UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

International Stem Cell Corporation

(Exact Name of Registrant as Specified in its Charter)

De laware (State or Other Jurisdiction of Incorporation or Organization) 20-4494098 (I.R.S. Employer Identification No.)

5950 Priestly Drive, Carlsbad, CA 92008 (Address of Principal Executive Offices)

INTERNATIONAL STEM CELL CORPORATION 2010 EQUITY PARTICIPATION PLAN (Full Title of the Plan)

Sophia Garnette
Vice President, Legal Affairs & Operations
International Stem Cell Corporation
5950 Priestly Drive,
Carls bad, CA 92008
(Name and Address of Agent For Service)

(760) 940-6383 (Telephone Number, Including Area Code, of Agent For Service)

Copies to:

Douglas Rein
DLA Piper LLP (US)
4365 Executive Drive, Suite 1100
San Diego, California 92121
Telephone: (858) 677-1400
Facsimile: (858) 677-1401

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Securities Exchange Act of 1934, as amended.

Large accelerated filer		Accelerated filer	
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	X
		Emerging growth company	
~ ~ ~ ~	company, indicate by check mark if the registrant has elected not to use the extended transition accounting standards provided pursuant to Section $7(a)(2)(B)$ of the Securities Act. \Box	period for complying with any	

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Proposed Maximum Amount to be Registered(1)	Proposed Maximum Offering Price per Share (3)	Aggregate Offering Price	Amount of Registration Fee
Common Stock \$0.001 par value per share	6,000,000(2)	\$1.5425	\$9,255,000	\$1,153

- (1) This Registration Statement on Form S-8 (this "Registration Statement") covers (i) shares of Common Stock, par value \$0.001 per share ("Common Stock"), of International Stem Cell Corporation (the "Registrant"), issuable pursuant to the International Stem Cell Corporation 2010 Equity Participation Plan (the "2010 Plan"); and (ii) pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), any additional shares of Common Stock that become issuable under the 2010 Plan by reason of any stock dividend, stock split or other similar transaction.
- (2) Represents 6,000,000 shares of Common Stock available for future issuance under the 2010 Plan.
- (3) Estimated pursuant to Rule 457(h) and Rule 457(c) under the Securities Act, solely for the purpose of computing the registration fee, based on the average of the high and low prices reported for a share of Common Stock on the OTC QB on August 10, 2018.

PART I

INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

On April 30, 2010, International Stem Cell Corporation, a Delaware corporation (the "Company"), registered 18,000,000 shares of its common stock, par value \$0.001 per share, to be offered and sold to participants under the Company's 2010 Equity Participation Plan, as amended from time to time (the "Plan") pursuant to the Registration Statement on Form S-8 (File No. 333-166420) (the "Initial Registration Statement"). The Plan was amended by the Company's stockholders on May 7, 2015, to increase the number of shares available for issuance under the Plan by 1,080,000 shares of common stock and the additional shares were registered on September 14, 2015 pursuant to the Registration Statement on Form S-8 (File No. 333-206930). The Plan was further amended by the Company's stockholders on May 13, 2016, to increase the number of shares available for issuance under the Plan by 2,500,000 shares of common stock and the additional shares were registered on May 17, 2016 pursuant to the Registration Statement on Form S-8 (File No. 333-211411). The Plan was further amended by the Company's stockholders on June 21, 2018, to increase the number of shares available for issuance under the Plan by 6,000,000 shares of common stock. This Registration Statement is being filed pursuant to General Instruction E to Form S-8 (Registration of Additional Securities) to register such additional 6,000,000 shares of common stock which may be offered or sold to participants under the Plan.

In accordance with General Instruction E to Form S-8, the contents of the Initial Registration Statement are hereby incorporated by reference.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

The rules of the Commission allow us to incorporate by reference into this registration statement the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this registration statement, and information that we file later with the Commission will automatically update and supersede this information. This registration statement incorporates by reference the documents listed below (other than portions of these documents that are deemed furnished under applicable Commission rules rather than filed and exhibits furnished in connection with such items):

- (a) Our Annual Report on Form 10-K (Commission file number 000-51891-18744291) for the year ended December 31, 2017;
- (b) All other reports filed by us pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), since the end of the fiscal year covered by the annual report referred to in (a) above (in each case, except for the information furnished under Items 2.02 or 7.01 in any current report on Form 8-K); and
- (c) The description of our Common Stock contained or incorporated in the registration statements filed by the Company, pursuant to Section 12 under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment to this registration statement which indicates that all securities offered hereby have been sold or which deregisters all securities remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be a part hereof from the date of filing of such reports and other documents; *provided*, *however*, that documents or information deemed to have been furnished and not filed in accordance with Commission rules shall not be deemed incorporated by reference into this registration statement.

For the purposes of this registration statement, any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Item 4. Description of Securities

Not applicable.

Item 5. Interests of Named Experts and Counsel

Not applicable.

Item 6. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act.

As permitted by the Delaware General Corporation Law, the Company's certificate of incorporation includes a provision to indemnify any and all persons it has power to indemnify under such law from and against any and all of the expenses, liabilities or other matters referred to in or covered by such law. In addition, the Company's certificate of incorporation includes a provision whereby the Company shall indemnify each of the Company's directors and officer in each and every situation where, under the Delaware General Corporation law the Company is not obligated, but is permitted or empowered to make such indemnification, except as otherwise set forth in the Company's bylaws. The Company's certificate of incorporation also includes a provision which eliminates the personal liabilities of its directors for monetary damages for breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to the Company or its stockholders, (2) for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (3) under Section 174 of the Delaware General Corporation Law or (4) for any transaction from which the director derived an improper personal benefit.

As permitted by the Delaware General Corporation Law, the Company's bylaws provide that (1) it is required to indemnify its directors to the fullest extent permitted by the Delaware General Corporation Law and may, if and to the extent authorized by the Board of Directors, indemnify its officers, employees or agents and any other person whom it has the power to indemnify against liability, reasonable expense or other matters and (2) the Company shall advance expenses to its directors and officer who are entitled to indemnification, as incurred, to its directors and officers in connection with a legal proceeding, subject to limited exceptions.

Item 7. Exemption from Registration Claimed.

Not Applicable.

Item 8. Exhibits.

Exhibit Number	Exhibit Title
4.1	Certificate of Incorporation (incorporated by reference to Exhibit 3.4 of the Registrant's Form 10-SB filed on April 4, 2006, File No. 000-51891).
4.2	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Preliminary Information Statement on Form 14C filed on December 29, 2006, File No. 000-51891).
4.3	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on June 4, 2012, File No. 000-51891).
4.4	Certificate of Amendment to Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on December 5, 2014, File No. 000-51891).
4.5	Certificate of Amendment to Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on July 28, 2015, File No. 000-51891).
4.6	Certificate of Amendment to Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on May 19, 2017, File No. 000-51891).
4.7	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on May 6, 2011, File No. 000-51891).
4.8	Form of Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 of the Registrant's Form 10-KSB filed on April 9, 2007, File No. 000-51891).
4.9	Certification of Designation of Series B Preferred Stock (incorporated by reference to Exhibit 4.1 of the Registrant's Form 8-K filed on May 12, 2008, File No. 000-51891).

- 4.10 Certification of Designation of Series D Preferred Stock (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on January 5, 2009, File No. 000-51891).
- 4.11 Certificate of Designation of Series G Preferred Stock (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on March 14, 2012, File No. 000-51891).
- 4.12 <u>Certificate of Preferences, Rights and Limitations of Series I-1 Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on March 10, 2016, File No. 000-51891).</u>
- 4.13 <u>Certificate of Preferences, Rights and Limitations of Series I-12 Convertible Preferred Stock (incorporated by reference to Exhibit 3.2 of the Registrant's Form 8-K filed on March 10, 2016, File No. 000-51891).</u>
- 4.14 Form of Series A Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 of the Registrant's Form 8-K filed on March 10, 2016, File No. 000-51891).
- 4.15 Form of Placement Agent Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.4 of the Registrant's Form 8-K filed on March 10, 2016, File No. 000-51891).
- 5.1 Opinion of DLA Piper LLP (US)
- 23.1 Consent of Mayer Hoffman McCann P.C., Independent Registered Public Accounting Firm
- 23.2 Consent of DLA Piper LLP (US) (filed as part of Exhibit 5.1)
- 24.1 Powers of Attorney (included on signature page)
- 99.1 2010 Equity Participation Plan (incorporated by reference to Appendix A of the Registrant's Schedule 14A filed April 30, 2018, File No. 000-51891).

Item 9. Undertakings

- (a) The undersigned Registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
- (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 in the aggregate, represent a fundamental 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 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
- (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)(i) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act, 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, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new Registration Statement relating to the securities offered herein, 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 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 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 Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, 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 Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Carlsbad, State of California, on this 14th day of August, 2018.

INTERNATIONAL STEM CELL CORPORATION

By: /s/ Andrey Semechkin
Andrey Semechkin
Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned directors and/or officers of International Stem Cell Corporation, hereby severally constitute and appoint Andrey Semechkin and Sophia Garnette and each of them individually, with full powers of substitution and resubstitution, our true and lawful attorneys, with full powers to them and each of them to sign for us, in our names and in the capacities indicated below, the Registration Statement on Form S-8 filed with the Commission, and any and all amendments to said Registration Statement (including post-effective amendments), and any registration statement filed pursuant to Rule 462(b) under the Securities Act in connection with the registration under the Securities Act of the Registrant's equity securities, and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as each of them might or could do in person, and hereby ratifying and confirming all that said attorneys, and each of them, or their substitute or substitutes, shall do or cause to be done by virtue of this Power of Attorney.

Pursuant to the requirements of the Securities Act of 1933 this Registration Statement has been signed by the following persons in the capacities indicated on this 14th day of August, 2018:

Signature	Title(s)		
/s/ Andrey Semechkin Andrey Semechkin	Chief Executive Officer, Co-Chairman and Director (principal executive officer)		
/s/ Sophia Garnette Sophia Garnette	Vice President, Legal Affairs and Operations (principal financial and accounting officer)		
/s/ Russell Kern Russell Kern	Executive VP and Chief Scientific Officer and Director		
/s/ Paul V. Maier Paul V. Maier	Director		
/s/ Donald A. Wright Donald A. Wright	Co-Chairman and Director		

August 10, 2018

International Stem Cell Corporation 5950 Priestly Drive, Carlsbad, CA 92008

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel for International Stem Cell Corporation, a Delaware corporation (the "Company"), in connection with the preparation and filing of the Registration Statement on Form S-8 (the "Registration Statement") filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), with respect to the issuance from time to time of up to 6,000,000 shares of the Company's Common Stock, par value \$0.001 per share (the "Common Stock"), pursuant to awards granted or to be granted under the Company's 2010 Equity Incentive Plan (the "Plan"). The 6,000,000 shares of Common Stock issuable under the Plan are hereinafter referred to as the "Shares."

In connection herewith, we have examined and relied without independent investigation as to matters of fact upon such certificates of public officials, such statements and certificates of officers of the Company and originals or copies certified to our satisfaction of the Registration Statement, the Plan, the Restated Certificate of Incorporation, as amended, and the Amended and Restated Bylaws of the Company as now in effect and minutes of all pertinent meetings and actions of the Board of Directors of the Company and of the Company.

In rendering this opinion, we have assumed the genuineness of all signatures on all documents examined by us, the due authority of the parties signing such documents (other than with respect to the Company), the authenticity of all documents submitted to us as originals, the conformity to the originals of all documents submitted to us as copies and that the issuance of the Shares complies in all respects with the terms, conditions and restrictions set forth in the Registration Statement and the Plan. The Company has represented to us and we have also assumed that the Company has reserved from its duly authorized capital stock a sufficient number of shares of Common Stock as were approved by the Company's stockholders for issuance under the Plan. The Company has also covenanted and we have also assumed that it will at all times reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue the Shares in accordance with the Plan, the number of Shares which are then issuable and deliverable upon the settlement of awards under the Plan.

We are members of the Bar of the State of California, and we do not express any opinion herein concerning any law other than the Delaware General Corporation Law (including the statutory provisions, all applicable provisions of the Delaware Constitution and the reported judicial decisions interpreting the foregoing) and the federal law of the United States of America. To the extent that any applicable document is stated to be governed by the laws of another jurisdiction, we have assumed for purposes of this opinion that the laws of such jurisdiction are identical to the aforementioned state laws of the State of Delaware. No opinion is expressed herein with respect to the qualification of the Shares under the securities or blue sky laws of any state or any non-U.S. jurisdiction.

This opinion speaks only at and as of its date and is based solely on the facts and circumstances known to us and as of such date. In addition, in rendering this opinion, we assume no obligation to revise, update or supplement this opinion (i) should the present aforementioned laws of the State of Delaware or federal laws of the United States of America be changed by legislative action, judicial decision or otherwise, or (ii) to reflect any facts or circumstances which may hereafter come to our attention.

Based upon, subject to and limited by the foregoing, we are of the opinion and so advise you that the Shares have been duly authorized and, when issued and delivered in accordance with the terms of the Plan, will be, validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ DLA PIPER LLP (US)

DLA PIPER LLP (US)

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

As independent registered public accountants, we hereby consent to the incorporation by reference of our report dated April 6, 2018, relating to the consolidated financial statements of **International Stem Cell Corporation and Subsidiaries** (which report includes an explanatory paragraph relating to the uncertainty of the Company's ability to continue as a going concern), as of and for the years ended December 31, 2017 and 2016, included in or made part of this Registration Statement on Form S-8.

/s/ Mayer Hoffman McCann P.C. San Diego, California August 14, 2018