January 9, 2009, as amended by Amendment No. 1 to Schedule 13D dated January 22, 2009, Amendment No. 2 to Schedule 13D dated March 16, 2009, Amendment No. 3 to Schedule 13D dated June 30, 2009, and Amendment No. 4 to Schedule 13D dated September 30, 2009 (the "Schedule 13D"). This Amendment is being filed by and on behalf of X-Master, Inc. ("X-Master"), Andrei Semechkin ("A. Semechkin"), and Rouslan Semechkin ("R. Semechkin"), (each a "Reporting Person" and collectively, the "Reporting Persons"). This Amendment relates to the common stock, par value \$0.001, of International Stem Cell Corporation, a Delaware corporation (the "Issuer"). Unless otherwise stated herein, all capitalized terms used in this Amendment have the same meanings as those set forth in the Schedule 13D.

### **ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION**

Item 3 is hereby amended and restated in its entirety as follows:

Pursuant to the Series D Stock Purchase Agreement, A. Semechkin individually acquired 10 shares of Series D Preferred Stock on January 22, 2009, 10 shares of Series D Preferred Stock on March 16, 2009, 10 shares of Series D Preferred Stock on June 30, 2009, and 3 shares of Series D Preferred Stock on September 30, 2009, for an aggregate purchase price of \$3,300,000 from his personal funds. Pursuant to the Note Exchange Agreement (defined below), A. Semechkin individually acquired 3,817 shares of Series D Preferred Stock on October 9, 2009, for an aggregate price of \$381,700. The shares were issued to A. Semechkin in exchange for the surrender of a certain promissory note dated February 26, 2009 pursuant to which A. Semechkin loaned the Issuer the original principal amount of \$360,000 from his personal funds.

The source of funds for the acquisition of the 2,000,000 shares of Series C Preferred Stock on August 20, 2008 and September 23, 2008, for an aggregate purchase price of \$2,000,000; and the acquisition of the 10 shares of Series D Preferred Stock on December 30, 2008 for \$1,000,000, was primarily from the proceeds of loans made to X-Master by Hartcom Impex, Ltd., a British Virgin Islands corporation ("Hartcom"), and from the working capital of X-Master. X-Master entered into loan agreements with Hartcom on February 22, 2008 for \$1,400,000, July 28, 2008 for \$700,000, and September 22, 2008 for \$1,000,000. The loans provide that the proceeds may be used for general working capital purposes, or any other lawful purpose. The loans are for a term of seven (7) years and twenty (20) days from funding date and at a fixed interest rate of 4.8% per annum with principal and interest payable at maturity.

In August 2008, R. Semechkin individually acquired 25,630 Common Shares at market prices at an aggregate purchase price of approximately \$10,000 from his personal funds.

The shares referred to in this Item 3 are sometimes referred to in this statement as the "Group Shares".

### **ITEM 4. PURPOSE OF TRANSACTION**

Item 4 is hereby amended by restating the first paragraph under the heading "The Series D Preferred Stock" in its entirety as follows:

#### The Series D Preferred Stock

As reported in the Issuer's Current Report on Form 8-K, dated January 5, 2009, on December 30, 2008, the Issuer entered into a Series D Preferred Stock Purchase Agreement (the "Purchase Agreement") with each of the Reporting Persons providing for the issuance and sale of up to \$5,000,000 of Series D Preferred Stock, an aggregate of 50 shares, at a purchase price of \$100,000 per share. Each share of Series D Preferred Stock is convertible into Common Shares, at a conversion rate of \$0.25 per share (400,000 Common Shares for each share of Series D Preferred Stock) subject to adjustment as provided in the Series D Preferred Stock Certificate of Designation (the "Series D Certificate"). Pursuant to the Series D Purchase Agreement, the investment was made in five tranches. The first four tranches were made in the amount of \$1,000,000 each and the fifth tranche in the amount of \$300,000. The closings contemplated by the Series D Purchase Agreement occurred on December 30, 2008, January 22, 2009, March 16, 2009, June 30, 2009, and September 30, 2009 respectively. The timing of the second and third closings, which were scheduled for February 5, 2009 and March 20, 2009 were accelerated to January 22, 2009 and March 16, 2009 respectively and the fifth closing, which was scheduled for September 20, 2009, was postponed to September 30, 2009, by mutual agreement of the parties. On October 9, 2009, the Issuer entered into a Note Exchange Agreement with A. Semechkin providing for the surrender of a certain promissory note dated February 26, 2009 between the Issuer and A. Semechkin, on which principal and interest were due October 1, 2009 in the amount of \$381,700, in exchange for the issuance of 3,817 shares of Series D Preferred Stock to A. Semechkin. The foregoing description of the Note Exchange Agreement does not purport to be complete and is qualified in its entirety by reference to the Note Exchange Agreement, a copy of which is filed as Exhibit 2 and incorporated in this statement by reference. The issuance of the Series D Preferred Stock was made pursuant to Section 4(2) of the Securities Act of 1933, as amended.

## ITEM 5. INTEREST IN SECURITIES OF THE ISSUER

Item 5 is hereby amended and restated in its entirety as follows:

(a) As of October 9, 2009, X-Master, by virtue of its beneficial ownership of the Group Shares, beneficially owned the equivalent of 26,771,430 Common Shares. The Group Shares represent approximately 36% of the total number of shares of Common Shares outstanding as of August 5, 2009 (plus the 26,745,800 Common Shares which would be outstanding upon the conversion of the Series C and Series D Preferred Stock and exercise of stock options assuming that no other shares of preferred stock or stock options held by others have been previously, or are simultaneously, converted to Common Shares).

As of October 9, 2009, A. Semechkin, by virtue of his beneficial ownership of the Group Shares, beneficially owned the equivalent of 26,771,430 Common Shares. The Group Shares represent approximately 36% of the total number of shares of Common Shares outstanding as of August 5, 2009 (plus the 26,745,800 Common Shares which would be outstanding upon the conversion of the Series C and Series D Preferred Stock and exercise of stock options assuming that no other shares of preferred stock or stock options held by others have been previously, or are simultaneously, converted to Common Shares).

As of October 9, 2009, R. Semechkin, by virtue of his beneficial ownership of the Group Shares, beneficially owned the equivalent of 26,771,430 Common Shares. The Group Shares represent approximately 36% of the total number of shares of Common Shares outstanding as of August 5, 2009 (plus the 26,745,800 Common Shares which would be outstanding upon the conversion of the Series C and Series D Preferred Stock and exercise of stock options assuming that no other shares of preferred stock or stock options held by others have been previously, or are simultaneously, converted to Common Shares).

(b) Number of shares as to which X-Master has:

- (i) Sole power to vote or to direct the vote: 0
- (ii) Shared power to vote or to direct the vote: 26,771,430
- (iii) Sole power to dispose or to direct the disposition of: 0
- (iv) Shared power to dispose or to direct the disposition of: 26,771,430

Number of shares as to which A. Semechkin has:

- (i) Sole power to vote or to direct the vote: 0
- (ii) Shared power to vote or to direct the vote: 26,771,430
- (iii) Sole power to dispose or to direct the disposition of: 0
- (iv) Shared power to dispose or to direct the disposition of: 26,771,430

Number of shares as to which R. Semechkin has:

- (i) Sole power to vote or to direct the vote: 0
- (ii) Shared power to vote or to direct the vote: 26,771,430
- (iii) Sole power to dispose or to direct the disposition of: 0
- (iv) Shared power to dispose or to direct the disposition of: 26,771,430

(c) On October 9, 2009, A. Semechkin acquired 3.817 shares of Series D preferred stock for \$100,000 per share convertible into common stock, par value \$0.001 per share, at a conversion rate of \$0.25 per share, for a total of 1,526,800 Common Shares. The acquisition was made pursuant to the Note Exchange Agreement described in Item 4 above.

(d) Not applicable.

(e) Not applicable.

## ITEM 7. MATERIAL TO BE FILED AS EXHIBITS

- |            |  |
|------------|--|
| Exhibit 1: | Agreement of Joint Filing, dated October 13, 2009, by and among X-Master, Inc., Andrei Semechkin, and Rouslan Semechkin.   |
| Exhibit 2: | Note Exchange Agreement, dated October 9, 2009, by and between International Stem Cell Corporation and Andrei Semechkin.   |
| Exhibit 3: | Power of Attorney, dated November 19, 2008, relating to X-Master, Inc. (incorporated by reference to Exhibit 24 of the Reporting Persons' statement on Form 4 with respect to International Stem Cell Corporation, filed on January 2, 2009).    |
| Exhibit 4: | Power of Attorney, dated November 19, 2008, relating to Andrei Semechkin (incorporated by reference to Exhibit 24 of the Reporting Persons' statement on Form 4 with respect to International Stem Cell Corporation, filed on January 2, 2009).  |
| Exhibit 5: | Power of Attorney, dated November 19, 2008, relating to Rouslan Semechkin (incorporated by reference to Exhibit 24 of the Reporting Persons' statement on Form 4 with respect to International Stem Cell Corporation, filed on January 2, 2009). |

## SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: October 13, 2009

X-Master, Inc.

By: /s/ Michael B. Tule

Name: Michael B. Tule

Title: Attorney in fact

Andrei Semechkin

By: /s/ Michael B. Tule

Name: Michael B. Tule

Title: Attorney in fact

Rouslan Semechkin

By: /s/ Michael B. Tule

Name: Michael B. Tule

Title: Attorney in fact

Signature page to AMENDMENT NO. 5 TO SCHEDULE 13D – CUSIP Number 05577Y107

## AGREEMENT OF JOINT FILING

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby consent to the joint filing on their behalf of a single Schedule 13D and any amendments thereto, with respect to the beneficial ownership by each of the undersigned of shares of common stock, \$0.001 par value, of International Stem Cell Corporation, a Delaware corporation. The undersigned hereby further agree that this statement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original, but all of which counterparts shall together constitute one and the same instrument.

Dated: October 13, 2009

X-Master, Inc.

By: /s/ Michael B. Tule  
Name: Michael B. Tule  
Title: Attorney in fact

Andrei Semechkin

By: /s/ Michael B. Tule  
Name: Michael B. Tule  
Title: Attorney in fact

Rouslan Semechkin

By: /s/ Michael B. Tule  
Name: Michael B. Tule  
Title: Attorney in fact



## NOTE EXCHANGE AGREEMENT

This Note Exchange Agreement ("Agreement") is made as of this 9 day of October, 2009 by and between Andrey Semechkin, an individual residing at 2595 Jason Court, Oceanside, California, (the "Noteholder") and International Stem Cell Corporation, a Delaware corporation (the "Borrower").

## WITNESSETH:

WHEREAS, Borrower has issued to Noteholder a promissory note (the "Note") dated February 26, 2009 in the principal amount of \$360,000, on which principal and interest are due October 1, 2009. The accrued interest due on the Note through October 1, 2009 is \$21,700 and the total amount or principal plus interest due October 1, 2009 is \$381,700.

WHEREAS, the Note permits Borrower to repay the principal and accrued interest thereunder with shares of Borrower's Series D Preferred Stock. The Borrower has elected that method of repayment.

NOW THEREFORE, in consideration of the above premises, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Surrender of Note. Noteholder hereby surrenders the Note in exchange for 3.817 shares of the Borrower's Series D Preferred Stock (the "Shares"). The issuance of the Shares in exchange for the Note shall be in full payment for all amounts due under the Note.

2. Conversion of Shares. Noteholder hereby elects to convert the Shares into 1,526,800 shares of common stock (the "Common Shares") at the conversion price of \$0.25/share, pursuant to the conversion price formula contained in the Certificate of Designation of the Series D Preferred Stock.

3. Representations and Warranties of the Borrower. The Borrower hereby represents and warrants as follows:

a. The Borrower is duly organized, validly existing and in good standing under the laws of Delaware. The Borrower has full power and authority to enter into and to perform its obligations under this Agreement and this Agreement constitutes a valid and binding obligation of the Borrower enforceable in accordance with its terms.

b. Each of the Shares and the Common Shares, when issued, shall have been duly authorized and validly issued and are fully paid and non-assessable.

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c. Neither the execution and delivery of this Agreement, the issuance of the Shares or the Common Shares, nor any agreement executed in connection herewith will constitute a violation of, or be a default under the Certificate of Incorporation or the By-Laws of the Corporation or any contract, lease, indenture, agreement, order, judgment, or decree to which the Corporation is a party.

4. Noteholder Representations and Warranties. Noteholder represents and warrants to Borrower the he is an accredited investor as defined by the rules and regulations promulgated under the Securities Act of 1933, as amended, and that he is taking the Shares and the Common Shares for investment and not for resale. Noteholder further represents that he is familiar with the restrictions on resale imposed by SEC Rule 144 and acknowledges that the Shares and the Common Shares will contain restrictions on resale consistent with such Rule and other applicable State and Federal laws and regulations.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of this 8th day of October 2009.

NOTEHOLDER:

/s/ Andrey Semechkin  
Andrey Semechkin

BORROWER:

International Stem Cell Corporation

By: /s/ Kenneth C. Aldrich  
Kenneth C. Aldrich  
Chief Executive Officer  
International Stem Cell Corporation