SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.)

Filed by the Registrant ☒ Filed by a Party other than the Registrant ☐

Check the appropriate box:

☐ Preliminary Proxy Statement

☐ **Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**

☐ Definitive Proxy Statement

☒ Definitive Additional Materials

☐ Soliciting Material Pursuant to §240.14a-11(c) or §240.14a-12

INTERNATIONAL STEM CELL CORPORATION

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

☒ No fee required.

☐ Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

☐ Fee paid previously with preliminary materials.

☐ Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

November 3, 2014

Dear Shareholders,

Thank you for your continuing support of International Stem Cell Corporation. I want to update you on some important matters including how we intend to increase the Company's visibility, recognition and market capitalization and outline our most significant near term objectives, most notably the initiation of our first clinical study, the first-ever using neural stem cells derived from pluripotent stem cells for the treatment of Parkinson's disease.

As a company our goals are to be a recognized leader in human stem cell transplantation and to use our scientific expertise to develop commercial products that address unmet medical needs for patients around the world. To achieve these goals, we must advance our research from the preclinical to the clinical stage and demonstrate safety and efficacy of our therapy in humans. Based on the safety and efficacy data reported to date and new data we will report at this month's annual meeting of the Society for Neuroscience, the world's largest organization of scientists and physicians devoted to understanding the brain and nervous system. We have a strong preclinical evidence to support our planned clinical trial in Parkinson's disease. The Phase I trial in patients with Parkinson's disease will examine the safety of our approach, as well as some efficacy endpoints, and if successful, a larger Phase II study will follow, to evaluate the effectiveness of our approach in treating the symptoms and halting or even reversing the progress of the disease.

We know from previous cell therapy trials in other indications that, because of patient enrollment rate limitations, safety studies in the United States can often take several years to complete. For this reason it is relatively common to carry out Phase I in countries where early-stage trials can be completed faster and more economically, maintaining clinical quality while saving the company time and money. Countries such as the UK, Australia and Sweden all have excellent Parkinson's disease specialists, have successful track records of running movement disorder clinical trials and, most importantly, permit studies to enroll patients relatively quickly. We believe that filing a regulatory submission before the end of this year and beginning our clinical trial as early as 1Q 2015 in one of these countries may significantly accelerate the overall clinical program. The human safety data we obtain from the foreign trial will strengthen our US IND, which we continue to plan for, and may allow us to transition directly to a Phase II study as part of our collaboration with Duke Clinical Research Institute.

We are already experiencing growing levels of interest in our core stem cell platform and our therapeutic products from pharmaceutical companies and with human data this interest will only increase. In addition, when we receive the definitive and final ruling on our patent filings from the Court of Justice for the European Union, which we expect before year-end, this new intellectual property will give us significant licensing advantages in Europe over embryonic stem cell-based technologies.

Concurrent to our lead target indication of Parkinson's disease, we are also researching the use of human neural stem cells in other indications. In 1Q 2015 we anticipate reporting data from our collaboration with Tulane on the use of these cells in stroke.

To ensure the Company's achievements are optimally recognized by the investment community, it's important that we increase our visibility and position our stock to be more accessible to institutional investors and brokerage firms, which should also help make potential future financings more accretive. The first move is to transition our stock listing to a national securities exchange such as NASDAQ. A national exchange listing and the associated higher stock price should generate greater interest among investors and analysts. If we are successful in generating this interest, I anticipate that the Company's common stock would have greater liquidity and a stronger long-term investor base.

However, to qualify for listing on a national exchange the stock price needs to be over $3 and ideally closer to $5, which is why the ratio of the reverse split we are proposing at the December 4 stockholders meeting is between 50 and 150. Waiting for the share price to grow organically simply delays our ability to grow the business and bring these important treatments to patients.

Future Milestones

We believe that the timing is optimal to elevate our investor and public visibility given that we're in the midst of transforming from a preclinical to a clinical stage company. The several milestones we see ahead of us should all add significant value to our business and should facilitate our bringing innovative treatments to patients. These milestones include:

- Initiate the Phase I clinical trial in Parkinson's disease in 1Q 2015.
- Report interim data from the Phase I clinical trial at a medical conference in 2015.
- Transition to trading on a national exchange such as NASDAQ.
- Execute a definitive license agreement with Rohto Pharmaceutical Co. Ltd following the conclusion of their evaluation of our cells.
- Publish preclinical data from the Stroke study using our human neural stem cells.

I think you can see that we have a tremendously exciting time ahead of us. I look forward to your support at the stockholders meeting on December 4, 2014

Sincerely,

Andrey Semechkin, PhD

Co-Chairman and CEO

About International Stem Cell Corporation

International Stem Cell Corporation is focused on the therapeutic applications of human parthenogenetic stem cells (hpSCs) and the development and commercialization of cell-based research and cosmetic products. ISCO's core technology, parthenogenesis, results in the creation of pluripotent human stem cells from unfertilized oocytes (eggs). hpSCs avoid ethical issues associated with the use or destruction of viable human embryos. ISCO scientists have created the first parthenogenetic, homozygous stem cell line that can be a source of therapeutic cells for hundreds of millions of individuals of differing genders, ages and racial background with minimal immune rejection after transplantation. hpSCs offer the potential to create the first true stem cell bank, UniStemCell™. ISCO also produces and markets specialized cells and growth media for therapeutic research worldwide through its subsidiary Lifeline Cell Technology (www.lifelinecelltech.com), and stem cell-based skin care products through its subsidiary Lifeline Skin Care (www.lifelineskincare.com). More information is available at www.internationalstemcell.com and companyblog.intlstemcell.com.

To receive ongoing corporate communications, please click on the following link: http://www.b2i.us/irpass.asp?BzID=1468&to=ea&s=0

Forward-looking Statements

Statements pertaining to anticipated developments, the expected timing and results of preclinical and clinical studies and subsequent regulatory filings, the potential benefits of research programs and products, and other opportunities for the company and its subsidiaries, along with other statements about the future expectations, beliefs, goals, plans, or prospects expressed by management constitute forward-looking statements. Any statements that are not historical fact (including, but not limited to statements that contain words such as “will,” “should,” “believes,” “plans,” “anticipates,” “expects,” “estimates”) should also be considered to be forward-looking statements. Forward-looking statements involve risks and uncertainties, including, without limitation, risks inherent in the development and/or commercialization of potential products, regulatory approvals, need and ability to obtain future capital, application of capital resources among competing uses, and maintenance of intellectual property rights. Actual results may differ materially from the results anticipated in these forward-looking statements and as such should be evaluated together with the many uncertainties that affect the company’s business, particularly those mentioned in the cautionary statements found in the company’s Securities and Exchange Commission filings. The company disclaims any intent or obligation to update forward-looking statements.