

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
Washington, DC 20549

**Amendment No. 1**  
**to**  
**Form S-1**  
**REGISTRATION STATEMENT**  
**UNDER**  
**THE SECURITIES ACT OF 1933**

**INTERNATIONAL STEM CELL CORPORATION**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
Incorporation or organization)

2384  
(Primary Standard Industrial  
Classification Code number)  
5950 Priestly Drive  
Carlsbad, CA 92008  
(760) 940-6383

(Address and telephone number of principal executive offices)

LINH NGUYEN  
5950 Priestly Drive  
Carlsbad, CA 92008  
(760) 940-6383

(Name, address and telephone number of agent for service)

*Copies to:*  
DOUGLAS REIN  
DLA PIPER LLP (US)  
4365 Executive Drive, Suite 1100  
San Diego, CA 92121-2133  
(858) 677-1443

20-4494098  
(I.R.S. Employer  
Identification No.)

**Approximate date of commencement of proposed sale to the public:** As soon as possible after this Registration Statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐

Accelerated filer ☐

Non-accelerated filer ☐

Smaller reporting company ☒

**CALCULATION OF REGISTRATION FEE**

Title of Each Class of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Security (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee
Shares of Common Stock, par value \$0.001 per share		\$	\$	\$
Warrants to purchase shares of common stock (3)		—	—	—
Shares of Common Stock issuable upon exercise of the Warrants		\$	\$	\$
Placement Agent Warrants to purchase shares of common stock (3)				
Shares of Common Stock issuable upon exercise of the Placement Agent Warrants		\$	\$	\$
Total		\$	\$15,000,000	\$2,046.00

(1) Pursuant to and in accordance with Rule 416 under the Securities Act, this registration statement also covers such indeterminate number of additional shares of common stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends, recapitalizations or similar transactions.

(2) Calculated pursuant to Rule 457(o) on the basis of the maximum aggregate offering price of all the securities being registered.

(3) The warrants will be issued for no additional consideration. No registration fee is required pursuant to Rule 457(g).

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

**The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting offers to buy these securities in any state where the offer or sale of these securities is not permitted.**

**SUBJECT TO COMPLETION, DATED DECEMBER 7, 2012**

# **INTERNATIONAL STEM CELL CORPORATION**

## **PROSPECTUS**

### **50,000,000 Shares of Common Stock Warrants to purchase 25,000,000 Shares of Common Stock Shares of Common Stock underlying the Warrants**

We are offering up to 50,000,000 shares of our common stock, and warrants to purchase up to 25,000,000 shares of our common stock at an exercise price of \$ \_\_\_\_\_ per share, subject to adjustment. Purchasers of our common stock will automatically receive a warrant to purchase one share of our common stock for every two shares of common stock that they purchase in this offering without the payment of additional consideration for the warrant. The warrants will be exercisable on or after the closing date of this offering and through and including the close of business on December \_\_\_\_\_, 2017.

We are not required to sell any specific dollar amount or number of securities, but will use our best efforts to sell all of the securities being offered. It is anticipated that there will only be one closing of the offering. This offering will terminate on January 31, 2013 unless the offering is fully subscribed before that date or we decide to terminate the offering prior to that date. All funds received from investors will be placed in a non-interest bearing escrow account with BNY Mellon, which we refer to as the escrow agent. If the closing does not occur by January 31, 2013, we will return your investment to you without interest and without any other offset within two business days. All costs associated with the registration will be borne by us.

Our common stock is quoted on the OTC QB and trades under the symbol "ISCO". We do not intend to apply for listing of the warrants on any securities exchange, and we do not expect that the warrants will be quoted on the OTC QB. The last reported sale price of our common stock on December 5, 2012 on the OTC QB was \$0.25 per share.

	<u>Per Share</u>	<u>Total</u>
Offering Price per Share	\$ _____	\$ _____
Placement Agent's Fees	\$ _____	\$ _____
Offering Proceeds, before expenses	\$ _____	\$ _____

CRT Capital Group, LLC has agreed to act as our exclusive placement agent in connection with this offering. The placement agent is not purchasing the securities offered by us, and is not required to sell any specific number or dollar amount of securities, but will assist us in this offering on a "best efforts" basis. We have agreed to pay the placement agent a cash fee equal to 6% of the gross proceeds of the offering of securities by us (excluding any gross proceeds received by us from the sale of the first \$1,300,000 worth of securities to members of our Board of Directors, employees, the Semechkin family or their affiliates) and to issue to the placement agent warrants to purchase a number of shares of our common stock equal to 5% of the aggregate number of shares of common stock sold in the offering. The placement agent warrants will have terms substantially similar to the warrants being offered hereby to purchasers of our common stock. The placement agent warrants will not be exercisable or convertible more than five (5) years from the effective date of the registration statement of which this prospectus is a part and will otherwise comply with FINRA Rule 5110 (g)(1). We estimate the total expenses of this offering, excluding the placement agent fees, will be approximately \$365,000. Because there is no minimum offering amount required as a condition to closing this offering, the actual public offering amount, placement agent fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amount set forth above. See "Plan of Distribution" beginning on page 25 of this prospectus for more information on this offering and the placement agent arrangements.

**Investing in the securities involves substantial risks. Before making any investment in the securities, you should read and carefully consider the risks described in this prospectus under See "Risk Factors" beginning on page 5 of this prospectus.**

**You should rely only on the information contained in this prospectus or any prospectus supplement or amendment thereto. We have not authorized anyone to provide you with different information.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

## **CRT Capital**

**Sole Placement Agent**

**The date of this prospectus is December \_\_\_\_\_, 2012.**

OFFERS AND SALES WILL ONLY BE MADE BY US OR THE PLACEMENT AGENT IN JURISDICTIONS WHERE THE PLACEMENT AGENT BELIEVES THERE ARE EXEMPTIONS FROM SUCH REGISTRATION REQUIREMENT UNDER THE LAWS AND REGULATIONS OF THE STATE IN QUESTION. BROKERS OR DEALERS EFFECTING TRANSACTIONS IN THE SECURITIES SHOULD CONFIRM THAT THE SECURITIES HAVE BEEN REGISTERED UNDER THE SECURITIES LAWS OF THE STATE OR STATES IN WHICH SALES OF THE SECURITIES OCCUR AS OF THE TIME OF SUCH SALES, OR THAT THERE IS AN AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES LAWS OF SUCH STATES.

THIS PROSPECTUS IS NOT AN OFFER TO SELL ANY SECURITIES OTHER THAN THE SHARES AND WARRANTS. THIS PROSPECTUS IS NOT AN OFFER TO SELL SECURITIES TO ANY PERSON OR IN ANY PARTICULAR JURISDICTION IN ANY CIRCUMSTANCES IN WHICH SUCH AN OFFER OR SALE IS UNLAWFUL.

## INTERNATIONAL STEM CELL CORPORATION

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You should read this prospectus, including all documents incorporated herein by reference, together with additional information described under “Where You Can Find More Information”.

You may obtain the information incorporated by reference without charge by following the instructions under “Where You Can Find More Information”.

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## About This Prospectus

You may rely only on the information contained in this prospectus or that we have referred you to. We have not authorized anyone to provide you with different information. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities other than the securities offered by this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities in any circumstances in which such offer or solicitation is unlawful. Neither the delivery of this prospectus nor any sale made in connection with this prospectus shall, under any circumstances, create any implication that there has been no change in our affairs since the date of this prospectus or that the information contained by reference to this prospectus is correct as of any time after its date. In this prospectus, references to “International Stem Cell Corporation,” “the Company,” “we,” “us,” and “our,” refer to International Stem Cell Corporation.

## PROSPECTUS SUMMARY

### ***Business Overview***

We are a development-stage biotechnology company focused on therapeutic, cosmeceutical and biomedical product development with multiple long-term therapeutic opportunities and two revenue-generating businesses offering potential for increased future revenue.

Our products are based on multi-decade experience with human cell culture and a proprietary type of pluripotent stem cells, “human parthenogenetic stem cells” (“hpSCs”). Our hpSCs are comparable to human embryonic stem cells (“hESCs”) in that they have the potential to be differentiated into many different cells in the human body. However, the derivation of hpSCs does not require the use of fertilized eggs or the destruction of viable human embryos and they offer the potential for creation of immune-matched cells and tissues that are less likely to be rejected following transplantation into people across various ethnic groups. We have facilities and manufacturing protocols that comply with the requirements of the US Food and Drug Administration (“FDA”) and other regulatory authorities.

### ***Market Opportunity and Growth Strategy***

#### *Therapeutic Market – Clinical Applications of hpSCs for Disease Treatment*

With respect to therapeutic research and product candidates, we focus on applications where cell and tissue therapy is already proven but where there is an insufficient supply of safe and functional cells or tissue. We believe that the most promising potential clinical applications of our technology are: 1) Parkinson’s disease; 2) metabolic/liver diseases; and 3) corneal blindness.

Parkinson’s disease (“PD”) is a common neurodegenerative disease and, according to the Parkinson Disease foundation, there are more than one million individuals sufferers in the United States and more than \$2 billion is spent on medication. Currently there is no cure for PD and the improvements in symptoms provided by PD drugs often diminish with time. Using our proprietary technologies and know-how, we are creating neuronal cells from hpSCs as a potential treatment of PD and other central nervous system disorders in order to address this significant market opportunity.

Liver disease affects one in ten persons according to the American Liver Foundation, and is one of the top ten leading causes of death in the United States. There are more than one hundred individual diseases of the liver and, for people with liver failure, the only effective treatment is full or partial organ transplantation. However, the demand for liver organs far exceeds the number available. According to the American Liver Foundation, over 16,000 individuals in the United States are waiting for a transplant. Using our proprietary technologies and

know-how, we are creating liver cells from hpSCs that may be used to treat a variety of hepatic and metabolic liver diseases to address this significant market opportunity. Importantly, liver cell transplantation has already been used in early stage clinical trials to treat patients with liver failure and has proven especially useful as a “bridge” to keep patients alive until they can receive a whole liver transplant.

According to the World Health Organization, corneal blindness currently affects over eight million people worldwide with a significant proportion of sufferers in India. There is a tremendous shortage of cells and corneal tissue for transplantation necessary to effectively treat sufferers, particularly in South Asia where cultural and other reasons inhibit the donation of corneal tissue. Using our proprietary technologies and know-how, we are creating corneal-like structures from hpSCs grown to clear, hollow spheres composed of tissue exhibiting a three-dimensional layered structure similar to what is found in normal corneal tissue to address this significant market opportunity. Portions or all of these tissue layers may be suitable for cornea transplantation in humans. In addition, corneal cells can be used for coating of contact lenses for the purpose of accelerated corneal healing. We are currently collaborating with a leading eye hospital in India for pre-clinical and clinical development of a cornea product for the Indian market.

#### ***Cosmeceutical Market – Skin Care Products***

Anti-aging represents a significant portion of the prestige facial skincare market. Despite the recessionary economy, sales of anti-aging products increased in 2011. With increasingly aging populations in key markets such as the U.S. and Asia, we believe that the prestige facial skincare market is positioned for significant growth.

In order to make claims that products can actually diminish the signs of aging, marketers are constantly looking for new combinations of specialty ingredients. The category of skincare products based on biotechnology such as human stem cells is just beginning to be developed, and therefore we believe that it has significant growth potential. Our goal is to leverage our leadership in human stem cell technology to develop and commercialize advanced anti-aging skincare products for the consumer and professional channels that provide a demonstrable cosmetic effect.

Our wholly-owned subsidiary Lifeline Skin Care, Inc. (“LSC”) develops, manufactures and markets cosmetic skin care products to address this significant market opportunity. LSC currently has three proprietary skin care products all containing a proprietary stem cell extract, including a Defensive Day Serum, Recovery Night Serum and a Firming Eye Complex.

LSC’s products are regulated as cosmetics. Marketing and sales are conducted direct to the consumer via the internet as well as through dermatology clinics and medical and day spas (“professional channel”). LSC currently sells its products nationally and internationally through a branded website and select distributors. Domestically, we plan to increase LSC’s distribution and growth opportunities by expanding our efforts in the professional channel and opening up new channels such as specialty retail stores, department stores and TV shopping. Internationally, we plan to increase LSC’s distribution and growth opportunities through agreements with specialty distributors in both Latin America and Asia.

#### ***Biomedical Market – Primary Human Cell Research Products***

The global market for human cell systems for use in basic research is extremely large, with continuing anticipated growth. We believe that the following are the main drivers in the research market:

- The need for experimental human cells which are more predictive of human biology than are non-human cells or genetically-modified cell lines or living non-human animals.
- The emerging field of stem-cell-based regenerative medicine and the increase in associated grant money to study stem cells is driving the market not only for stem cell products but also for cell culture products in general.

- The desire to lower the cost of drug development in the pharmaceutical industry. We believe that human cell systems may provide a platform for screening toxic drugs early in the development process, thus avoiding late stage failures in clinical trials and reducing costs.
- The need to eliminate animal products in research reagents that may contaminate future therapeutic products.
- The need for experimental control. Serum-free defined media provides the benefit of experimental control because there are fewer undefined components.
- The need for consistency in experiments that can be given by quality controlled products.
- The need to eliminate in-house formulation of media, obtain human tissue or perform cell isolation.
- The need to reduce animal testing in the consumer products industry.

Our wholly-owned subsidiary Lifeline Cell Technology, LLC (“LCT”) develops, manufactures and commercializes over 130 human cell culture products, including frozen human “primary” cells and the reagents (called “media”) needed to grow, maintain and differentiate the cells, in order to address this significant market opportunity. LCT’s scientists have used a technology called basal medium optimization to systematically produce optimized products designed to culture specific human cell types and to elicit specific cellular behaviors. These techniques also produce products that do not contain non-human animal proteins, a feature desirable to the research and therapeutic markets.

Each LCT cell product is quality tested for the expression of specific markers (to assure the cells are the correct type), proliferation rate, viability, morphology and absence of pathogens. Each cell system also contains associated donor information and all informed consent requirements are strictly followed. LCT’s research products are marketed and sold by its internal sales force, OEM partners and LCT brand distributors in Europe and Asia.

While we have continued to expand our sales and marketing efforts in order to increase revenue, to date we have generated limited revenue to support our core therapeutic research and development efforts.

Our principal executive offices are located at 5950 Priestly Drive, Carlsbad, California 92008, and our telephone number is (760) 940-6383. Our website address is [www.internationalstemcell.com](http://www.internationalstemcell.com).

### **The Offering**

Securities offered

Up to 50,000,000 shares of our common stock, and warrants to purchase up to 25,000,000 shares of our common stock. Purchasers of our common stock will automatically receive a warrant to purchase one share of common stock for every two shares of common stock that they purchase in this offering without payment of additional consideration for the warrant. Each warrant may be exercised on or after the closing date of this offering through and including the close of business on December , 2017. The warrant includes a cashless exercise right.

Offering price	\$      per share of common stock.
Common stock outstanding prior to offering	95,388,815 shares (1)
Common stock to be outstanding after the offering	shares (2)
Use of proceeds	We expect to use the proceeds received from the offering to fund our research and development activities, including those involving our and non-human efficacy pre-clinical studies for the Parkinson's disease and endoderm programs and for general working capital needs.
OTC QB Symbol	ISCO
Risk Factors	Investing in the securities involves substantial risks. See "Risk Factors" beginning on page 4 and the other information in this prospectus for a discussion of the factors you should consider before you decide to invest in the securities.
<p>(1) The total number of shares of our common stock outstanding reflected above is as of December 5, 2012, and includes 8,000,000 shares of common stock to be issued upon the conversion of all of our outstanding shares of Series C Preferred Stock effective immediately prior to the closing of this offering. The total number of shares of our common stock outstanding reflected above excludes:</p> <ul style="list-style-type: none"> <li>• 23,530,472 shares of common stock issuable upon exercise of outstanding stock options, including those options issued outside our stock option plans, at a weighted average exercise price of \$0.99 per share;</li> <li>• 3,330,000 additional shares of common stock reserved for issuance under various outstanding warrant agreements, at an exercise price of \$0.25 per share, and 200,000 shares of common stock reserved for issuance under other warrants, at an average exercise price of \$1.75 per share;</li> <li>• 30,973,200 additional shares of common stock reserved for issuance upon conversion of our outstanding shares of Series B, Series D and Series G Preferred Stock; and</li> <li>• 16,841,640 additional shares of common stock reserved for future issuance under our 2006 and 2010 stock option plans.</li> </ul> <p>(2) Assumes the sale of all shares of common stock covered by this prospectus. Excludes up to 25,000,000 shares of common stock that could be issued upon exercise of the warrants sold as part of this offering.</p> <p>Unless otherwise specifically stated, information throughout this prospectus does not assume the exercise of outstanding options or warrants to purchase shares of our common stock.</p>	

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## RISK FACTORS

You should carefully consider the risks described below as well as other information provided to you in this document, including information in the section of this document entitled “Forward Looking Statements”. If any of the following risks actually occur, our business, financial condition or results of operations could be materially adversely affected, the value of our common stock could decline, and you may lose all or part of your investment.

### Risks Related to Our Business

***Our business is at an early stage of development and we may not develop therapeutic products that can be commercialized.***

Our business is at an early stage of development. We do not have any products in late stage clinical trials. We are still in the early stages of identifying and conducting research on potential therapeutic products. Our potential therapeutic products will require significant research and development and preclinical and clinical testing prior to regulatory approval in the United States and other countries. We may not be able to obtain regulatory approvals, enter clinical trials for any of our product candidates, or commercialize any products. Our product candidates may prove to have undesirable and unintended side effects or other characteristics adversely affecting their safety, efficacy or cost effectiveness that could prevent or limit their use. Any product using any of our technology may fail to provide the intended therapeutic benefits, or achieve therapeutic benefits equal to or better than the standard of treatment at the time of testing or production.

***We have a history of operating losses, do not expect to be profitable in the near future and our independent registered public accounting firm has expressed doubt as to our ability to continue as a going concern.***

We have not generated any profits since our entry into the biotechnology business and have incurred significant operating losses. We expect to incur additional operating losses for the foreseeable future and, as we increase our research and development activities, we expect our operating losses to increase significantly. We do not have any sources of significant or sustained revenues and may not have any in the foreseeable future.

We have expended substantial funds to develop our technologies, products and product candidates. Based on our financial condition, recurring losses and projected spending, which raise substantial doubts about our ability to continue as a going concern, our independent registered public accounting firm included an explanatory paragraph in its report on our financial statements as of and for the year ended December 31, 2011 regarding this uncertainty. The inclusion of the going concern statement by our auditors may adversely affect our stock price and our ability to raise needed capital or enter into advantageous contractual relationships with third parties. If we were unable to continue as a going concern, the values we receive for our assets on liquidation or dissolution could be significantly lower than the values reflected in our financial statements.

***We will need additional capital to conduct our operations and develop our products and our ability to obtain the necessary funding is uncertain.***

During 2011, we used a significant amount of cash to finance the continued development and testing of our product candidates, and we need to obtain significant additional capital resources in order to develop products going forward. Our burn rate as of the third quarter ended September 30, 2012 was approximately \$600,000 per month excluding capital expenditures and patent costs averaging \$75,000 per month. We may not be successful in maintaining our normal operating cash flow and the timing of our capital expenditures may not result in cash flows sufficient to sustain our operations through 2012. If financing is not sufficient and additional financing is not available or available only on terms that are detrimental to our long-term survival, it could have a major adverse effect on our ability to continue to function. The timing and degree of any future capital requirements will depend on many factors, including:

- the accuracy of the assumptions underlying our estimates for capital needs in 2012 and beyond;
- scientific progress in our research and development programs;



- the magnitude and scope of our research and development programs and our ability to establish, enforce and maintain strategic arrangements for research, development, clinical testing, manufacturing and marketing;
- our progress with preclinical development and clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims; and
- the number and type of product candidates that we pursue.

Additional financing through strategic collaborations, public or private equity or debt financings or other financing sources may not be available on acceptable terms, or at all. Additional equity financing could result in significant dilution to our stockholders, and any debt financings will likely involve covenants restricting our business activities. Additional financing may not be available on acceptable terms, or at all. Further, if we obtain additional funds through arrangements with collaborative partners, these arrangements may require us to relinquish rights to some of our technologies, product candidates or products that we would otherwise seek to develop and commercialize on our own. If sufficient capital is not available, we may be required to delay, reduce the scope of or eliminate one or more of our research or product development initiatives, any of which could have a material adverse effect on our financial condition or business prospects.

***We have limited clinical testing and regulatory capabilities, and human clinical trials are subject to extensive regulatory requirements, very expensive, time-consuming and difficult to design and implement. Our products may fail to achieve necessary safety and efficacy endpoints during clinical trials, which may limit our ability to generate revenues from therapeutic products.***

Due to the relatively early stage of our therapeutic products and stem cell therapy-based systems, we have not yet invested significantly in clinical testing and regulatory capabilities, including for human clinical trials. We cannot assure you that we will be able to invest or develop resources for these capabilities successfully or as expediently as necessary. In particular, human clinical trials can be very expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. The clinical trial process is time consuming. We estimate that clinical trials of our product candidates will take at least several years to complete. Furthermore, failure can occur at any stage of the trials, and we could encounter problems that cause us to abandon or repeat clinical trials. The commencement and completion of clinical trials may be affected by several factors, including:

- unforeseen safety issues;
- determination of dosing issues;
- inability to demonstrate effectiveness during clinical trials;
- slower than expected rates of patient recruitment;
- inability to monitor patients adequately during or after treatment; and
- inability or unwillingness of medical investigators to follow our clinical protocols.

In addition, we or the FDA may suspend our clinical trials at any time if it appears that we are exposing participants to unacceptable health risks or if the FDA finds deficiencies in our IND submissions or the conduct of these trials.

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***Patents held by other persons may result in infringement claims against us that are costly to defend and which may limit our ability to use the disputed technologies and prevent us from pursuing research and development or commercialization of potential products.***

A number of pharmaceutical, biotechnology and other companies, universities and research institutions have filed patent applications or have been issued patents relating to cell therapy, stem cells, and other technologies potentially relevant to or required by our expected products. We cannot predict which, if any, of such applications will issue as patents or the claims that might be allowed. We are aware that a number of companies have filed applications relating to stem cells. We are also aware of a number of patent applications and patents claiming use of stem cells and other modified cells to treat disease, disorder or injury.

If third party patents or patent applications contain claims infringed by either our licensed technology or other technology required to make and use our potential products and such claims are ultimately determined to be valid, we might not be able to obtain licenses to these patents at a reasonable cost, if at all, or be able to develop or obtain alternative technology. If we are unable to obtain such licenses at a reasonable cost, we may not be able to develop some products commercially. We may be required to defend ourselves in court against allegations of infringement of third party patents. Patent litigation is very expensive and could consume substantial resources and create significant uncertainties. An adverse outcome in such a suit could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties, or require us to cease using such technology.

***Our competition includes fully integrated biotechnology, pharmaceutical and cosmetic companies that have significant advantages over us.***

The market for therapeutic stem cell products is highly competitive. We expect that our most significant competitors will be fully integrated and more established pharmaceutical, biotechnology and cosmetic companies. These companies are developing stem cell-based products and they have significantly greater capital resources and research and development, manufacturing, testing, regulatory compliance, and marketing capabilities. Many of these potential competitors are further along in the process of product development and also operate large, company-funded research and development programs. As a result, our competitors may develop more competitive or affordable products, or achieve earlier patent protection or product commercialization than we are able to achieve. Competitive products may render any products or product candidates that we develop obsolete.

***If we fail to meet our obligations under our license agreements, we may lose our rights to key technologies on which our business depends.***

Our business depends in part on licenses from third parties. These third party license agreements impose obligations on us, such as payment obligations and obligations to diligently pursue development of commercial products under the licensed patents. If a licensor believes that we have failed to meet our obligations under a license agreement, the licensor could seek to limit or terminate our license rights, which could lead to costly and time consuming litigation and, potentially, a loss of the licensed rights. During the period of any such litigation, our ability to carry out the development and commercialization of potential products could be significantly and negatively affected. If our license rights were restricted or ultimately lost, our ability to continue our business based on the affected technology platform could be severely affected adversely.

***Restrictive and extensive government regulation could slow or hinder our production of a cellular product.***

The research and development of stem cell therapies is subject to and restricted by extensive regulation by governmental authorities in the United States and other countries. The process of obtaining FDA and other necessary regulatory approvals is lengthy, expensive and uncertain. We may fail to obtain the necessary approvals to continue our research and development, which would hinder our ability to manufacture or market any future product.

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***Research in the field of embryonic stem cells is currently subject to strict government regulations, and our operations could be restricted or outlawed by any legislative or administrative efforts impacting the use of nuclear transfer technology or human embryonic material.***

Significant portions of our business are focused on human cell therapy, which includes the production of human differentiated cells from stem cells and involves human oocytes. Although our focus is on parthenogenetic stem cells derived from unfertilized oocytes, certain aspects of that work may involve the use of embryonic stem cells. Research utilizing embryonic stem cells is controversial, and currently subject to intense scrutiny, particularly in the area of the use of human embryonic material.

Federal law is not as restrictive regarding the use of federal funds for human embryonic cell research, commonly referred to as hES cell research as it once was. However, federal law does prohibit federal funding for creation of parthenogenetic stem cells. Our operations may also be restricted by future legislative or administrative efforts by politicians or groups opposed to the development of hES cell technology, parthenogenetic cell technology or nuclear transfer technology. Further, future legislative or administrative restrictions could, directly or indirectly, delay, limit or prevent the use of hES technology, parthenogenetic technology, or nuclear transfer technology, the use of human embryonic material, or the sale, manufacture or use of products or services derived from nuclear transfer technology or hES or parthenogenetic technology.

***Restrictions on the use of human stem cells, and the ethical, legal and social implications of that research, could prevent us from developing or gaining acceptance for commercially viable products in these areas.***

Although our stem cells are derived from unfertilized human eggs through a process called “parthenogenesis” that can produce cells suitable for therapy, but are believed to be incapable of producing a human being, such cells are nevertheless often incorrectly referred to as “embryonic” stem cells. Because the use of human embryonic stem cells gives rise to ethical, legal and social issues regarding the appropriate use of these cells, our research related to human parthenogenic stem cells could become the subject of adverse commentary or publicity and some political and religious groups may still raise opposition to our technology and practices. In addition, many research institutions, including some of our scientific collaborators, have adopted policies regarding the ethical use of human embryonic tissue, which, if applied to our procedures, may have the effect of limiting the scope of research conducted using our stem cells, thereby impairing our ability to conduct research in this field. In some states, use of embryos as a source of stem cells is prohibited.

***To the extent we utilize governmental grants in the future, the governmental entities involved may retain certain rights in technology that we develop using such grant money and we may lose the revenues from such technology if we do not commercialize and utilize the technology pursuant to established government guidelines.***

Certain of our licensors’ research has been or is being funded in part by government grants. Our research may also be government-funded in the future. In connection with certain grants, the governmental entity involved retains various rights in the technology developed with the grant. These rights could restrict our ability to fully capitalize upon the value of this research by reducing total revenues that might otherwise be available since such governmental rights may give the government the right to practice the invention without payment of royalties if we do not comply with applicable requirements.

***We rely on parthenogenesis, cell differentiation and other stem cell technologies that we may not be able to successfully develop, which may prevent us from generating revenues, operating profitably or providing investors any return on their investment.***

We have concentrated our research on our parthenogenesis, cell differentiation and stem cell technologies, and our ability to operate profitably will depend on being able to successfully implement or develop these technologies for human applications. These are emerging technologies with, as yet, limited human applications.

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We cannot guarantee that we will be able to successfully implement or develop our nuclear transfer, parthenogenesis, cell differentiation and other stem cell technologies or that these technologies will result in products or services with any significant commercial utility. We anticipate that the commercial sale of such products or services, and royalty/licensing fees related to our technology, would be an additional source of revenues.

***The outcome of pre-clinical, clinical and product testing of our products is uncertain, and if we are unable to satisfactorily complete such testing, or if such testing yields unsatisfactory results, we may be unable to commercially produce our proposed products.***

Before obtaining regulatory approvals for the commercial sale of any potential human products, our products will be subjected to extensive pre-clinical and clinical testing to demonstrate their safety and efficacy in humans. The clinical trials of our prospective products, or those of our licensees or collaborators, may not demonstrate the safety and efficacy of such products at all, or to the extent necessary to obtain appropriate regulatory approvals. Similarly, the testing of such prospective products may not be completed in a timely manner, if at all, or only after significant increases in costs, program delays or both, all of which could harm our ability to generate revenues. In addition, our prospective products may not prove to be more effective for treating disease or injury than current therapies. Accordingly, we may have to delay or abandon efforts to research, develop or obtain regulatory approval to market our prospective products. The failure to adequately demonstrate the safety and efficacy of a therapeutic product under development could delay or prevent regulatory approval of the product and could harm our ability to generate revenues, operate profitably or produce any return on an investment in us.

***If we are unable to keep up with rapid technological changes in our field or compete effectively, we will be unable to operate profitably.***

We are engaged in activities in the biotechnology field, which is characterized by extensive research efforts and rapid technological progress. If we fail to anticipate or respond adequately to technological developments, our ability to operate profitably could suffer. Research and discoveries by other biotechnology, agricultural, pharmaceutical or other companies may render our technologies or potential products or services uneconomical or result in products superior to those we develop. Similarly, any technologies, products or services we develop may not be preferred to any existing or newly developed technologies, products or services.

***We may not be able to protect our proprietary technology, which could harm our ability to operate profitably.***

The biotechnology, cosmeceutical, and pharmaceutical industries place considerable importance on obtaining patent and trade secret protection for new technologies, products and processes. Our success will depend, to a substantial degree, on our ability to obtain and enforce patent protection for our products, preserve any trade secrets and operate without infringing the proprietary rights of others. We cannot assure you that:

- we will succeed in obtaining any patents, obtain them in a timely manner, or that the breadth or degree of protection that any such patents will protect our interests;
- the use of our technology will not infringe on the proprietary rights of others;
- patent applications relating to our potential products or technologies will result in the issuance of any patents or that, if issued, such patents will afford adequate protection to us or will not be challenged, invalidated or infringed; or
- patents will not be issued to other parties, which may be infringed by our potential products or technologies.

We are aware of certain patents that have been granted to others and certain patent applications that have been filed by others with respect to nuclear transfer and other stem cell technologies. The fields in which we operate have been characterized by significant efforts by competitors to establish dominant or blocking patent rights to

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gain a competitive advantage, and by considerable differences of opinion as to the value and legal legitimacy of competitors' purported patent rights and the technologies they actually utilize in their businesses.

Considerable research in the areas of stem cells, cell therapeutics and regenerative medicine is being performed in countries outside of the United States, and a number of our competitors are located in those countries. The laws protecting intellectual property in some of those countries may not provide adequate protection to prevent our competitors from misappropriating our intellectual property.

***Our business is highly dependent upon maintaining licenses with respect to key technology.***

Although our primary focus relates to intellectual property we have developed internally, some of the patents we utilize are licensed to us by Advanced Cell Technology, which has licensed some of these from other parties, including the University of Massachusetts. These licenses are subject to termination under certain circumstances (including, for example, our failure to make minimum royalty payments). The loss of any of such licenses, or the conversion of such licenses to non-exclusive licenses, could harm our operations and/or enhance the prospects of our competitors.

Although our licenses with Advanced Cell Technology allow us to cure any defaults under the underlying licenses to them and to take over the patents and patents pending in the event of default by Advanced Cell Technology, the cost of such remedies could be significant and we might be unable to adequately maintain these patent positions. If so, such inability could have a material adverse effect on our business. Some of these licenses also contain restrictions (*e.g.*, limitations on our ability to grant sublicenses) that could materially interfere with our ability to generate revenue through the licensing or sale to third parties of important and valuable technologies that we have, for strategic reasons, elected not to pursue directly. In the future we may require further licenses to complete and/or commercialize our proposed products. We may not be able to acquire any such licenses on a commercially-viable basis.

***Certain of our technology may not be subject to protection through patents, which leaves us vulnerable to theft of our technology.***

Certain parts of our know-how and technology are not patentable or are trade secrets. To protect our proprietary position in such know-how and technology, we intend to require all employees, consultants, advisors and collaborators to enter into confidentiality and invention ownership agreements with us. These agreements may not provide meaningful protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure. Further, in the absence of patent protection, competitors who independently develop substantially equivalent technology may harm our business.

***We depend on our collaborators to help us develop and test our proposed products, and our ability to develop and commercialize products may be impaired or delayed if collaborations are unsuccessful.***

Our strategy for the development, clinical testing and commercialization of our proposed products requires that we enter into collaborations with corporate partners, licensors, licensees and others. We are dependent upon the subsequent success of these other parties in performing their respective responsibilities and the continued cooperation of our partners. Our collaborators may not cooperate with us or perform their obligations under our agreements with them. We cannot control the amount and timing of our collaborators' resources that will be devoted to our research and development activities related to our collaborative agreements with them. Our collaborators may choose to pursue existing or alternative technologies in preference to those being developed in collaboration with us.

Under agreements with collaborators, we may rely significantly on such collaborators to, among other things:

- design and conduct advanced clinical trials in the event that we reach clinical trials;
- fund research and development activities with us;

- pay us fees upon the achievement of milestones; and
- market with us any commercial products that result from our collaborations.

The development and commercialization of potential products will be delayed if collaborators fail to conduct these activities in a timely manner, or at all. In addition, our collaborators could terminate their agreements with us and we may not receive any development or milestone payments. If we do not achieve milestones set forth in the agreements, or if our collaborators breach or terminate their collaborative agreements with us, our business may be materially harmed.

***Our reliance on the activities of our non-employee consultants, research institutions, and scientific contractors, whose activities are not wholly within our control, may lead to delays in development of our proposed products.***

We rely extensively upon and have relationships with scientific consultants at academic and other institutions, some of whom conduct research at our request, and other consultants with expertise in clinical development strategy or other matters. These consultants are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. We have limited control over the activities of these consultants and, except as otherwise required by our collaboration and consulting agreements to the extent they exist, can expect only limited amounts of their time to be dedicated to our activities. These research facilities may have commitments to other commercial and non-commercial entities. We have limited control over the operations of these laboratories and can expect only limited amounts of time to be dedicated to our research goals.

***We may be subject to litigation that will be costly to defend or pursue and uncertain in its outcome.***

Our business may bring us into conflict with our licensees, licensors or others with whom we have contractual or other business relationships, or with our competitors or others whose interests differ from ours. If we are unable to resolve those conflicts on terms that are satisfactory to all parties, we may become involved in litigation brought by or against us. That litigation is likely to be expensive and may require a significant amount of management's time and attention, at the expense of other aspects of our business. The outcome of litigation is always uncertain, and in some cases could include judgments against us that require us to pay damages, enjoin us from certain activities, or otherwise affect our legal or contractual rights, which could have a significant adverse effect on our business.

***We may not be able to obtain third party patient reimbursement or favorable product pricing, which would reduce our ability to operate profitably.***

Our ability to successfully commercialize certain of our proposed products in the human therapeutic field may depend to a significant degree on patient reimbursement of the costs of such products and related treatments at acceptable levels from government authorities, private health insurers and other organizations, such as health maintenance organizations. Reimbursement in the United States or foreign countries may not be available for any products we may develop, and, if available, may be decreased in the future. Also, reimbursement amounts may reduce the demand for, or the price of, our products with a consequent harm to our business. We cannot predict what additional regulation or legislation relating to the health care industry or third party coverage and reimbursement may be enacted in the future or what effect such regulation or legislation may have on our business. If additional regulations are overly onerous or expensive, or if health care related legislation makes our business more expensive or burdensome than originally anticipated, we may be forced to significantly downsize our business plans or completely abandon our business model.

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***Our products may be expensive to manufacture, and they may not be profitable if we are unable to control the costs to manufacture them.***

Our products may be significantly more expensive to manufacture than other therapeutic products currently on the market today. We hope to substantially reduce manufacturing costs through process improvements, development of new science, increases in manufacturing scale and outsourcing to experienced manufacturers. If we are not able to make these, or other improvements, and depending on the pricing of the product, our profit margins may be significantly less than that of other therapeutic products on the market today. In addition, we may not be able to charge a high enough price for any cell therapy product we develop, even if they are safe and effective, to make a profit. If we are unable to realize significant profits from our potential product candidates, our business would be materially harmed.

***To be successful, our proposed products must be accepted by the health care community, which can be very slow to adopt or unreceptive to new technologies and products.***

Our proposed products and those developed by our collaborative partners, if approved for marketing, may not achieve market acceptance since hospitals, physicians, patients or the medical community in general may decide not to accept and utilize these products. The products that we are attempting to develop represent substantial departures from established treatment methods and will compete with a number of more conventional therapies manufactured and marketed by major pharmaceutical companies. The degree of market acceptance of any of our developed products will depend on a number of factors, including:

- our establishment and demonstration to the medical community of the clinical efficacy and safety of our proposed products;
- our ability to create products that are superior to alternatives currently on the market;
- our ability to establish in the medical community the potential advantage of our treatments over alternative treatment methods; and
- reimbursement policies of government and third party payers.

If the healthcare community does not accept our products for any of the foregoing reasons, or for any other reason, our business would be materially harmed.

***We depend on key personnel for our continued operations and future success, and a loss of certain key personnel could significantly hinder our ability to move forward with our business plan.***

Because of the specialized nature of our business, we are highly dependent on our ability to identify, hire, train and retain highly qualified scientific and technical personnel for the research and development activities we conduct or sponsor. The loss of one or more key executive officers, or scientific officers, would be significantly detrimental to us. In addition, recruiting and retaining qualified scientific personnel to perform research and development work is critical to our success. Our anticipated growth and expansion into areas and activities requiring additional expertise, such as clinical testing, regulatory compliance, manufacturing and marketing, will require the addition of new management personnel and the development of additional expertise by existing management personnel. In the past year we have had significant turnover in our management personnel, and there is intense competition for qualified personnel in the areas of our present and planned activities. Accordingly, we may not be able to continue to attract and retain the qualified personnel, which would adversely affect the development of our business.

***We may not have sufficient product liability insurance, which may leave us vulnerable to future claims we will be unable to satisfy.***

The testing, manufacturing, marketing and sale of human therapeutic products entail an inherent risk of product liability claims. We currently have a limited amount of product liability insurance, which may not be adequate to meet potential product liability claims. In the event we are forced to expend significant funds on defending

product liability actions, and in the event those funds come from operating capital, we will be required to reduce our business activities, which could lead to significant losses. Adequate insurance coverage may not be available in the future on acceptable terms, if at all. If available, we may not be able to maintain any such insurance at sufficient levels of coverage and any such insurance may not provide adequate protection against potential liabilities. Whether or not a product liability insurance policy is obtained or maintained in the future, any product liability claim could harm our business or financial condition.

### **Risks Related to the Securities Markets and Our Capital Structure**

*Stock prices for biotechnology companies have historically tended to be very volatile.*

Stock prices and trading volumes for many biotechnology companies fluctuate widely for a number of reasons, including but not limited to the following factors, some of which may be unrelated to their businesses or results of operations:

- clinical trial results;
- the amount of cash resources and such company's ability to obtain additional funding;
- announcements of research activities, business developments, technological innovations or new products by competitors;
- entering into or terminating strategic relationships;
- changes in government regulation;
- disputes concerning patents or proprietary rights;
- changes in our revenues or expense levels;
- public concern regarding the safety, efficacy or other aspects of the products or methodologies we are developing;
- reports by securities analysts;
- activities of various interest groups or organizations;
- media coverage; and
- status of the investment markets.

This market volatility, as well as general domestic or international economic, market and political conditions, could materially and adversely affect the market price of our common stock.

***Two of our executive officers and directors can significantly influence our direction and policies, and their interests may be adverse to the interests of our other stockholders.***

Dr. Andrey Semechkin, Chief Executive Officer and Co-Chairman of the Board of Directors, and Dr. Ruslan Semechkin, Vice President of International Stem Cell and a director, beneficially own all of the outstanding shares of our Series C, Series D and Series G Preferred Stock, which could be converted into approximately 32% of our outstanding shares of common stock as of December 5, 2012. Drs. Andrey and Ruslan Semechkin have irrevocably agreed to convert all of the Series C Preferred Stock into shares of common stock effective immediately prior to the closing of this offering. As a result of their holdings and the rights, preferences and privileges of those series of preferred stock, Dr. Andrey Semechkin and Dr. Ruslan Semechkin may appoint and remove two of our seven directors, and propose candidates for nomination of up to two additional directors, and therefore will be able to significantly influence the election of our Board of Directors. They may also prevent corporate transactions (such as a merger, consolidation, a sale of all or substantially all of our assets or a financing transaction) that may be favorable from the standpoint of our other stockholders or they may cause a transaction that our other stockholders may view as unfavorable.



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***The application of the “penny stock” rules to our common stock could limit the trading and liquidity of our common stock, adversely affect the market price of our common stock and increase stockholder transaction costs to sell those shares.***

As long as the trading price of our common stock is below \$5.00 per share, the open market trading of our common stock will be subject to the “penny stock” rules, unless we otherwise qualify for an exemption from the “penny stock” definition. The “penny stock” rules impose additional sales practice requirements on certain broker-dealers who sell securities to persons other than established customers and accredited investors (generally those with assets in excess of \$1,000,000 or annual income exceeding \$200,000 or \$300,000 together with their spouse). These regulations, if they apply, require the delivery, prior to any transaction involving a penny stock, of a disclosure schedule explaining the penny stock market and the associated risks. Under these regulations, certain brokers who recommend such securities to persons other than established customers or certain accredited investors must make a special written suitability determination regarding such a purchaser and receive such purchaser’s written agreement to a transaction prior to sale. These regulations may have the effect of limiting the trading activity of our common stock, reducing the liquidity of an investment in our common stock and increasing the transaction costs for sales and purchases of our common stock as compared to other securities.

***The rights of holders of our common stock are subordinate to significant rights, preferences and privileges of our existing four series of preferred stock, and to any additional series of preferred stock created in the future.***

Under the authority granted by our Certificate of Incorporation, our Board of Directors has established four separate series of outstanding preferred stock, including Series B, Series C, Series D and Series G Preferred Stock, which have various rights and preferences senior to the shares of common stock. Drs. Andrey and Ruslan Semechkin have irrevocably agreed to convert all of the Series C Preferred Stock into shares of common stock effective immediately prior to the closing of this offering. If the Company declares and pays a dividend on our common stock, shares of our Series B Preferred Stock are entitled to share in such dividends on a pro rata as-if-converted to common stock basis. Shares of our existing preferred stock are also entitled to enhanced voting rights and liquidation preferences. As a result of the various voting rights, the holders of our existing preferred stock may be able to block the proposed approval of various corporate actions, which could prevent us from achieving strategic or other goals dependent on such actions. As a result of the liquidation preferences, in the event that we voluntarily or involuntarily liquidate, dissolve or windup our affairs (including as a result of a merger), the holders of our preferred stock would be entitled to receive stated amounts per share, including any accrued and unpaid dividends, before any distribution of assets or merger consideration is made to holders of our common stock. Additionally, these shares of preferred stock may be converted, at the option of the holders, into common stock at rates that may be adjusted, for the benefit of holders of preferred stock, if we sell equity securities below the then existing conversion prices. Any such adjustments would compound the potential dilution suffered by holders of common stock if we issue additional securities, including through this offering, at prices below the current conversion prices (ranging from \$0.25 to \$0.40 per share). Additionally, subject to the consent of the holders of our existing preferred stock, our Board of Directors has the power to issue additional series of preferred stock and to designate, as it deems appropriate (subject to the rights of the holders of the current series of preferred stock), the special dividend, liquidation or voting rights of the shares of those additional series. The creation and designation of any new series of preferred stock could adversely affect the voting power, dividend, liquidation and other rights of holders of our common stock and, possibly, any other class or series of stock that is then in existence.

***The market price for our common stock may be particularly volatile given our status as a relatively unknown company with a limited operating history and lack of profits, which could lead to wide fluctuations in our share price. The price at which stockholders purchase shares of our common stock may not be indicative of the price of our common stock that will prevail in the trading market.***

The market for our common stock may be characterized by significant price volatility when compared to seasoned issuers, and we expect that our stock price could continue to be more volatile than a seasoned issuer for the indefinite future. The potential volatility in our share price is attributable to a number of factors. First, there has been limited trading in our common stock. As a consequence of this lack of liquidity, any future trading of shares by our stockholders may disproportionately influence the price of those shares in either direction. Second, we are a speculative or “risky” investment due to our limited operating history and lack of profits to date, and

uncertainty of future market acceptance for our potential products. As a consequence of this enhanced risk, more risk averse investors may, under the fear of losing all or most of their investment in the event of negative news or lack of progress, be more inclined to sell their shares on the market more quickly and at greater discounts than would be the case with the stock of a seasoned issuer. Many of these factors will be beyond our control and may decrease the market price of our common stock, regardless of our operating performance. We cannot make any predictions or projections as to what the prevailing market price for our common stock will be at any time or as to what effect that the sale of shares or the availability of shares for sale at any time will have on the prevailing market price.

In addition, the market price of our common stock could be subject to wide fluctuations in response to:

- quarterly variations in our revenues and operating expenses;
- announcements of new products or services by us;
- fluctuations in interest rates;
- significant sales of our common stock;
- the operating and stock price performance of other companies that investors may deem comparable to us; and
- news reports relating to trends in our markets or general economic conditions.

***Shares eligible for future sale may adversely affect the market.***

From time to time, certain of our stockholders may be eligible to sell all or some of their shares of common stock by means of ordinary brokerage transactions in the open market pursuant to Rule 144 promulgated under the Securities Act of 1933, as amended, subject to certain limitations. In general, pursuant to Rule 144, a stockholder (or stockholders whose shares are aggregated) who is not an affiliate of our company and who has satisfied a six month holding period may, as long as we are current in our required filings with the SEC, sell securities without further limitation. Rule 144 also permits, under certain circumstances, the sale of securities, without any limitations, by a non-affiliate of our company who has satisfied a one year holding period. Affiliates of our company who have satisfied a six month holding period may sell securities subject to limitations. Any substantial sale of our common stock pursuant to Rule 144 or pursuant to any resale prospectus may have an adverse effect on the market price of our securities. Currently, a substantial majority of our securities are either free trading or subject to the release of trading restrictions under the six month or one year holding periods of Rule 144.

***Certain provisions of our Certificate of Incorporation and Delaware law may make it more difficult for a third party to affect a change-in-control.***

Our Certificate of Incorporation authorizes the Board of Directors to issue up to 20,000,000 shares of preferred stock and our Board of Directors has created and issued shares of four series of preferred stock that remain outstanding, including Series B, Series C, Series D and Series G Preferred Stock. The terms of the Series B, Series C, Series D and Series G Preferred Stock include, among other things, voting rights on particular matters (for example, with respect to the Series D Preferred Stock, restricting our ability to undergo a change in control or merge with, or sell assets to, a third party), preferences as to dividends and liquidation, and conversion rights. These preferred stock rights diminish the rights of holders of our common stock, and therefore could reduce the value of such common stock. In addition, as long as shares of our Series B, Series C, Series D and Series G Preferred Stock remain outstanding, or if our Board creates and issues additional shares of preferred stock in the future with rights that restrict our ability to merge with, or sell assets to, a third party, it could make it more difficult, delay, discourage, prevent or make it more costly to acquire the Company or affect a change-in-control. Drs. Andrey and Ruslan Semechkin have irrevocably agreed to convert all of the Series C Preferred Stock into shares of common stock effective immediately prior to the closing of this offering.

***The sale or issuance of a substantial number of shares may adversely affect the market price for our common stock.***

The future sale of a substantial number of shares of our common stock in the public market, or the perception that such sales could occur, could significantly and negatively affect the market price for our common stock. We

expect that we will likely issue a substantial number of shares of our capital stock in financing transactions in order to fund our operations and the growth of our business. Under these arrangements, we may agree to register the shares for resale soon after their issuance. We may also continue to pay for certain goods and services with equity, which would dilute our current stockholders. Also, sales of the shares issued in this manner could negatively affect the market price of our stock.

***The sale of our common stock to Aspire Capital may cause substantial dilution to our existing stockholders and the sale of the shares of common stock acquired by Aspire Capital could cause the price of our common stock to decline.***

On December 9, 2010, the Company entered into a purchase agreement with Aspire Capital which provided that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of \$25.0 million of our common stock. As of December 5, 2012, we have sold Aspire Capital 9,333,333 shares of common stock for aggregate proceeds of \$5,942,460.00, and we may sell Aspire Capital up to an additional \$19,057,540.00 of our common stock in the future. Pursuant to the purchase agreement, the number of shares of common stock that we may designate Aspire Capital to purchase is dependent on the closing price of our common stock on the date that we provide Aspire Capital with a purchase notice directing it to purchase shares, and the purchase price per share is the lower of (i) the lowest sale price for the common stock on the date of sale or (ii) the arithmetic average of the three lowest closing sale prices of our common stock during the 12 consecutive business days preceding the date of sale. If we elect to sell additional shares to Aspire Capital under the Common Stock Purchase Agreement, depending upon market liquidity at the time, it may cause the trading price of our common stock to decline.

After Aspire Capital has acquired additional shares of our common stock under the purchase agreement, it may sell all, some or none of such shares. In connection with the purchase agreement, the Company also entered into a registration rights agreement with Aspire Capital, dated December 9, 2010 that provides, among other things, that the Company will register the resale of all shares acquired by Aspire Capital under the purchase agreement. Therefore, sales to Aspire Capital by us pursuant to the purchase agreement may result in substantial dilution to the interests of other holders of our common stock. The sale of a substantial number of shares of our common stock to Aspire Capital pursuant to the purchase agreement, or anticipation of such sales, as well as the resale of such shares by Aspire Capital, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales. However, we have the right to control the timing and amount of any sales of our shares to Aspire Capital, and we may terminate the purchase agreement at any time at our discretion without any cost to us.

***Limitations on director and officer liability and indemnification of our officers and directors by us may discourage stockholders from bringing suit against a director.***

Our certificate of incorporation and bylaws provide, with certain exceptions as permitted by governing state law, that a director or officer shall not be personally liable to us or our stockholders for breach of fiduciary duty as a director, except for acts or omissions which involve intentional misconduct, fraud or knowing violation of law, or unlawful payments of dividends. These provisions may discourage stockholders from bringing suit against a director for breach of fiduciary duty and may reduce the likelihood of derivative litigation brought by stockholders on our behalf against a director. In addition, our certificate of incorporation and bylaws may provide for mandatory indemnification of directors and officers to the fullest extent permitted by governing state law.

***Compliance with the rules established by the SEC pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 is complex. Failure to comply in a timely manner could adversely affect investor confidence and our stock price.***

Rules adopted by the SEC pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 require us to perform an annual assessment of our internal controls over financial reporting, certify the effectiveness of those controls and obtain an opinion by our independent registered public accountants. The standards that must be met for

management to assess the internal controls over financial reporting now in effect are complex, costly and require significant documentation, testing and possible remediation to meet the detailed standards. We may encounter problems or delays in completing activities necessary to make an assessment of our internal controls over financial reporting. If we cannot perform the assessment or certify that our internal controls over financial reporting are effective investor confidence and share value may be negatively impacted.

***We do not expect to pay cash dividends in the foreseeable future on our common stock.***

We have not historically paid cash dividends on our common stock, and we do not plan to pay cash dividends on our common stock in the foreseeable future.

**Risks Related to this Offering**

***Our management team will have immediate and broad discretion over the use of the net proceeds from this offering.***

There is no minimum offering amount required as a condition to closing this offering and therefore net proceeds from this offering will be immediately available to our management to use at their discretion. The decisions made by our management may not result in positive returns on your investment and you will not have an opportunity to evaluate the economic, financial or other information upon which our management bases its decisions.

***You will experience immediate and substantial dilution as a result of this offering and may experience additional dilution in the future.***

You will incur immediate and substantial dilution as a result of this offering. After giving effect to the sale by us of up to 50,000,000 shares of our common in this offering at a public offering price of \$ \_\_\_\_\_ per share, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, investors in this offering can expect an immediate dilution of \$ \_\_\_\_\_ per share, or \_\_\_\_\_ %, at the public offering price. In addition, we are issuing warrants to purchase up to 25,000,000 shares of our common stock to purchasers in this offering and, in the past, we issued options and warrants to acquire shares of common stock. To the extent these options and warrants are ultimately exercised, you will sustain future dilution. We may also acquire or license other technologies or finance strategic alliances by issuing equity, which may result in additional dilution to our stockholders.

***There is no public market for the warrants to purchase common stock in this offering.***

There is no established public trading market for the warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply for listing the warrants on any securities exchange. Without an active market, the liquidity of the warrants will be limited.

***The offering may not be fully subscribed, and, even if the offering is fully subscribed, we will need additional capital in the future. If additional capital is not available, we may not be able to continue to operate our business pursuant to our business plan or we may have to discontinue our operations entirely.***

The placement agent in this offering will offer the securities on a “best-efforts” basis, meaning that we may raise substantially less than the total maximum offering amounts. We will not provide any refund to investors if less than all of the securities are sold. Further, during 2010 and 2011, we have used a significant amount of cash to finance the continued development and testing of our product candidates. If we continue to use cash at this rate we will need significant additional financing, which we may seek to raise through, among other things, public and private equity offerings and debt financing. Any equity financings will likely be dilutive to existing stockholders, and any debt financings will likely involve covenants restricting our business activities. Additional financing may not be available on acceptable terms, or at all.

## FORWARD-LOOKING STATEMENTS

Information in this prospectus contains forward-looking statements. These forward-looking statements can be identified by the use of words such as “believes,” “estimates,” “could,” “possibly,” “probably,” “anticipates,” “projects,” “expects,” “may,” or “should” or other variations or similar words. No assurances can be given that the future results anticipated by the forward-looking statements will be achieved. The following matters constitute cautionary statements identifying important factors with respect to those forward-looking statements, including certain risks and uncertainties that could cause actual results to vary materially from the future results anticipated by those forward-looking statements. A description of key factors that have a direct bearing on our results of operations is provided above under “Risk Factors” beginning on page 3 of this Prospectus.

## USE OF PROCEEDS

We estimate that we will receive up to \$13,735,000 in net proceeds from the sale of the securities in this offering and after deducting placement agent fees and estimated offering expenses payable by us and assuming the sale of all of the securities offered in this offering. However, we may not be successful in selling any or all of the securities offered hereby; as a result, we may receive significantly less in net proceeds, and the net proceeds received may not be sufficient to continue to operate our business.

We currently expect to use the net proceeds from this offering to fund our research and development activities, including pre-clinical studies for the Parkinson’s disease and endoderm programs, as well as for general working capital needs.

Even if we sell all of the securities subject to this offering on favorable terms, of which there can be no assurance, we will still need to obtain additional financing in the future in order to fully fund these research and development activities, as well as any resulting product candidates through the regulatory approval process. We may seek such additional financing through public or private equity or debt offerings or other sources, including collaborative or other arrangements with corporate partners, and through government grants and contracts.

We anticipate that the net proceeds obtained from this offering will be used to fund the following initiatives in order of priority (in thousands):

Therapeutic research programs involving preclinical animal studies and new stem cell line derivation	\$ 5,400
Sales and marketing initiatives for research products and cosmeceuticals	\$ 2,600
Research and development of commercial research products	\$ 600
General working capital purposes	\$ 5,135
Maximum net proceeds of the offering	\$13,735

We will have significant discretion in the use of any net proceeds. We may invest the net proceeds received from this offering temporarily until we use them for their stated purpose.

## DILUTION

Net tangible book value per share is equal to total assets less intangible assets and total liabilities, divided by the number of shares of our outstanding common stock. As of September 30, 2012, our net tangible book value (excluding the effect of \$4,941 million related to our Series G Preferred Stock that has been classified as mezzanine equity, as opposed to a liability, on the Company’s condensed consolidated balance sheet) was \$3,500,000, or \$0.04 per share of common stock, based upon 95,388,815 shares outstanding as of that date (including 8,000,000 shares of common stock to be issued upon the conversion of all of our outstanding shares of Series C Preferred Stock immediately prior to the closing of this offering).

Net tangible book value dilution per share represents the difference between the amount per share of common stock paid by the new investors who purchase shares of our common stock in this offering and the pro forma net tangible book value per share in common stock immediately after completion of this offering, assuming no value is attributed to the warrants. After giving effect to our sale of the shares of common stock at a public offering price of \$            per share, as of September 30, 2012, and after deducting placement agent commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2012 would have been \$            million, or \$            per share. This represents an immediate increase of net tangible book value of \$            per share to our existing shareholders and an immediate dilution in net tangible book value of \$            per share to purchasers of securities in this offering. The following table illustrates this per share dilution:

	<u>Adjusted</u>
Assumed public offering price per share of common stock	
Net tangible book value per share as of September 30, 2012	\$ 0.04
Increase attributable to the sale of shares to investors in this offering	
Adjusted net tangible book value per share after this offering	
Dilution in net tangible book value per share to new investors	

The foregoing discussion and illustration do not reflect potential dilution from (i) the exercise of outstanding options or warrants to purchase shares of our common stock, (ii) shares of common stock reserved for future issuance under our 2006 and 2010 stock option plans or (iii) the conversion of our outstanding shares of Series B preferred stock, Series D preferred stock or Series G preferred stock into common stock.

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## DESCRIPTION OF CAPITAL STOCK

The following summary describes the material terms of our capital stock. It summarizes material provisions of our certificate of incorporation and by-laws.

### **General**

Our certificate of incorporation authorizes us to issue 320,000,000 shares of capital stock, \$0.001 par value per share, of which 300,000,000 shares are designated common stock and 20,000,000 shares are designated preferred stock. As of December 5, 2012, there were issued and outstanding 95,388,815 shares of common stock, warrants to purchase 3,530,000 shares of common stock, 300,000 shares of Series B preferred stock, 43 shares of Series D preferred stock and 5,000,000 shares of Series G preferred stock. The total number of shares of our common stock outstanding reflected above includes 8,000,000 shares of common stock to be issued upon the conversion of all of our outstanding shares of Series C Preferred Stock effective immediately prior to the closing of this offering.

### **Common Stock**

#### *Voting Rights*

Holders of our common stock are entitled to one vote per share. Subject to any voting rights granted to holders of any preferred stock, the affirmative vote of a majority of the shares present in person or by proxy and entitled to vote on the subject matter, other than the election of directors, will generally be required to approve matters voted on by our stockholders. Directors will be elected by plurality of the votes of the shares present in person or represented by a proxy at the meeting entitled to vote on the election of directors. Our certificate of incorporation does not provide for cumulative voting.

#### *Dividends*

Subject to the rights of holders of any outstanding preferred stock, the holders of outstanding shares of our common stock will share ratably on a per share basis in any dividends declared from time to time by our Board of Directors.

#### *Other Rights*

Subject to the rights of holders of any outstanding preferred stock, upon our liquidation, dissolution or winding up, we will distribute any assets legally available for distribution to our stockholders, ratably among the holders of our common stock outstanding at that time.

### **Warrants to Purchase Shares of Common Stock to be Issued as a Part of this Offering**

The warrants to purchase shares of common stock to be issued as a part of this offering will be issued in the form filed as an exhibit to the registration statement of which this prospectus is a part. You should review a copy of the form of warrant for a complete description of the terms and conditions applicable to the warrants. The following is a brief summary of the warrants and is subject in all respects to the provisions contained in the form of warrant.

Each warrant represents the right to purchase one share of common stock at an exercise price equal to \$            per share, subject to adjustment as described below. Each warrant may be exercised on or after the closing date of this offering through and including the close of business on December   , 2017. The warrant includes a cashless exercise right.

The exercise price and the number of shares underlying the warrants are subject to appropriate adjustment in the event of stock splits, stock dividends on our common stock, stock combinations or similar events affecting our common stock. In addition, in the event we consummate any merger, consolidation, sale or other reorganization

event in which our common stock is converted into or exchanged for securities, cash or other property or we consummate a sale of substantially all of our assets, then in certain of such events, the holders of the warrants will be entitled to receive upon exercise of the warrants the kind and amount of securities, cash or other property which the holders would have received had they exercised the warrants immediately prior to such reorganization event. In addition, if we are acquired by a company that does not have a market for its common stock, the holder of the warrant may require us to repurchase the warrant at its then fair value using the Black Scholes option pricing formula.

**No fractional shares of common stock will be issued in connection with the exercise of a warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the market value of a share of common stock. A warrant may be transferred by a holder, upon surrender of the warrant, properly endorsed (by the holder executing an assignment in the form attached to the warrant). The warrants will not be listed on any securities exchange or automated quotation system and we do not intend to arrange for any exchange or quotation system to list or quote the warrants.**

### **Preferred Stock**

Our board of directors, without stockholder approval, but subject to the rights of our outstanding preferred stock, may issue preferred stock in one or more series from time to time and fix or alter the designations, relative rights, priorities, preferences, qualifications, limitations and restrictions of the shares of each series, to the extent that those are not fixed in our certificate of incorporation. The rights, preferences, limitations and restrictions of different series of preferred stock may differ with respect to dividend rates, amounts payable on liquidation, voting rights, conversion rights, redemption provisions, sinking fund provisions and other matters. Our board of directors may authorize the issuance of preferred stock that ranks senior to our common stock with respect to the payment of dividends and the distribution of assets on liquidation. In addition, our board of directors can fix the limitations and restrictions, if any, upon the payment of dividends on our common stock to be effective while any shares of preferred stock are outstanding. We have issued shares of Series A, Series B, Series C, Series D and Series G Preferred Stock. These classes of preferred stock include voting rights, including the right to vote as a series on particular matters, preferences as to dividends and liquidation, conversion rights, redemption rights and sinking fund provisions.

#### *Series B Preferred Stock*

On May 12, 2008, to obtain funding for working capital, the Company entered into a series of subscription agreements with five accredited investors for the sale of a total of 400,000 Series B Units, each Series B Unit consisting of one share of Series B Preferred Stock ("Series B Preferred") and two Series B Warrants ("Series B Warrants") to purchase common stock for each \$1.00 invested.

The total purchase price received by the Company was \$400,000. The Series B Preferred is convertible into shares of common stock at the initial conversion ratio of two shares of common stock for each share of Series B Preferred converted (which was established based on an initial conversion price of \$0.50 per share), and the Series B Warrants were exercisable at \$0.50 per share until five years from the issuance of the Series B Warrants. The Series B Preferred and Series B Warrants contained anti-dilution clauses whereby, (subject to the exceptions contained in those instruments) if the Company issues equity securities or securities convertible into equity at a price below the respective conversion price of the Series B Preferred or the exercise price of the Series B Warrant, such conversion and exercise prices shall be adjusted downward to equal the price of the new securities. In 2010, the holders of the Series B Warrants waived their anti-dilution rights and their exercise price is now fixed at \$0.25. If we issue additional securities through this offering at a price below the current conversion price of \$0.25 per share, the conversion price of the Series B Preferred shall be adjusted downward to equal the price of the new securities. Any such adjustments would compound the potential dilution suffered by holders of common stock.



The Series B Preferred has a priority (senior to the shares of common stock, but junior to the shares of Series A Preferred Stock) on any sale or liquidation of the Company equal to the purchase price of the Series B Units, plus a liquidation premium of 6% per year. If the Company elects to declare a dividend in any year, it must first pay to the Series B Preferred holder a dividend equal to the amount of the dividend the Series B Preferred holder would receive if the Series B Preferred were converted just prior to the dividend declaration. Each share of Series B Preferred has the same voting rights as the number of shares of common stock into which it would be convertible on the record date. As of June 30, 2012 and December 31, 2011, the Company had 300,000 shares of the Series B Preferred Stock issued and outstanding.

#### *Series C Preferred Stock*

On August 20, 2008, to obtain funding for working capital, the Company entered into a subscription agreement with an accredited investor (the "Series C Investor") to sell for \$3,000,000 up to 3,000,000 shares of Series C Preferred Stock ("Series C Preferred") at a price of \$1.00 per Series C Preferred share. The Series C Preferred will be convertible into shares of common stock at \$0.25 per share. The Series C Preferred had an anti-dilution clause whereby, if the Company issues 250,000 shares or more of equity securities or securities convertible into equity at a price below the conversion price of the Series C Preferred, the conversion price of the Series C Preferred shall be adjusted downward to equal the price of the new securities. The Series C Preferred shall have priority over the common stock on any sale or liquidation of the Company equal to the purchase price of the Series C Preferred Shares, plus a liquidation premium of 6% per year, but such payment may be made only after payment in full of the liquidation preferences payable to holders of any shares of Series A and Series B preferred stock then outstanding. If the Company elects to declare a dividend in any year, it must first pay to the Series C Preferred a dividend in the amount of the dividend the Series C Preferred holder would receive if converted just prior to the dividend declaration. Each share of Series C Preferred shall have the same voting rights as the number of shares of common stock into which it would be convertible on the record date. 700,000 shares of Series C Preferred Stock were sold on August 20, 2008, and 1,300,000 shares of Series C Preferred Stock were sold on September 23, 2008. The beneficial conversion feature for the Series C preferred stock is \$720,000. All the Series C Preferred Stock was issued to X-Master Inc., which is a related party and affiliated with our Chief Executive Officer and Co-Chairman of the Board of Directors Dr. Andrey Semechkin and Dr. Ruslan Semechkin, Vice President of International Stem Cell and a director. As of June 30, 2012 and December 31, 2011, we had 2,000,000 shares of the Series C Preferred Stock issued and outstanding. The holders of Series C Preferred Stock have irrevocably agreed to convert all of the outstanding shares of Series C Preferred Stock into common stock at \$0.25 per share, or a total of 8,000,000 shares of common stock, contingent upon and immediately prior to the consummation of the closing of this offering.

#### *Series D Preferred Stock*

On December 30, 2008, to obtain funding for both working capital and the eventual repayment of the outstanding obligation under the OID Senior Secured Convertible Note with a principal amount of \$1,000,000 issued in May 2008, the Company entered into a Series D Preferred Stock Purchase Agreement (the "Series D Agreement") with accredited investors (the "Investors") to sell for up to \$5,000,000 or up to 50 shares of Series D Preferred Stock ("Series D Preferred") at a price of \$100,000 per Series D Preferred share. The sale of the Series D Preferred closed on the following schedule: (1) 10 shares were sold on December 30, 2008; (2) 10 shares were sold on February 5, 2009; and (3) 10 shares were sold on each of March 20, 2009, and June 30, 2009 and 3 shares on September 30, 2009. The Company raised a total of \$4,700,000 in the Series D Preferred Stock round. Of the Series D Preferred Stock issued, 10 shares of the Series D Preferred Stock was issued to X-Master Inc., which is a related party and affiliated with our Chief Executive Officer and Co-Chairman of the Board of Directors Dr. Andrey Semechkin and Dr. Ruslan Semechkin, Vice President of International Stem Cell and a director and 33 shares of the Series D Preferred Stock was issued to our Chief Executive Officer and Co-Chairman of the Board of Directors Dr. Andrey Semechkin. As of June 30, 2012 and December 31, 2011, we had 43 shares of the Series D Preferred Stock issued and outstanding. Historically, the Series D Preferred Stock earned cumulative dividends at a rate of 10% per annum through December 31, 2011 and 6% per annum effective January 1, 2012, payable 15 days after each quarter end. As of June 30, 2012 and December 31, 2011, Series D Preferred Stock dividends of

\$64,000 and \$108,000 were accrued, respectively. During the three and six months ended June 30, 2012 and 2011, dividends of \$64,000, \$173,000, \$107,000 and \$213,000 were paid to the holders, respectively. On December 4, 2012, the holders of all of the outstanding shares of Series D Preferred Stock executed a Waiver of Anti-Dilution Rights (the “Anti-Dilution Waiver”) pursuant to which such holders waived all anti-dilution adjustment rights under the Certificate of Designation for the Series D Preferred Stock in connection with the offering of securities pursuant to this registration statement, including the shares issuable on exercise of all warrants registered hereunder. The Anti-Dilution Waiver does not apply to any future issuances of securities which would otherwise trigger anti-dilution adjustments under the Certificate of Designation for the Series D Preferred Stock.

#### *Series G Preferred Stock*

On March 9, 2012, the Company entered into a Series G Preferred Stock Purchase Agreement (the “Series G Agreement”) with AR Partners, LLC (the “Purchaser”) to sell five million (5,000,000) shares of Series G Preferred Stock (“Series G Preferred”) at a price of \$1.00 per Series G Preferred share, for a total purchase price of \$5,000,000. The Purchaser is an affiliate of Dr. Andrey Semechkin, the Company’s Co-Chairman and Chief Executive Officer, and Dr. Ruslan Semechkin, Vice President of International Stem Cell and a director.

The Series G Preferred is convertible into shares of common stock at \$0.40 per share, resulting in an initial conversion ratio of 2.5 shares of common stock for every share of Series G Preferred. The conversion price may be adjusted for stock splits and other combinations, dividends and distributions, recapitalizations and reclassifications, exchanges or substitutions and is subject to a weighted-average adjustment in the event of the issuance of additional shares of common stock below the conversion price. If, as anticipated, we issue additional securities through this offering at a price below the current conversion price of \$0.40 per share, the conversion price of the Series G Preferred shall be adjusted downward through a weighted average adjustment. Any such adjustments would compound the potential dilution suffered by holders of common stock. Assuming the sale of all \$15.0 million of the securities offered in this offering at a price of \$ \_\_\_\_\_ per share, then pursuant to the weighted-average adjustment, all of the outstanding shares of Series G Preferred would be convertible into a total of \_\_\_\_\_ shares of common stock, or a conversion ratio of \_\_\_\_\_ shares of common stock for every share of Series G Preferred.

The Series G Preferred shares have priority over the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Common Stock on the proceeds from any sale or liquidation of the Company in an amount equal to the purchase price of the Series G Preferred, but such payment may be made only after payment in full of the liquidation preferences payable to holders of any shares of Series D Preferred Stock then outstanding. Historically, from the date of issuance of the Series G Preferred, cumulative dividends at the rate per annum of six percent (6%) of the Purchase Price per share accrued quarterly on such shares of Series G Preferred. Each share of Series G Preferred has the same voting rights as the number of shares of Common Stock into which it would be convertible on the record date. As long as there are at least 1,000,000 shares of Series G Preferred outstanding, the holders of Series G Preferred have (i) the initial right to propose the nomination of two members of the Board, at least one of which nominees shall be subject to the approval of the Company’s independent directors, for election by the stockholder’s at the Company next annual meeting of stockholders, or, elected by the full board of directors to fill a vacancy, as the case may be, and (ii) the right to approve any amendment to the certificate of incorporation, certificates of designation or bylaws, in manner adverse to the Series G Preferred, alter the percentage of board seats held by the Series G directors or increase the authorized number of shares of Series G Preferred. At least one of the two directors nominated by holders of the Series G Preferred shares shall be independent based on the NASDAQ listing requirements. As of June 30, 2012, Series G Preferred Stock dividends of \$92,000 was accrued compared to none as of December 31, 2011. No dividend was paid to the holders during the three and six months ended June 30, 2012 and 2011.

On October 12, 2012, the Company and the holders of all of the outstanding shares of Series D and Series G Preferred Stock entered into a Waiver Agreement (the “Waiver Agreement”) pursuant to which such holders

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irrevocably waived their right to receive any and all accrued but unpaid dividends and interest thereon on or after September 30, 2012 on the Series D and Series G Preferred Stock. Under the Waiver Agreement, the holders of Series D and Series G Preferred Stock are restricted from transferring any shares of Series D Preferred Stock unless the transferee agrees to be bound by the Waiver Agreement.

**Transfer Agent**

The transfer agent for our common stock is Securities Transfer Corporation. The transfer agent address is 2591 Dallas Parkway, Suite 102, Frisco, TX 75034.

## PLAN OF DISTRIBUTION

CRT Capital Group, LLC, which we refer to as the placement agent, has entered into a placement agent agreement with us in connection with this offering. Pursuant to the placement agent agreement, we have authorized the placement agent to act as our exclusive placement agent to solicit offers for the purchase of securities in this offering. The placement agent will assist us on a “best efforts” basis. The placement agent will have no obligation to buy any of the securities from us, nor is it required to arrange the purchase or sale of any specific number or dollar amount of securities. There is no minimum amount which must be raised in order to complete this offering. We will enter into subscription agreements directly with investors in connection with this offering.

The placement agent agreement provides that the obligations of the placement agent under the placement agent agreement are subject to certain conditions precedent, including the prior effectiveness of the registration statement of which this prospectus is a part, the absence of any material adverse change in our business, and the receipt of certain customary certificates, opinions and letters from us, our officers, our legal counsel, and our independent auditors.

We have entered into an escrow agreement in connection with this offering with the placement agent and BNY Mellon, which we refer to as the escrow agent. All funds we receive from investors in connection with this offering will be placed in a non-interest bearing escrow account with BNY Mellon, which we refer to as the escrow account. If the closing of this offering has not occurred by January 31, 2013, and in other circumstances as described in the escrow agreement, we will return the funds deposited into the escrow account to the investors, without interest and without any offset or deduction. This offering is being conducted in compliance with Securities and Exchange Commission Rule 15c2-4.

It is currently contemplated that there will be one closing of the offering. On the closing date, we will issue securities for which subscriptions have been received and accepted to the investors and we will receive funds in the amount of the aggregate purchase price for those securities. We currently anticipate the closing of the sale of the securities to occur on                      , 20     .

On the closing date, the following will occur:

- we will receive from the escrow account funds in the amount of the aggregate purchase price of the securities being sold by us on the closing date, less the amount of fees we are paying to the placement agent pursuant to the placement agent agreement; and
- we will cause common stock sold on the closing date to be delivered in book-entry form through the facilities of the Depository Trust Company and deliver warrants to the subscribers, each as set forth in the subscription agreement entered into between us and each investor.

We have agreed to pay the placement agent a cash fee equal to 6% of the gross proceeds of this offering (excluding any gross proceeds received by us from the sale of the first \$1,300,000 worth of securities to members of our Board of Directors, our employees, the Semechkin family or its affiliates). We do not have any agreements with any of the foregoing parties whereby they have agreed to purchase securities in this offering and there is no guarantee that any such party will participate. The following table shows the per-share placement agent fee and total placement agent fee to be paid by us to the placement agent in connection with this offering. The total amount assumes that all of the securities offered pursuant to this prospectus are actually sold and issued by us (and assumes that no shares will be sold to members of our Board of Directors, our employees, the Semechkin family or its affiliates).

<u>Placement Agent Fee Per Share of Common Stock</u>	
\$	
	<u>Total</u>
	\$

We have also agreed to issue to the placement agent warrants to purchase a number of shares of our common stock equal to 5.0% of the aggregate number of shares of common stock sold in the offering, which we refer to as

the placement agent warrants. The placement agent warrants will have terms substantially similar to the terms of the warrants being offered in this offering to investors, subject to any changes required by FINRA. The warrants will not be exercisable or convertible more than five (5) years from the effective date of the registration statement of which this prospectus is a part. The placement agent has agreed that, for a period of 180 days after their issuance date (which shall not be earlier than the closing date of this offering), neither the placement agent warrants nor any shares issuable upon exercise of the placement agent warrants shall be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of such securities by any person for a period of 180 days immediately following the effective date of registration statement of which this prospectus is a part or commencement of sales in the offering, except the transfer of any security:

- by operation of law or by reason of reorganization of the Company;
- to any FINRA member firm participating in this offering and the officers or partners thereof, if all securities so transferred remain subject to the lock-up restriction described above for the remainder of the time period;
- if the aggregate amount of securities of the Company held by either the placement agent or a related person do not exceed 1% of the securities being offered; or
- that is beneficially owned on a pro-rata basis by all equity owners of an investment fund, provided that no participating member manages or otherwise directs investments by the fund, and participating members in the aggregate do not own more than 10% of the equity in the fund.

We have paid the placement agent an advance of \$25,000 against out-of-pocket accountable expenses actually anticipated to be incurred by the placement agent in this offering, which will be reimbursed to us to the extent not actually incurred. In addition, we will reimburse the placement agent for its out-of-pocket accountable expenses actually incurred up to a maximum amount of \$25,000 plus the reasonable legal fees of counsel to the Placement Agent which legal fees shall not exceed \$50,000.

We are offering pursuant to this prospectus up to 50,000,000 shares of our common stock and warrants to purchase up to 25,000,000 shares of our common stock, but there can be no assurance that the offering will be fully subscribed. The placement agent is assisting us on a “best efforts” basis and has no obligation to buy any of the securities from us, nor is it required to arrange the purchase or sale of any specific number or dollar amount of securities. Accordingly, we may sell substantially less than all of the securities offered pursuant to this prospectus in which case our net proceeds would be substantially reduced and the total placement agent fees may be substantially less than the maximum total set forth above.

We have agreed to indemnify the placement agent against certain liabilities, including liabilities (i) arising under the Securities Act of 1933, as amended, in connection with the offer and sale of securities in this offering, (ii) relating to the accuracy of the financial statements incorporated by reference into the registration statement of which this prospectus is a part, and (iii) related to any failure or alleged failure by us to perform any of our obligations under the placement agent agreement. We have also agreed to indemnify the placement agent for any and all expenses (including reasonable fees and disbursements of legal counsel) incurred in connection with investigating or defending against any such liabilities.

Each of our directors and executive officers, and certain of our stockholders, are subject to lock-up agreements that prohibit them from offering for sale, pledging, announcing the intention to sell, selling, contracting to sell, selling any option or contract to purchase, purchasing any option or contract to sell, granting any option, right or warrant to purchase, making any short sale or otherwise transferring or disposing of, directly or indirectly, any shares of our common stock or any securities convertible into, exercisable or exchangeable for or that represent the right to receive shares of our common stock for a period of at least 60 days following the date of this prospectus without the prior written consent of the placement agent. The lock-up agreement does not prohibit our directors and executive officers, and certain of our stockholders, from transferring shares of our common stock,

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for bona fide gifts or estate planning purposes, subject to certain requirements, or the exercise of stock options granted pursuant to our equity incentive plans. The 60-day lock-up period in all of the lock-up agreements is subject to extension if (i) during the last 17 days of the lock-up period we issue an earnings release or material news or a material event relating to us occurs or (ii) prior to the expiration of the lock-up period, we announce that we will release earnings results during the 16-day period beginning on the last day of the lock-up period, in which case the restrictions imposed in these lock-up agreements shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event, unless the placement agent waives the extension in writing.

The placement agent agreement will be filed as an exhibit to the registration statement of which this prospectus is a part.

The placement agent has informed us that it does not intend to engage in passive market making activities in connection with this offering, and that it does not intend to enter into any over-allotment, stabilizing or syndicate covering transactions in connection with this offering.

## MARKET PRICE OF AND DIVIDENDS ON COMMON STOCK AND RELATED MATTERS

### Market Information

Our common stock is approved for quotation on the OTC QB under the trading symbol “ISCO”. The OTC QB is a regulated quotation service that displays real-time quotes, last-sale prices and volume information in over-the-counter equity securities. The OTC QB securities are traded by a community of market makers that enter quotes and trade reports. This market is limited in comparison to an exchange and any prices quoted may not be a reliable indication of the value of our common stock.

As of December 5, 2012, we had 95,388,815 shares of common stock outstanding, and approximately 645 holders of record of our common stock, and we had 5,300,043 shares of preferred stock outstanding, and six holders of record of our preferred stock, with 5,300,043 shares of preferred stock being convertible into 30,973,200 shares of common stock. The total number of shares of our common stock outstanding reflected above includes 8,000,000 shares of common stock to be issued upon the conversion of all of our outstanding shares of Series C Preferred Stock effective immediately prior to the closing of this offering.

The quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not reflect actual transactions. The high and low sales prices of our common stock, as reported by OTC QB for each quarter during fiscal years 2012, 2011 and 2010, are reported below:

	Market Price	
	High	Low
<b>Fiscal Year 2012</b>		
First Quarter	\$0.68	\$0.38
Second Quarter	\$0.55	\$0.21
Third Quarter	\$0.40	\$0.22
Fourth Quarter (through December 5, 2012)	\$0.29	\$0.16
<b>Fiscal Year 2011</b>		
First Quarter	\$2.20	\$1.24
Second Quarter	\$1.34	\$0.82
Third Quarter	\$1.08	\$0.67
Fourth Quarter	\$0.84	\$0.37
<b>Fiscal Year 2010</b>		
First Quarter	\$2.74	\$0.55
Second Quarter	\$2.36	\$1.03
Third Quarter	\$1.37	\$0.95
Fourth Quarter	\$2.29	\$1.05

### Dividends

Our Board of Directors determines any payment of dividends. We have never declared or paid cash dividends on our common stock. We do not expect to authorize the payment of cash dividends on our shares of common stock in the foreseeable future. Any future decision with respect to dividends will depend on our future earnings, operations, capital requirements and availability, restrictions in future financing agreements and other business and financial considerations.

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## LEGAL MATTERS

The validity of the issuance of securities offered by this prospectus will be passed upon for us by DLA Piper LLP (US), San Diego, California.

## EXPERTS

The consolidated balance sheets of International Stem Cell Corporation and Subsidiaries as of December 31, 2011 and 2010, and the related consolidated statements of operations, stockholders' equity (deficit) and cash flows for the years then ended and for the period from inception (August 17, 2001) through December 31, 2011 have been incorporated by reference herein and in the registration statement in reliance upon the reports of Mayer Hoffman McCann P.C. and Vasquez & Company LLP, independent registered public accounting firms, incorporated by reference herein, and given upon the authority of said firms as experts in accounting and auditing.

On October 17, 2012 and December 4, 2012, we entered into a letter agreement with Vasquez & Company LLP, our former independent registered public accounting firm. Pursuant to this letter agreement, except for liability resulting from malpractice, gross negligence, willful misconduct or challenges from the Public Company Accounting Oversight Board or SEC, we agreed to indemnify Vasquez & Company, LLP for all liability incurred in connection with any lawsuit brought against it because of its consent to the inclusion of its report on its audit of our 2010 financial statements, as restated, in this registration statement.

## WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other information with the SEC. Copies of our reports, proxy statements and other information may be inspected and copied at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Copies of these materials can also be obtained by mail at prescribed rates from the Public Reference Room of the SEC, 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an internet site that contains reports, proxy and information statements and other information regarding International Stem Cell Corporation and other issuers that file electronically with the SEC. The address of the SEC internet site is [www.sec.gov](http://www.sec.gov). In addition, we make available on or through our Internet site copies of these reports as soon as reasonably practicable after we electronically file or furnish them to the SEC. Our Internet site can be found at [www.internationalstemcell.com](http://www.internationalstemcell.com).



## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

This prospectus does not contain all of the information set forth in the registration statement, certain parts of which are omitted in accordance with the rules and regulations of the SEC. Statements contained in this prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance reference is made to the copy of that contract or other document filed as an exhibit to the registration statement. For further information about us and the securities offered by this prospectus, we refer you to the registration statement and its exhibits and schedules which may be obtained as described herein.

The SEC allows us to “incorporate by reference” the information contained in certain documents that we have filed 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 prospectus. We hereby incorporate by reference the documents listed below (File No. 000-51891).

- our annual report on Form 10-K for the fiscal year ended December 31, 2011, filed on March 16, 2012;
- our quarterly reports on Form 10-Q for the quarters ended March 31, 2012, June 30, 2012, and September 30, 2012, filed on May 14, 2012, August 8, 2012, and November 8, 2012, respectively;
- our current reports on Form 8-K filed on January 18, 2012, March 6, 2012, March 15, 2012, March 28, 2012, April 18, 2012, June 4, 2012, August 3, 2012 and December 5, 2012;
- our proxy statement on Schedule 14A, filed on April 16, 2012, for our Annual meeting of Stockholders held on May 29, 2012; and
- the description of our common stock contained in our registration statement on Forms 10-SB filed under the Securities Exchange Act on April 4, 2006, including any amendment or reports filed for the purpose of updating such descriptions.

Each person to whom a prospectus is delivered will receive a copy of all of the information that has been incorporated by reference in this prospectus but not delivered with the prospectus. You may obtain copies of these filings, at no cost, through the “Investor Relations” section of our website ([www.internationalstemcell.com](http://www.internationalstemcell.com)), and you may request copies of these filings, at no cost, by writing or telephoning us at:

International Stem Cell Corporation  
Attention: Linh T. Nguyen  
5950 Priestly Drive  
Carlsbad, CA 92008  
Telephone: (760) 940-6383

The information contained on our website is not a part of this prospectus.

**PART II**  
**INFORMATION NOT REQUIRED IN THE PROSPECTUS**

**ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION**

The following table sets forth the fees and expenses incurred or expected to be incurred by International Stem Cell Corporation in connection with the issuance and distribution of the securities being registered hereby, other than underwriting discounts and commissions. All of the amounts shown are estimated except the SEC registration fee. Estimated fees and expenses can only reflect information that is known at the time of filing this registration statement and are subject to future contingencies, including additional expenses for future offerings.

Securities and Exchange Commission registration fee	\$ 2,046.00
Transfer agent's fees and expenses	\$ 2,500.00
Printing and engraving expenses	\$ 5,000.00
Legal fees and expenses including Blue Sky fees	\$ 275,000.00
Accounting fees and expenses	\$ 55,000.00
Miscellaneous expenses	\$ 25,454.00
Total	\$ 365,000.00

**ITEM 14. 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 15. RECENT SALES OF UNREGISTERED SECURITIES**

During the three-year period preceding the date of the filing of this registration statement, we have issued securities in the transactions described below without registration under the Securities Act.

**(a) Issuance of stock for cash or services.**

These securities were offered and sold by us in reliance upon exemptions from the registration statement requirements provided by Section 4(2) of the Securities Act or Regulation D under the Securities Act as transactions by an issuer not involving a public offering.

From July 1, 2009 through December 31, 2009, as part of a Series E Preferred Stock Purchase Agreement, the Company issued shares of Series E Preferred Stock and warrants to purchase a total of 4,127,084 shares of common stock (all of which warrants were exercised) to one accredited investor for an aggregate of \$2,000,000.

From July 1, 2009 through December 31, 2009, the Company issued 352,564 shares of common stock to two accredited investors for an aggregate of \$250,000.

From July 1, 2009 through December 31, 2009, as consideration for consulting services, the Company issued 280,000 shares of common stock to three accredited investors.

From January 1, 2010 through December 31, 2010, the Company issued 1,978,353 shares of common stock to eleven accredited investors for an aggregate of \$1,730,000.

From January 1, 2010 through December 31, 2010, as consideration for consulting services, the Company issued 749,167 shares of common stock to eleven consultants.

From May 1, 2010 through December 31, 2010, as part of a Series F Preferred Stock Purchase Agreement, the Company issued shares of Series F Preferred Stock and warrants to purchase a total of 7,000,000 shares of common stock (all of which warrants were exercised) for an aggregate of \$7,500,000.

From December 17, 2010 through March 16, 2012, as part of the Common Stock Purchase Agreement with Aspire, the Company issued 9,833,333 shares of common stock for an aggregate of \$5,942,460.

On January 14, 2011, as consideration for consulting services, the Company issued 150,000 shares of common stock to a consultant.

On March 9, 2012, the Company issued 5,000,000 shares of Series G Preferred Stock to an accredited investor for an aggregate of \$5,000,000.

**(b) Issuance of stock on conversion of preferred stock.**

From the beginning of 2009 through December 5, 2012 the holders of a total of 1,251,445 shares of Series B Preferred Stock and Series D Preferred Stock converted their shares to a total of 12,936,800 shares of common stock. These issuances were exempt pursuant to Section 3(a)(9) of the Securities Act. Effective immediately prior to the closing of this offering, 8,000,000 shares of common stock will be issued upon the conversion of all of our outstanding shares of Series C Preferred Stock effective immediately prior to the closing of this offering. This issuance will be exempt pursuant to Section 3(a)(9) of the Securities Act.

**(c) Issuances upon conversion or exercise of warrants.**

From the beginning of 2009 through December 5, 2012, we issued a total of 6,608,269 shares of common stock upon exercise or conversion of previously issued warrants. The issuances upon conversion were exempt from registration pursuant to Section 3(a)(9) of the Securities Act and the issuance upon exercise were exempt from registration pursuant to Section 4(2) of the Securities Act.

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**ITEM 16. EXHIBITS**

A list of exhibits filed herewith is contained in the exhibit index that immediately precedes such exhibits and is incorporated herein by reference.

**ITEM 17. UNDERTAKINGS**

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;

(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)(ii) do not apply if the registration statement is on Form S-3 or Form S-8, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed 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.

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 therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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 Securities 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 Securities Act and will be governed by the final adjudication of such issue.

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The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) or under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus 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.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Carlsbad, California on December 6, 2012.

### INTERNATIONAL STEM CELL CORPORATION

By: /s/ Andrey Semechkin

Andrey Semechkin  
Chief Executive Officer

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature:	Capacity:	Date:
<u>/s/ Andrey Semechkin</u> Andrey Semechkin	Chief Executive Officer and Director (Principal Executive Officer)	December 6, 2012
<u>/s/ Linh T. Nguyen</u> Linh T. Nguyen	Chief Financial Officer (Principal Financial and Accounting Officer)	December 6, 2012
<u>/s/ James Berglund</u> James Berglund*	Director	December 6, 2012
<u>/s/ Charles J. Casamento</u> Charles J. Casamento*	Director	December 6, 2012
<u>/s/ Paul V. Maier</u> Paul V. Maier*	Director	December 6, 2012
<u>/s/ Ruslan Semechkin</u> Ruslan Semechkin*	Director	December 6, 2012
<u>/s/ Donald A. Wright</u> Donald A. Wright*	Co-Chairman and Director	December 6, 2012

\*By: /s/ Linh T. Nguyen  
Linh T. Nguyen  
Attorney-in-fact

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## EXHIBIT INDEX

Exhibit Number	Description
3.1	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).
3.2	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).
3.3	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).
3.4	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).
4.1	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).
4.2	Certificate of Elimination for Series A Preferred Stock (incorporated by reference to Exhibit 3.2 of the Registrant's Form 8-K filed on June 4, 2012, File No. 000-51891).
4.3	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).
4.4	Certification of Designation of Series C Preferred Stock (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on August 21, 2008, File No. 000-51891).
4.5	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).
4.6	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).
4.7	Warrant Certificate for warrants in connection with Series A Preferred Stock (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on January 17, 2008, File No. 000-51891).
4.8	Warrant Certificate for warrants in connection with Series B Preferred Stock (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on May 12, 2008, File No. 000-51891).
4.9	Form of Warrant to Purchase Common Stock.
5.1	Opinion of DLA Piper LLP (US).
10.1	Employment Agreement, dated December 1, 2006, by and between International Stem Cell and Kenneth C. Aldrich (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on December 29, 2006, File No. 000-51891).
10.2	Employment Agreement, dated October 31, 2006, by and between International Stem Cell and Jeffrey Janus (incorporated by reference to Exhibit 10.4 of the Registrant's Form 8-K filed on December 29, 2006, File No. 000-51891).
10.3	First Amendment to Exclusive License Agreement (ACT IP), dated as of August 1, 2005, by and between Advanced Cell, Inc. and LCT (incorporated by reference to Exhibit 10.9 of the Registrant's Form 8-K filed on December 29, 2006, File No. 000-51891).
10.4	First Amendment to Exclusive License Agreement (UMass IP), dated as of August 1, 2005, by and between Advanced Cell, Inc. and LCT (incorporated by reference to Exhibit 10.10 of the Registrant's Form 8-K filed on December 29, 2006, File No. 000-51891).

<b>Exhibit Number</b>	<b>Description</b>
10.5	First Amendment to Exclusive License Agreement (Infigen IP), dated as of August 1, 2005, by and between Advanced Cell, Inc. and LCT (incorporated by reference to Exhibit 10.11 of the Registrant's Form 8-K filed on December 29, 2006, File No. 000-51891).
10.6	Exclusive License Agreement (Infigen IP), dated as of May 14, 2004, by and between Advanced Cell Technology, Inc and PacGen Cellco, LLC (predecessor company of LCT) (incorporated by reference to Exhibit 10.12 of the Registrant's Form 8-K filed on December 29, 2006, File No. 000-51891).
10.7	Exclusive License Agreement (ACT IP), dated as of May 14, 2004, by and between Advanced Cell Technology, Inc. and PacGen Cellco, LLC (predecessor company of LCT) (incorporated by reference to Exhibit 10.13 of the Registrant's Form 8-K filed on December 29, 2006, File No. 000-51891).
10.8	Exclusive License Agreement (UMass IP), dated as of May 14, 2004, by and between Advanced Cell Technology, Inc. and PacGen Cellco, LLC (predecessor company of LCT) (incorporated by reference to Exhibit 10.14 of the Registrant's Form 8-K filed on December 29, 2006, File No. 000-51891).
10.9	International Stem Cell Corporation 2006 Equity Participation Plan (incorporated by reference to Exhibit 10.15 of the Registrant's Form 8-K filed on December 29, 2006, File No. 000-51891).
10.10	Common Stock Purchase Warrant issued with OID Senior Convertible Note (incorporated by reference to Exhibit 10.3 of the Registrant's Form 8-K filed on May 16, 2008, File No. 000-51891).
10.11	Multiple Advance Convertible Note (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on August 18, 2008, File No. 000-51891).
10.12	Common Stock Purchase Warrant issued with Multiple Advance Convertible Note (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on August 18, 2008, File No. 000-51891).
10.13	Employment Agreement with Andrey Semechkin (incorporated by reference to Exhibit 10.4 of the Registrant's Form 8-K filed on January 5, 2009, File No. 000-51891).
10.14	Employment Agreement with Ruslan Semechkin (incorporated by reference to Exhibit 10.5 of the Registrant's Form 8-K filed on January 5, 2009, File No. 000-51891).
10.15	Preferred Stock Purchase Agreement dated June 30, 2009 (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on July 6, 2009, File No. 000-51891).
10.16	Amended and Restated Employment Agreement with Brian Lundstrom dated May 11, 2011 (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on May 13, 2011, File No. 000-51891).
10.17	Employment offer letter with Kurt May dated June 9, 2011 (incorporated by reference to Exhibit 10.1 of the Registrant's Form 10-Q filed on November 14, 2011, File No. 000-51891).
10.18	Employment Offer Letter with Linh Nguyen dated September 20, 2011 (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on September 27, 2011, File No. 000-51891).
10.19	Form of Stock Option Agreement for stock options granted outside of the 2006 Equity Participation Plan (incorporated by reference to Exhibit 10.19 of the Registrant's Form 10-K filed on March 30, 2010, File No. 000-51891).
10.20	Preferred Stock Purchase Agreement dated May 4, 2010 (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed May 5, 2010, File No. 000-51891).
10.21	Common Stock Purchase Agreement, dated as of December 9, 2010, by and between the Company and Aspire Capital Fund, LLC (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on December 13, 2010, File No. 000-51891).



<b>Exhibit Number</b>	<b>Description</b>
10.22	Registration Rights Agreement, dated as of December 9, 2010, by and between the Company and Aspire Capital Fund, LLC (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on December 13, 2010, File No. 000-51891).
10.23	Cell Culture Automation Agreement dated May 13, 2010 (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on May 19, 2010, File No. 000-51891).
10.24	Exchange Agreement with Socius CG II, Ltd. dated June 11, 2010 (incorporated by reference to Exhibit 10.4 of the Registrant's Form 10-Q filed on August 6, 2010, File No. 000-51891).
10.25	Exchange Agreement with Optimus Capital Partners, LLC dated June 11, 2010 (incorporated by reference to Exhibit 10.5 of the Registrant's Form 10-Q filed on August 6, 2010, File No. 000-51891).
10.26	2010 Equity Participation Plan (incorporated by reference to Appendix A of the Registrant's Schedule 14A filed March 30, 2010, File No. 000-51891).
10.27	Standard Multi-Tenant Office Lease – Gross Agreement, dated as of February 19, 2011, by and between the Company and S Real Estate Holdings, LLC (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed February 28, 2011, File No. 000-51891).
10.28	Form of Placement Agent Agreement with CRT Capital Group, LLC.
10.29	Dividend Waiver Agreement dated October 12, 2012 (incorporated by reference to Exhibit 10.29 of the Registrant's Form S-1 filed on October 18, 2012, File No. 333-184493 ).
10.30	Subscription Escrow Agreement dated November 30, 2012 by and between the Company and BNY Mellon.
10.31	Form of Subscription Agreement.
10.32	Consulting Agreement with James Berglund dated July 24, 2012 (incorporated by reference to Exhibit 4.8 of the Registrant's Form 10-Q filed on November 8, 2012).
21.1	Subsidiaries of the Registrant (incorporated by reference to Exhibit 21.1 of the Registrant's Form S-1 filed on December 17, 2010, File No. 333-171233).
23.1	Consent of Mayer Hoffmann McCann P.C.
23.2	Consent of Vasquez & Company LLP.
23.3	Consent of DLA Piper LLP (US) (included in exhibit 5.1).
24.1	Power of Attorney (included on the signature page of the Registrant's Form S-1 filed on October 18, 2012, File No. 333-184493).

**INTERNATIONAL STEM CELL CORPORATION**  
**WARRANT TO PURCHASE COMMON STOCK**

Warrant No.: 2012-[ ] Issuance Date: , 2012

Number of Warrant Shares: [ ] Initial Exercise Price Per Share: \$[ ]

International Stem Cell Corporation, a Delaware corporation ("Company"), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, , the holder hereof or its designees or assigns ("Holder"), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, upon surrender of this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, the "Warrant"), at any time or times on or after the date hereof (the "Issuance Date"), but not after 11:59 p.m., New York time, on the fifth anniversary of the Issuance Date (subject to acceleration under the terms of Article 3.1), that number of duly authorized, validly issued, fully paid and non-assessable shares of Common Stock set forth above, subject to adjustment as set forth herein (the "Warrant Shares").

This Warrant is issued pursuant to the Subscription Agreement dated , 2012, by and among the Company and the investor referred to therein (the "Subscription Agreement"). Except as otherwise defined herein, capitalized terms in this Warrant shall have the meanings set forth in ARTICLE 13.

**ARTICLE 1**  
**EXERCISE OF WARRANT**

**1.1 Mechanics of Exercise.**

1.1.1 Subject to the terms and conditions hereof, this Warrant may be exercised by the Holder on any day on or after the Issuance Date, in whole or in part, by (i) surrender of this original Warrant to the Company, (ii) delivery of a written notice to the Company, in the form attached hereto as Exhibit A (the "Exercise Notice"), of the Holder's election to exercise this Warrant and (iii) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of Warrant Shares as to which this Warrant is being exercised (the "Aggregate Exercise Price"), with such payment made, at Investor's option, in cash or by wire transfer of immediately available funds, or by cashless exercise pursuant to Article 1.3.

1.1.2 On the Trading Day on which the Company has received each of this original Warrant, the Exercise Notice and the Aggregate Exercise Price (the "Exercise Delivery Documents") from the Holder by 6:30 p.m. Eastern time, or on the next Trading Day if the Exercise Delivery Documents are received after 6:30 p.m. Eastern time or on a non-Trading Day (in each case, the "Exercise Delivery Date"), the Company shall transmit (i) a facsimile acknowledgment of confirmation of receipt of the Exercise Delivery Documents to the Holder, and (ii) an electronic copy of its share issuance instructions to the Holder and to the Company's transfer agent (the "Transfer Agent"), with such transmissions to comply with the notice provisions contained in Section 7 of

Annex I to the Subscription Agreement, and shall instruct and authorize the Transfer Agent to credit such aggregate number of freely-tradable Warrant Shares to which the Holder is entitled to receive upon such exercise to the Holder's or its designee's balance account with The Depository Trust Company (DTC) through the Fast Automated Securities Transfer (FAST) Program through its Deposit Withdrawal Agent Commission (DWAC) system, with such credit to occur no later than 8:00 p.m. Eastern Time on the Trading Day following the Exercise Delivery Date, time being of the essence.

1.1.3 Upon delivery of the Exercise Delivery Documents, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder's DTC account.

1.1.4 If this Warrant is submitted in connection with any exercise pursuant to this Article 1.1 and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise, then the Company shall as soon as practicable and in no event later than three Trading Days after any exercise and return of the previously issued Warrant and at its own expense, issue a new Warrant (in accordance with Article 6.4) representing the right to purchase the number of Warrant Shares purchasable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional shares of Common Stock are to be issued upon the exercise of this Warrant, but rather the number of shares of Common Stock to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all taxes which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant.

**1.2 Exercise Price.** For purposes of this Warrant, "Exercise Price" means \$[ ] per Warrant Share, subject to adjustment as provided herein.

**1.3 Cashless Exercise.** The Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the "Net Number" of shares of Common Stock determined according to the following formula (a "Cashless Exercise");

$$\text{Net Number} = \frac{(B-C) \times A}{B}$$

For purposes of the foregoing formula:

A = the total number of shares with respect to which this Warrant is then being exercised.

B = the average of the Closing Bid Prices of the shares of Common Stock (as reported by Bloomberg) for the five (5) consecutive Trading Days ending on the date immediately preceding the date of the Exercise Notice.

C = the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

**1.4 Company's Failure to Timely Deliver Securities.** If the Company shall fail to timely credit the Holder's balance account with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise hereunder, and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company (a "Buy-In"), then the Company shall, within one Trading Day after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased (the "Buy-In Price"), at which point the Company's obligation to credit such Holder's balance account with DTC for the number of Warrant Shares to which the Holder is entitled upon the Holder's exercise hereunder and to issue such Warrant Shares shall terminate and the Holder shall return to the Company any and all Warrant Shares that it has or may receive from the Company or the Transfer Agent, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit such Holder's balance account with DTC for the number of Warrant Shares to which the Holder is entitled upon the Holder's exercise hereunder and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock sold by Holder in satisfaction of its obligations, times (B) the Closing Bid Price on the date of exercise.

**1.5 Disputes.** In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Article 11.

**1.6 Insufficient Authorized Shares.** If at any time while any of the Warrants remain outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon exercise of the Warrants at least a number of shares of Common Stock equal to 110% of the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of all of the Warrants then outstanding (the "Required Reserve Amount") (an "Authorized Share Failure"), then the Company shall immediately take all action necessary to increase the Company's authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for the Warrants then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than 90 days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders' approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal.

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**ARTICLE 2**  
**ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES**

If the Company at any time on or after the Issuance Date subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares will be proportionately increased. If the Company at any time on or after the Subscription Date combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant Shares will be proportionately decreased. Any adjustment under this ARTICLE 2 shall become effective at the close of business on the date the subdivision or combination becomes effective.

**ARTICLE 3**  
**FUNDAMENTAL TRANSACTIONS**

**3.1 Fundamental Transactions.** The Company shall not enter into or be party to a Fundamental Transaction unless the Successor Entity assumes in writing all of the obligations of the Company under this Warrant, including agreements to deliver to each Holder of this Warrant, in exchange for such Warrant and in lieu of the shares of the Common Stock (or other securities, cash, assets or other property) purchasable upon the exercise of this Warrant prior to such Fundamental Transaction, a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant and exercisable for an equivalent number of shares of capital stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights) which the Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Warrant been converted immediately prior to such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant). Upon the consummation of any Fundamental Transaction and until the delivery of the security of the Successor Entity described in the preceding sentence, the Successor Entity shall (i) succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant with the same effect as if such Successor Entity had been named as the Company herein and (ii) deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the consummation of the Fundamental Transaction, in lieu of the shares of the Common Stock (or other securities, cash, assets or other property) purchasable upon the exercise of this Warrant prior to such Fundamental Transaction, such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights) which the Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Warrant been converted immediately prior to such Fundamental Transaction, as adjusted in accordance with the provisions of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a “Corporate Event”), the Company shall make appropriate provision to ensure that the Holder will thereafter have the right to receive upon an exercise of this Warrant at any time after the consummation of the Fundamental Transaction, in lieu of the shares of the Common Stock (or other securities, cash, assets or other property) purchasable

upon the exercise of this Warrant prior to such Fundamental Transaction, such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights) which the Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Warrant been exercised immediately prior to such Fundamental Transaction. Notwithstanding anything to the contrary in this Article 3.1, in the event a Fundamental Transaction involves the issuance of cash or freely tradable securities by an issuer listed on an Eligible Market, then the ability to exercise this Warrant shall expire on the consummation of that Fundamental Transaction. The provisions of this Article 3.1 shall apply similarly and equally to successive Fundamental Transactions and Corporate Events and shall be applied without regard to any limitations on the exercise of this Warrant.

**3.2 Purchase of Warrant.** Notwithstanding the foregoing, in the event of a Fundamental Transaction other than one in which the Successor Entity is a Public Successor Entity that assumes this Warrant such that this Warrant shall be exercisable for the publicly traded common stock of such Public Successor Entity, at the request of the Holder delivered before the 90th day after the effective date of such Fundamental Transaction, the Company (or the Successor Entity) shall purchase this Warrant from the Holder by paying to the Holder, within five (5) Trading Days after such request (or, if later, on the effective date of the Fundamental Transaction), cash in an amount equal to the value of the remaining unexercised portion of this Warrant on the date of such consummation, which value shall be determined by use of the Black Scholes Option Pricing Model using a volatility equal to the 100 day average historical price volatility prior to the date of the public announcement of such Fundamental Transaction.

#### **ARTICLE 4**

#### **NONCIRCUMVENTION**

The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation, Bylaws or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of this Warrant, and (iii) shall, so long as any portion of this Warrant is outstanding, take all action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the exercise of the Warrant, 110% of the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of the portion of the Warrant then outstanding (without regard to any limitations on exercise).

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**ARTICLE 5**  
**WARRANT HOLDER NOT DEEMED A STOCKHOLDER**

Except as otherwise specifically provided herein, the Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this ARTICLE 5, the Company shall provide the Holder with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders; provided, however that making such notices and information available on EDGAR shall satisfy this delivery requirement.

**ARTICLE 6**  
**REISSUANCE OF WARRANTS**

**6.1 Transfer of Warrant.** If this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Article 6.4), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Article 6.4) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

**6.2 Lost, Stolen or Mutilated Warrant.** Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Article 6.4) representing the right to purchase the Warrant Shares then underlying this Warrant.

**6.3 Exchangeable for Multiple Warrants.** This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Article 6.4) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, that no Warrants for fractional shares of Common Stock shall be given.

**6.4 Issuance of New Warrants.** Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this

Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Article 6.1 or Article 6.3, the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

## **ARTICLE 7 NOTICES**

Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given in accordance with Section 7 of Annex I to the Subscription Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefore. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Exercise Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the shares of Common Stock, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of shares of Common Stock as such or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder.

## **ARTICLE 8 AMENDMENT AND WAIVER**

Except as otherwise provided herein, the provisions of this Warrant may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Required Holders; provided that no such action may increase the exercise price of this Warrant or decrease the number of shares or class of stock obtainable upon exercise of this Warrant without the written consent of the Holder. No such amendment shall be effective to the extent that it applies to less than all of the holders of the Warrant then outstanding.

## **ARTICLE 9 GOVERNING LAW**

This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York.



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**ARTICLE 10**  
**CONSTRUCTION; HEADINGS**

This Warrant shall be deemed to be jointly drafted by the Company and the Holder and shall not be construed against any person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

**ARTICLE 11**  
**DISPUTE RESOLUTION**

In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within 2 Trading Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three Trading Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within 2 Trading Days submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by Holder and approved by Company, which approval may not be unreasonably withheld or delayed, or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent registered public accounting firm. The Company shall cause the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than 10 Trading Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error. The costs for any such determination shall be borne by the party whose calculation was furthest from the determination or such investment bank or accountant.

**ARTICLE 12**  
**REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF**

The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder right to pursue actual damages for any failure by the Company to comply with the terms of this Warrant. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

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**ARTICLE 13**  
**DEFINITIONS**

For purposes of this Warrant, in addition to the terms defined elsewhere herein, the following terms shall have the following meanings:

**13.1 “Bloomberg”** means Bloomberg Financial Markets.

**13.2 “Closing Bid Price”** means, for any security as of any date, the last closing bid price for such security on the Trading Market, as reported by Bloomberg, or, if the Trading Market begins to operate on an extended hours basis and does not designate the closing bid price, then the last bid price of such security prior to 4:00 p.m., Eastern time, as reported by Bloomberg, or, if the Trading Market is not the principal securities exchange or trading market for such security, the last closing bid price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price is reported for such security by Bloomberg, the average of the bid prices of any market makers for such security as reported in the “pink sheets” by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.). If the Closing Bid Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price of such security on such date shall be the fair market value as mutually determined by the Company and Holder. If the Company and Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to ARTICLE 11. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

**13.3 “Common Stock”** means (i) the Company’s shares of Common Stock, par value \$0.001 per share, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

**13.4 “Convertible Securities”** means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of Common Stock.

**13.5 “DWAC Shares”** means, except as expressly stated otherwise herein, all Warrant Shares issued or issuable to Holder or any Affiliate, successor or assign of Holder pursuant to this Warrant, all of which shall be (a) issued in electronic form, (b) freely tradable and without restriction on resale, and (c) timely credited by Company to the specified Deposit/Withdrawal at Custodian (DWAC) account with DTC under its Fast Automated Securities Transfer (FAST) Program or any similar program hereafter adopted by DTC performing substantially the same function, in accordance with instructions issued to and countersigned by the Transfer Agent of the Company.

**13.6 “Eligible Market”** means the Principal Market, the OTC Bulletin Board, The New York Stock Exchange, Inc., The NASDAQ Global Select Market, The NASDAQ Global Market, The NASDAQ Capital Market, the New York Stock Exchange or Euronext, but does not include the OTC Pink Sheet inter-dealer electronic quotation and trading system.

**13.7 “Fundamental Transaction”** means that the (A) Company shall, directly or indirectly, in one or more related transactions, (i) consolidate or merge

with or into (whether or not the Company is the surviving corporation) another Person or Persons, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company to another Person, or (iii) allow another Person to make a purchase, tender or exchange offer that is accepted by the holders of more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the Person or Persons making or party to, or associated or affiliated with the Persons making or party to, such purchase, tender or exchange offer), (iv) consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than the 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock purchase agreement or other business combination), or (v) reorganize, recapitalize or reclassify its Common Stock, or (B) any “person” or “group” (as these terms are used for purposes of Sections 13(d) and 14(d) of the Exchange Act) is or shall become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of 50% of the aggregate Common Stock of the Company, other than persons or groups who exceed such ownership level as of the date of issuance of this Warrant. Notwithstanding anything contained herein to the contrary, for the avoidance of doubt it is understood and agreed that the license of any of the Company’s intellectual properties or technologies shall not, in and of itself, constitute a Fundamental Transaction.

**13.8 “Options”** means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

**13.9 “Parent Entity”** of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

**13.10 “Person”** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

**13.11 “Principal Market”** means the OTCQB.

**13.12 “Public Successor Entity”** means a Successor Entity that is a publicly traded corporation whose stock is quoted or listed for trading on an Eligible Market.

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**13.13** “Required Holders” means the Holders of the Warrant representing at least a majority of shares of Common Stock underlying the Warrant then outstanding.

**13.14** “Successor Entity” means the Person (or, if so elected by the Required Holders, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Required Holders, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

**13.15** “Trading Day” means any day on which the Common Stock are traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded; provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

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IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

INTERNATIONAL STEM CELL CORPORATION

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

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**EXHIBIT A**

**EXERCISE NOTICE**

**INTERNATIONAL STEM CELL CORPORATION**

The undersigned hereby exercises the right to purchase \_\_\_\_\_ shares of the shares of Common Stock ("Warrant Shares") of International Stem Cell Corporation, a Delaware corporation ("Company"), evidenced by the attached Warrant to Purchase Common Stock ("Warrant"). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant. The Holder intends that payment of the Exercise Price shall be made as:

Cash Exercise with respect to \_\_\_\_\_ Warrant Shares

Cashless Exercise with respect to \_\_\_\_\_ Warrant Shares

Please issue

A certificate or certificates representing said shares of Common Stock in the name specified below

Said shares in electronic form to the Deposit/Withdrawal at Custodian (DWAC) account with Depository Trust Company (DTC) specified below.

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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**ACKNOWLEDGMENT**

The Company hereby acknowledges this Exercise Notice and hereby directs [ ] to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated [ ], 2012 from the Company and acknowledged and agreed to by the transfer agent.

INTERNATIONAL STEM CELL CORPORATION

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**DLA Piper LLP (US)**  
4365 Executive Drive, Suite 1100  
San Diego, California 92121-2133  
www.dlapiper.com

T 858.677.1400

F 858.677.1401

November 26, 2012

International Stem Cell Corporation  
5950 Priestly Drive  
Carlsbad, CA 92008

Ladies and Gentlemen:

We have acted as counsel to International Stem Cell Corporation, a Delaware corporation (the “*Company*”), in connection with the filing of registration statement on Form S-1 (Reg. No. 333-184493) (the “*Registration Statement*”), under the Securities Act of 1933, as amended (the “*Securities Act*”). The Registration Statement relates to the Company’s:

- (i) shares (the “*Shares*”) of common stock, \$0.001 par value per share (the “*Common Stock*”); and
- (ii) warrants representing rights to purchase Common Stock (the “*Warrants*”, and the shares issuable upon exercise thereof, the “*Warrant Shares*”).

The Shares, Warrant Shares and Warrants are, collectively, referred to herein as the “*Securities*”.

In rendering the opinions set forth below, we have assumed that (i) all information contained in all documents reviewed by us is true and correct; (ii) all signatures on all documents examined by us are genuine; (iii) all documents submitted to us as originals are authentic and all documents submitted to us as copies conform to the originals of those documents; (iv) each natural person signing any document reviewed by us had the legal capacity to do so; and (v) the certificates representing the Securities will be duly executed and delivered.

We have examined the Registration Statement, including the exhibits thereto, and such other documents, corporate records, and instruments and have examined such laws and regulations as we have deemed necessary for purposes of rendering the opinions set forth herein. Based upon such examination and subject to the further provisions hereof, we are of the following opinion:

1. The Shares, when issued, sold and delivered in the manner and for the consideration set forth in the Registration Statement, and the Subscription Agreement, filed as an exhibit to the Registration Statement, entered into with the purchasers of the Shares identified therein, will be validly issued, fully paid and non-assessable; and



2. The Warrants will constitute valid and legally binding obligations of the Company and the Warrant Shares, if and when issued, paid for and delivered in compliance with the terms of the applicable Warrants pursuant to which the Warrant Shares are to be issued, will be validly issued, fully paid and nonassessable.

The foregoing opinions are qualified to the extent that the enforceability of any document, instrument or the Securities may be limited by or subject to bankruptcy, insolvency, fraudulent transfer or conveyance, reorganization, moratorium or other similar laws relating to or affecting creditors' rights generally, and general equitable or public policy principles.

In providing this opinion, we have relied as to certain matters on information obtained from public officials and officers of the Company.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and the reference to us under the caption "Legal Matters" in the prospectus included in 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 Securities and Exchange Commission promulgated thereunder.

This opinion letter is given to you solely for use in connection with the offer and sale of the Securities while the Registration Statement is in effect and is not to be relied upon for any other purpose. Our opinion is expressly limited to the matters set forth above, and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the Securities or the Registration Statement.

Very truly yours,

/s/ DLA Piper LLP (US)

**DLA Piper LLP (US)**

[—] Shares of Common Stock  
and  
[—] Warrants to Purchase Shares of Common Stock

**INTERNATIONAL STEM CELL CORPORATION**

**PLACEMENT AGENT AGREEMENT**

[—], 2012

CRT Capital Group LLC  
262 Harbor Drive  
Stamford, Connecticut 06902

Ladies and Gentlemen:

International Stem Cell Corporation, a Delaware corporation (the “**Issuer**”), proposes to issue and sell to certain purchasers, pursuant to the terms and conditions of this Placement Agent Agreement (this “**Agreement**”) and the Subscription Agreements in the form of Exhibit A attached hereto (the “**Subscription Agreements**”) entered into with the purchasers identified therein (each a “**Purchaser**” and collectively, the “**Purchasers**”), up to an aggregate of (i) [—] shares (the “**Shares**”) of common stock, \$0.001 par value per share (the “**Common Stock**”), of the Issuer, and (ii) warrants (the “**Warrants**”) to purchase up to [—] shares of Common Stock. Purchasers of the Common Stock will receive a Warrant to purchase one share of Common Stock for every two shares of Common Stock that they purchase in the offering. The terms and conditions of the Warrants are set forth in a warrant certificate, the form of which is attached as Exhibit B hereto. The Shares issuable upon exercise of the Warrants and Placement Agent Warrants (as defined below) are referred to herein as the “**Warrant Shares**”. The Shares, the Warrants and the Warrant Shares are collectively referred to herein as the “**Securities**”. The Issuer hereby confirms its agreement with CRT Capital Group, LLC (the “**Placement Agent**”) to act as exclusive placement agent in accordance with the terms and conditions hereof.

1) Agreement to Serve as Placement Agent. On the basis of the representations, warranties and covenants of the Issuer contained herein, and subject to all of the terms and conditions of this Agreement:

a) The Issuer hereby authorizes the Placement Agent to act as its exclusive placement agent to solicit offers for the purchase of all or any part of the Shares and Warrants from the Issuer in connection with the proposed offering of the Shares and Warrants (the “**Offering**”). Until the earlier of the termination of this Agreement or the Closing Date (as defined in Section 4(c) hereof), the Issuer shall not, without the prior written consent of the Placement Agent, solicit or accept offers to purchase the Shares or Warrants (or securities convertible into, exercisable or exchangeable for or that represent the right to receive Common Stock, other than with respect to the exercise or conversion of outstanding options, warrants and convertible securities) otherwise than through the Placement Agent.

b) The Placement Agent agrees, as agent of the Issuer, to use its commercially reasonable “best efforts” to solicit offers to purchase the Shares and Warrants from the Issuer on the terms and subject to the conditions set forth in the Prospectus (as defined below). The Placement Agent shall use commercially reasonable “best efforts” to assist the Issuer in obtaining performance by each Purchaser whose offer to purchase Shares and Warrants has been solicited by the Placement Agent and accepted by the Issuer, but the Placement Agent shall not have any liability to the Issuer in the event any such purchase is not consummated for any reason. Under no circumstances will the Placement Agent be obligated to underwrite or purchase any Shares or Warrants for its own account.

c) The execution of this Agreement does not ensure any placement of the Shares or Warrants or any portion thereof, nor does it constitute a guarantee or warranty of the ability of the Placement Agent with respect to securing any financing on behalf of the Issuer, all of which are expressly disclaimed by the Placement Agent.

d) Subject to the provisions of this Section 2, offers for the purchase of Shares and Warrants may be solicited by the Placement Agent at such times and in such amounts as the Placement Agent deems advisable; provided, however, that, except for the Placement Agent Warrants (as defined in Section 1(e) below), Warrants may only be issued to Purchasers of Shares, and such Purchasers in all cases may only receive a Warrant to purchase one Warrant Share for every two Shares that they purchase in the Offering. The Placement Agent shall communicate to the Issuer, orally or in writing, each reasonable offer to purchase Shares and Warrants received by it as agent of the Issuer. The Issuer shall have the sole right to accept offers to purchase the Shares and Warrants and may reject any such offer, in whole or in part. The Placement Agent shall have the right, in its reasonable discretion, with notice to the Issuer, to reject any offer to purchase Shares and Warrants received by it, in whole or in part, and any such rejection shall not be deemed a breach of this Agreement.

e) As compensation for services rendered under this Agreement, on the Closing Date, the Issuer shall (i) pay to the Placement Agent by wire transfer of immediately available funds to an account designated by the Placement Agent, an aggregate amount equal to six percent (6.0%) of the gross proceeds received by the Issuer from the sale of the Shares and Warrants on the Closing Date, excluding any gross proceeds received by the Issuer from the sale of the first \$1,300,000 worth of Shares and Warrants to members of the Board of Directors or employees of the Issuer or to the Semechkin family or its affiliates and (ii) issue to the Placement Agent a number of warrants (on terms substantially similar to the Warrants) to purchase Common Stock (the “**Placement Agent Warrants**”) equal to five percent (5.0%) of the number of Shares of Common Stock sold to the Purchasers on the Closing Date, which will not be exercisable or convertible more than five (5) years from the Effective Date (as defined below) pursuant to Rule 5110(f)(2)(H)(i) of the Financial Industry Regulatory Authority (“**FINRA**”). The Placement Agent Warrants will be deemed compensation by FINRA. In accordance with FINRA Rule 5110(g)(1), the Placement Agent hereby agrees that, for a period of 180 days after their issuance date (which shall not be earlier than the closing date of this offering), neither the Placement Agent Warrants nor any of the Warrant Shares shall be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of such securities by any person for a period of 180 days immediately

following the Effective Time (as defined below) or commencement of sales in the Offering, except in the limited circumstances set forth in FINRA Rule 5110(g)(2).

f) The Issuer has paid the Placement Agent an advance of \$25,000 against out-of-pocket accountable expenses actually anticipated to be incurred by the Placement Agent in the Offering, which advance shall be reimbursed to the Issuer to the extent not actually incurred pursuant to FINRA Rule 5110(f)(2) (C). In addition, the Issuer shall reimburse the Placement Agent for its out-of-pocket accountable expenses pursuant to Section 11.

g) The Placement Agent may, in its sole discretion, retain other brokers or dealers to act as sub-agents on the Placement Agent's behalf in connection with the offering of the Shares and Warrants, payment to whom shall be solely the responsibility of the Placement Agent.

2) Registration Statement. The Issuer has prepared a registration statement on Form S-1 (File No. 333-184493) with respect to the Securities pursuant to the Securities Act of 1933, as amended (the "**Securities Act**"), and the rules and regulations of the Securities and Exchange Commission (the "**Commission**") promulgated under the Securities Act (the "**Rules and Regulations**").

For purposes of this Agreement, the following terms shall have the following meanings:

"**Applicable Time**" means [—] (Eastern time) on the date of this Agreement;

"**Effective Date**" means the date of the Effective Time;

"**Effective Time**" means the date and the time as of which the Registration Statement, or the most recent post-effective amendment thereto, if any, was declared effective by the Commission;

"**Free Writing Prospectus**" means any "free writing prospectus" as defined in Rule 405 of the Rules and Regulations relating to the Securities;

"**Issuer Free Writing Prospectus**" means any "issuer free writing prospectus" as defined in Rule 433 of the Rules and Regulations relating to the Securities;

"**Preliminary Prospectus**" means each prospectus included in the Registration Statement, or amendments thereof, before it became effective under the Securities Act and any prospectus filed with the Commission by the Issuer with the consent of the Placement Agent pursuant to Rule 424(a) of the Rules and Regulations;

"**Prospectus**" means the prospectus in the form first used to confirm sales of Securities after the Registration Statement became effective under the Securities Act; and

"**Registration Statement**" means a Registration Statement, as amended at the Effective Time, including all information required or deemed to be a part of a registration statement as of the Effective Time pursuant to Rule 430A of the Rules and Regulations. If the Issuer has filed an abbreviated registration statement to register additional shares of Common Stock pursuant to Rule 462(b) of the Rules and Regulations (the "**Rule 462 Registration Statement**"), then any reference herein to the term "Registration Statement" shall be deemed to include such Rule 462 Registration Statement.

3) Representations and Warranties of the Issuer. The Issuer represents warrants and covenants to the Placement Agent as follows:

(a) Compliance with Registration Requirements.

(i) The Registration Statement has been filed with the Commission under the Securities Act and has been declared effective under the Securities Act. No stop order suspending the effectiveness of the Registration Statement is in effect, and no proceedings for such purpose are pending before or, to the knowledge of the Issuer, threatened by the Commission. True and accurate copies of the Registration Statement and each of the amendments thereto have been delivered by the Issuer to the Placement Agent.

(ii) The Commission has not issued any order preventing or suspending the use of any Preliminary Prospectus or any Issuer Free Writing Prospectus.

(iii) The Registration Statement conforms, and any further amendments to the Registration Statement will conform, in all material respects to the requirements of the Securities Act and the Rules and Regulations. Information has been incorporated by reference into the Registration Statement in reliance on General Instruction VII of Form S-1. Each of the documents incorporated by reference in the Registration Statement, when such documents became effective or were filed with the Commission, as the case may be, conformed in all material respects to the requirements of the Securities Act or the Exchange Act, as applicable, and the Rules and Regulations, and none of such documents contained any untrue statement of a material fact or omitted to state any material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

(iv) The Prospectus conforms and, as amended or supplemented will conform, to the requirements of the Securities Act and the Rules and Regulations.

(v) As of the Effective Date, the date hereof, and the Closing Date, the Registration Statement does not and will not, and any further amendments to the Registration Statement will not, when they become effective, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading.

(vi) As of its date and the date hereof, the Prospectus does not, and as amended or supplemented on the Closing Date will not, contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(vii) As of the Applicable Time, the Prospectus, as supplemented by any Issuer Free Writing Prospectuses and any other documents listed in Schedule I(a) hereto, if any, taken together with the final pricing information included on the cover page of the Prospectus (collectively, the **“Disclosure Package”**), did not include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Each Issuer Free Writing Prospectus required to be filed with the Commission pursuant to the requirements of the Securities Act and the Rules and Regulations has been filed and complies

in all material respects with the requirements of the Securities Act and the Rules and Regulations.

(viii) Each Issuer Free Writing Prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Shares did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement, any Preliminary Prospectus, or the Prospectus (each as may be amended or supplemented from time to time). Each Issuer Free Writing Prospectus listed on Schedule I(b), as supplemented by and taken together with the Disclosure Package as of the Applicable Time, did not include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Issuer filed the Registration Statement with the Commission before using any Issuer Free Writing Prospectus and each Issuer Free Writing Prospectus was preceded or accompanied by the most recent Preliminary Prospectus satisfying the requirements of Section 10 under the Securities Act.

(ix) At the time of filing the Registration Statement and any post-effective amendments thereto and at the date hereof, the Issuer was not and is not (1) an “ineligible issuer”, as defined in Rule 405 of the Rules and Regulations, (2) a “blank check company”, as defined in Rule 419 of the Rules and Regulations, (3) a “shell company”, as defined in Rule 405 of the Rules and Regulations, or (4) offering “penny stock”, as defined in Rule 3a51-1 promulgated under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”).

(x) The representations and warranties set forth in this Section 3(a) do not apply to statements or omissions in the Registration Statement, any Preliminary Prospectus, the Prospectus (including any amendment or supplement to any of the foregoing) or any Issuer Free Writing Prospectus in reliance upon and in conformity with written information furnished to the Issuer by the Placement Agent expressly for use therein, such information being expressly limited to that information described in Section 13.

(xi) The statements in the Registration Statement, the Prospectus and the Disclosure Package regarding the Issuer’s expectations, beliefs, estimations, plans and intentions, and any other information that constitutes “forward-looking” information within the meaning of the Securities Act and the Exchange Act (including, without limitation, the statements made by the Issuer in such documents within the coverage of Section 27A of the Securities Act, Section 21E of the Exchange Act, and Rule 175(b) of the Rules and Regulations) were made by the Issuer with a reasonable basis and reflect the Issuer’s good faith belief regarding the matters described therein. Notwithstanding the foregoing, the representation and warranty set forth in this Section 3(a)(xi) shall not apply to any statements or omissions made in reliance upon and in conformity with written information concerning the Placement Agent furnished to the Issuer by or on behalf of the Placement Agent expressly for inclusion in the Registration Statement, any Preliminary Prospectus, the Prospectus or any Issuer Free Writing Prospectus, such information being expressly limited to that information described in Section 13.

(b) No Material Adverse Change in Business. Subsequent to the respective dates as of which information is given in the Registration Statement, the Prospectus or the

Disclosure Package, except as set forth therein or contemplated thereby, (i) there has not occurred any material adverse change in the condition, financial or otherwise, or in the earnings, business, operations or prospects of the Issuer or its Subsidiaries (as defined in Section 3(e)), either individually or taken as a whole (a “**Material Adverse Effect**”); provided, however, that none of the following alone shall be deemed, in and of itself, to constitute a Material Adverse Effect: (a) a change in the market price or trading volume of the Common Stock; (b) changes in general economic conditions or changes effecting the industry in which the Issuer operates generally (as opposed to Issuer-specific changes) so long as such changes do not have a materially disproportionate effect on the Issuer, or (c) continued operating losses generally in line with recent results and consistent with applicable forward looking statements in the Registration Statement, Prospectus and Disclosure Package, (ii) there has not been any change in the capitalization of the Issuer (other than as a result of the exercise or conversion of options, warrants or convertible securities), (iii) the Issuer has not incurred any material liabilities or obligations, direct or contingent, nor entered into any material transaction, and (iv) the Issuer has not purchased any of its capital stock or paid or declared any dividends or other distributions of any kind on any class of its capital stock.

(c) Authorization of Agreement; Power and Authority. This Agreement, each of the Subscription Agreements, the Warrants, the Placement Agent Warrants and the Escrow Agreement (as defined in Section 4(b)) (collectively, the “**Transaction Agreements**”) has been duly authorized, executed and delivered by the Issuer, and constitutes a valid, legal, and binding obligation of the Issuer, enforceable against the Issuer in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting the rights of creditors generally, and subject to general principles of equity. The Issuer has full power and authority to enter into each of the Transaction Agreements, and to authorize, issue and sell the Shares, Warrants and Placement Agent Warrants as contemplated by this Agreement.

(d) Incorporation; Good Standing. The Issuer is a corporation duly incorporated and validly existing under the laws of the State of Delaware and is in good standing under such laws. The Issuer has the requisite corporate power to carry on its business as described in the Prospectus and the Disclosure Package. The Issuer is duly qualified to transact business and is in good standing in all jurisdictions in which the conduct of its business requires such qualification, except where the failure to be so qualified or to be in good standing would not have a Material Adverse Effect.

(e) Subsidiaries. Except for Lifeline Skin Care, Inc., a California corporation (“**LSC**”) and Lifeline Cell Technology, LLC, a California limited liability company (“**LCT**” and together with LSC, the “**Subsidiaries**”), the Issuer has no subsidiaries and does not own any equity interest, directly or indirectly, in any corporation, partnership, limited liability company, association or other entity. The Issuer owns 100% of the outstanding equity interests of each of the Subsidiaries and no other corporation, partnership, limited liability company, association or other entity has the right to acquire any equity interest in either of the Subsidiaries. LSC is validly existing as a corporation in good standing under the laws of the State of California. LCT is validly existing as a limited liability company in good standing under the laws of the State of California. Each of LSC and LCT is duly qualified to do business and is in good standing as a foreign corporation or limited liability company, as applicable, in each jurisdiction in which its ownership or lease of property or the conduct of its business requires such qualification and has all power and authority necessary to own or hold

its properties and to conduct the business in which it is engaged, except where the failure to so qualify or have such power or authority would not reasonably be expected to have a Material Adverse Effect. In this Section 3, unless the context requires otherwise, all references to the “Issuer” shall include the Issuer and the Subsidiaries collectively (it being agreed, however, that only the Issuer is making representations, warranties and covenants hereunder).

(f) Capitalization. The authorized, issued and outstanding capital stock of the Issuer is as set forth in the Prospectus and the Disclosure Package, as of the dates specified therein. The outstanding shares of capital stock of the Issuer have been duly authorized and validly issued and are fully paid and non-assessable, and have been issued in compliance with federal and state securities laws. As of September 30, 2012, there were 87,388,815 shares of Common Stock issued and outstanding and 7,300,043 shares of preferred stock, par value \$0.001 per share, of the Issuer issued and outstanding, which were comprised of 300,000 shares of Series B Preferred Stock, 2,000,000 shares of Series C Preferred Stock, 43 shares of Series D Preferred Stock, and 5,000,000 shares of Series G Preferred Stock (collectively, the “**Preferred Stock**”). As of the Effective Date, there were no shares of Series A Preferred Stock, Series E Preferred Stock and Series F Preferred Stock outstanding. As of the Effective Date, [—] shares of Common Stock were issuable upon conversion of the Preferred Stock and [—] shares of Common Stock were issuable upon the exercise of options and warrants exercisable for Common Stock. None of the outstanding shares of capital stock was issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase securities of the Issuer. There are no authorized or outstanding shares of capital stock, options, warrants, preemptive rights, rights of first refusal or other rights to purchase, or equity or debt securities convertible into or exchangeable or exercisable for, any capital stock of the Issuer other than those described above or accurately described in the Prospectus and the Disclosure Package.

(g) Description and Authorization of Securities. The information set forth under the caption “Capitalization” in the Prospectus and the Disclosure Package is true and correct in all material respects. The Shares and the Warrants conform to the description thereof contained in the Prospectus and the Disclosure Package. The form of certificate for the Shares conforms to the requirements of the Delaware General Corporation Law. The Shares to be issued and sold by the Issuer have been duly authorized and when issued and paid for as contemplated herein will be validly issued, fully paid and non-assessable. The Warrants and Placement Agent Warrants have been duly authorized and, upon exercise of the Warrants and Placement Agent Warrants issued by the Issuer in accordance with their terms, the Warrant Shares will be validly issued, fully paid and non-assessable. No holder of the Shares, the Warrants, the Placement Agent Warrants or the Warrant Shares will be subject to personal liability by reason of being such a holder. No preemptive or similar rights of any security holder of the Issuer exist with respect to any of the Shares, the Warrants, the Placement Agent Warrants or the Warrant Shares or the sale and issuance thereof. Neither the filing of the Registration Statement nor the offering or sale of the Shares and Warrants (or the exercise of the Warrants or Placement Agent Warrants for the Warrant Shares) as contemplated by this Agreement gives rise to any rights for or relating to the registration of any shares of capital stock of the Issuer.

(h) Financial Statements. The consolidated financial statements of the Issuer and its Subsidiaries, together with the related notes and schedules as set forth or incorporated by reference in the Registration Statement, the Prospectus and the Disclosure Package, accurately



and fairly present in all material respects the consolidated financial position and the results of operations and cash flows of the Issuer and its Subsidiaries, at the indicated dates and for the indicated periods. Such financial statements and related schedules have been prepared in accordance with U.S. generally accepted accounting principles, consistently applied throughout the periods involved, and all adjustments necessary for an accurate and fair presentation of results for such periods have been made and disclosed therein. The Issuer is not contemplating a restatement of any of the financial statements incorporated by reference into the Registration Statement, the Prospectus and the Disclosure Package, and is not aware of any facts that could reasonably be expected to result in a restatement of any of such financial statements. Notwithstanding the execution of the letter agreement, dated October 17, 2012, by and between the Issuer and Vasquez & Company LLP (the “**Vasquez Letter**”), the financial statements (together with the related notes and schedules) included or incorporated by reference in the Registration Statement, the Prospectus and the Disclosure Package comply in all material respects with the Securities Act, the Exchange Act, and the Rules and Regulations and the rules and regulations under the Exchange Act. No other financial statements or supporting schedules or exhibits are required by the Securities Act or the Rules and Regulations to be described, or included or incorporated by reference in the Registration Statement, the Prospectus or the Disclosure Package.

(i) Independent Accountants. Mayer Hoffman McCann P.C., which certified certain of the financial statements and supporting schedules thereto included in the Registration Statement, the Prospectus and the Disclosure Package, is an independent registered public accounting firm as required by the Securities Act, the Rules and Regulations, and the applicable rules of the Public Company Accounting Oversight Board. Vasquez & Company, LLP (and together with Mayer Hoffman McCann P.C., the “**Accountants**”), which certified certain of the financial statements and supporting schedules thereto included in the Registration Statement, the Prospectus and the Disclosure Package, was an independent registered public accounting firm as required by the Securities Act, the Rules and Regulations, and the applicable rules of the Public Company Accounting Oversight Board at the time it certified such financial statements and supporting schedules thereto. The Issuer has had no material disagreements with the Accountants during the two (2) years preceding the Closing Date that were not satisfied in a manner mutually satisfactory to the Accountants and the Issuer.

(j) Internal Accounting Controls. The Issuer maintains a system of internal accounting controls sufficient to provide assurances that (i) transactions are executed in accordance with management’s general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with U.S. generally accepted accounting principles and to maintain accountability for assets, (iii) access to assets is permitted only in accordance with management’s general or specific authorization, and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Issuer’s Form 10-K for the fiscal year ended December 31, 2011 contained an unqualified opinion of the Issuer’s independent registered public accountants that the Issuer and its Subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011. Since December 31, 2011, there has been (i) no material weakness in the Issuer’s internal control over financial reporting (whether or not remediated) and (ii) no change in the Issuer’s internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Issuer’s internal control over financial reporting.

(k) Disclosure Controls and Procedures. The Issuer has established and maintains “disclosure controls and procedures” (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) and such disclosure controls and procedures are designed to ensure that all information (both financial and non-financial) required to be disclosed by the Issuer in the reports that it will file or furnish under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and regulations of the Commission promulgated under the Exchange Act, and that all such information is accumulated and communicated to the Issuer’s management as appropriate to allow timely decisions regarding required disclosure and to make the certifications of the principal executive officer and principal financial officer of the Issuer required under the Exchange Act with respect to such reports.

(l) Accounting Policies. The section entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operation—Critical Accounting Policies and Estimates” in the Registration Statement, the Prospectus and the Disclosure Package accurately and fairly describes in all material respects accounting policies which are the most important in the portrayal of the financial condition and results of operations of the Issuer and which require management’s most difficult, subjective or complex judgments.

(m) Absence of Defaults and Conflicts. The Issuer and the Subsidiaries are not (i) in violation of their respective charters or by-laws or (ii) in default in the performance or observance of any obligation, agreement, covenant or condition contained in any indenture, mortgage, loan or credit agreement, note, lease or other material agreement or instrument to which the Issuer or the Subsidiaries are a party or by which they are bound, or to which any of the property or assets of the Issuer or the Subsidiaries are subject (collectively, “**Agreements and Instruments**”). The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated herein (including the issuance and sale of the Shares, Warrants and Placement Agent Warrants and the use of the proceeds from the sale of the Shares, Warrants and Placement Agent Warrants as described in the Prospectus under the caption “Use of Proceeds”) and compliance by the Issuer with its obligations hereunder have been duly authorized by all necessary corporate action by the Issuer and do not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Issuer or the Subsidiaries pursuant to, the Agreements and Instruments, nor will such action result in any violation of the provisions of the charter or by-laws of the Issuer or the Subsidiaries, any applicable law, statute, rule, regulation, judgment, order, writ or decree of any government, government instrumentality or court, domestic or foreign, having jurisdiction over the Issuer or the Subsidiaries, or any of their respective assets, properties or operations.

(n) Absence of Legal Proceedings. Except as set forth in the Registration Statement, the Prospectus and the Disclosure Package, there are no legal or governmental proceedings pending or, to the Issuer’s knowledge, threatened, to which the Issuer or the Subsidiaries are a party or to which any of the properties of the Issuer or the Subsidiaries is subject. There are no federal, state, local or foreign laws, statutes, ordinances, rules or regulations applicable to the business or proposed business of the Issuer or the Subsidiaries that are required to be described in the Registration Statement or the Disclosure Package by the Securities Act or the Rules and Regulations that are not described as required.

(o) Description of Material Agreements; No Termination. There are no contracts, agreements or other documents that are required to be described in the Registration Statement or the Disclosure Package or to be filed as exhibits to the Registration Statement by the Securities Act or the Rules and Regulations that are not described or filed as required. The Issuer has neither sent nor received any notice indicating the termination of or intention to terminate any of the contracts or agreements referred to or described in the Registration Statement, the Prospectus or the Disclosure Package, or filed as exhibits to the Registration Statement or to any document incorporated by reference into the Registration Statement, and no such termination has been threatened by the Issuer or, to the Issuer's knowledge, any other party to any such contract or agreement.

(p) Compliance with Applicable Laws and Licensing Requirements. The Issuer currently complies, and at all times has complied, in all material respects with federal, state, local and foreign laws, statutes, ordinances, rules, regulations, decrees, orders and Governmental Licenses (as defined in Section 3(s)) (collectively, "**Laws**") applicable to its business, including, without limitation, (i) the Federal Food, Drug and Cosmetic Act of 1938, as amended (the "**FD&C Act**") and other federal, state, local and foreign Laws that apply to cosmetics, pharmaceuticals, biologics, biohazardous substances or materials, or clinical trials, and (ii) the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substance Control Act and other federal, state, local and foreign Laws applicable to hazardous or regulated substances and radioactive or biologic materials, except where the failure to comply could not, singularly or in the aggregate, be reasonably expected to have a Material Adverse Effect. The Issuer has not received any notification asserting, nor does it have knowledge of, any present or past failure to comply in any material respect with, or any violation of, any such Laws.

(q) Absence of Further Approvals. Each approval, consent, order, authorization, designation, declaration or filing by or with any regulatory, administrative or other governmental body necessary in connection with the execution and delivery by the Issuer of this Agreement and the performance of the Issuer of the transactions herein contemplated has been obtained or made and is in full force and effect, except (i) such additional steps as may be required by the Commission or FINRA, or (ii) such additional steps as may be necessary to qualify the Shares, Warrants and Placement Agent Warrants for public offering by the Placement Agent under state securities or Blue Sky laws.

(r) Possession of Intellectual Property. The Issuer owns, possesses or has valid, binding and enforceable rights to use the Issuer Intellectual Property (as defined below). Except as described in the Prospectus and the Disclosure Package, (i) the Issuer has not received any written notice, nor does the Issuer have knowledge, of any infringement by the Issuer with respect to any Intellectual Property (as defined below) of any third party, (ii) the development and commercialization of the products or product candidates of the Issuer described in the Prospectus and the Disclosure Package do not, to the Issuer's knowledge, infringe any issued patent claim of any third party, (iii) the Issuer is not obligated to pay a royalty, grant a license or provide other consideration to any third party in connection with the Issuer Intellectual Property, (iv) no third party has any ownership rights in or to any Issuer Intellectual Property, except such Issuer Intellectual Property that is licensed to the Issuer, (v) all patents and patent applications owned by the Issuer have been duly and properly filed, (vi) the Issuer is not aware of any material information required to be disclosed to the United States Patent and Trademark Office (the "**PTO**") that was not disclosed to the PTO, and

(vii) the Issuer is not aware of any facts which would preclude the Issuer from having clear title to the Issuer Intellectual Property. For purposes of this Agreement, “**Intellectual Property**” means patents, patent rights, trademarks, servicemarks, trade dress rights, copyrights, trade names and domain names, and all registrations and applications for each of the foregoing, trade secrets, know-how (including other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), inventions and technology, and “**Issuer Intellectual Property**” means Intellectual Property that is reasonably necessary or used in any material respect for the business of the Issuer as currently conducted or, to the extent such Intellectual Property has been developed or created by the Issuer, as described in the Prospectus and the Disclosure Package.

(s) Possession of Licenses and Permits. The Issuer possesses all certificates, authorizations, registrations, permits, licenses, approvals and consents (collectively, “**Governmental Licenses**”) issued by the appropriate federal, state, local or foreign regulatory agencies or bodies necessary for the business of the Issuer as described in the Prospectus and the Disclosure Package, including without limitation, all such certificates, authorizations, registrations, permits, licenses, approvals and consents required by the United States Food and Drug Administration (the “**FDA**”), the United States Drug Enforcement Administration or any other federal, state, local or foreign agencies or bodies engaged in the regulation of cosmetics, pharmaceuticals, biologics, biohazardous substances or materials, or clinical trials, except for any such Governmental Licenses, as to which the failure to possess would not reasonably be expected to have a Material Adverse Effect. The Issuer is in compliance with the terms and conditions of all such Governmental Licenses and all of the Governmental Licenses are valid and in full force and effect. The Issuer has not received any written notice of proceedings relating to the revocation or modification of any such Governmental Licenses. To the extent required by applicable laws and regulations of the FDA, the Issuer has submitted to the FDA an Investigational New Drug Application or amendment or supplement thereto for each clinical trial it has conducted or sponsored or is conducting or sponsoring, all such submissions were in compliance in all material respects with applicable laws and rules and regulations when submitted and no deficiencies have been asserted by the FDA with respect to any such submissions.

(t) Clinical Trials and Preclinical Studies. The clinical, pre-clinical and other studies, tests and research conducted by or on behalf of or sponsored by the Issuer and intended to be submitted to regulatory authorities and to serve as a basis for approval are, and at all times have been, to the extent applicable, conducted in accordance with the FD&C Act, and the regulations promulgated thereunder, FDA regulations governing clinical studies, current Good Laboratory Practices and Good Clinical Practices, the protection of human subjects and applicable institutional review board and independent ethics committee requirements, as well as other applicable federal, state, local and foreign Laws and consistent with current clinical and scientific research standards and procedures, except for such non-compliance as could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The descriptions in the Registration Statement, the Prospectus or the Disclosure Package, as applicable, of the results of such studies, tests and research are accurate and complete in all material respects and accurately and fairly present the data derived from such studies, tests and research, and the Issuer has no knowledge of any other studies, tests or research the results of which are inconsistent with or otherwise call into question the results described or referred to in the Registration Statement, the Prospectus and the Disclosure Package. The Issuer has not notified the FDA of any adverse reactions with

respect to any clinical or pre-clinical studies, tests or research that are described in the Prospectus and the Disclosure Package or the results of which are referred to in the Prospectus and the Disclosure Package, and the Issuer has not received any notices or other correspondence from the FDA or any other governmental agency with respect to any clinical or pre-clinical studies, tests or research that are described in the Prospectus and the Disclosure Package or the results of which are referred to in Prospectus and the Disclosure Package, nor does the Issuer have knowledge of any facts or circumstances, which would reasonably be expected to result in any action to place a clinical hold order on or otherwise result in the termination, suspension or material modification of such studies, tests or research, or to otherwise require the Issuer to engage in any remedial activities with respect to such studies, test or research, or to threaten to impose or actually impose any fines or other disciplinary actions, except where such adverse reactions, clinical holds, terminations, suspensions or material modifications could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(u) Manufacturing of Products. All the operations of the Issuer and, to the knowledge of the Issuer, all of the manufacturing facilities and operations of the Issuer's suppliers of product candidates and the components thereof manufactured in or imported into the United States, are in compliance in all material respects with applicable FDA rules and regulations, including current Good Manufacturing Practices and Good Tissue Practices, and meet sanitation standards set by the FD&C Act, and all of the operations of the Issuer and, to the knowledge of the Issuer, all of the manufacturing facilities and operations of the Issuer's suppliers of product candidates manufactured outside, or exported from, the United States, are in compliance in all material respects with applicable foreign regulatory requirements and standards.

(v) Title to Property. The Issuer does not own any real property. The Issuer has good and marketable title or ownership rights to all of the personal properties and other assets owned by it and reflected in the financial statements (or as described in the Prospectus and the Disclosure Package) described above, not subject to any lien, mortgage, pledge, charge or encumbrance of any kind except those that do not materially affect the value of such property and do not materially interfere with the current use of such properties or assets. The Issuer occupies its leased real properties under valid and binding leases conforming in all material respects to the description thereof set forth in the Prospectus and the Disclosure Package.

(w) Compliance with Environmental Laws. The Issuer is not in violation of any statute, rule, regulation, decree or order of any governmental agency or body or any court, domestic or foreign, relating to the use, disposal or release of hazardous chemicals, toxic substances or radioactive and biological materials or relating to the protection or restoration of the environment or human exposure to hazardous chemicals, toxic substances or radioactive and biological materials (collectively, "**Environmental Laws**") except where the failure to comply could not, singularly or in the aggregate, be reasonably expected to have a Material Adverse Effect. To the Issuer's knowledge, the Issuer neither owns nor operates any real property contaminated with any substance that is subject to any Environmental Laws, is not liable for any off-site disposal or contamination pursuant to any Environmental Laws, nor is it subject to any claim relating to any Environmental Laws. The Issuer is not aware of any pending investigation which might lead to such a claim.

(x) Payment of Taxes. The Issuer has filed all material Federal, State, local and foreign tax returns which have been required to be filed, subject to permitted extensions, and have paid all taxes indicated by said returns and all assessments received by the Issuer to the extent that such taxes and assessments have become due and are not being contested in good faith. All tax liabilities have been adequately provided for in the financial statements of the Issuer, and the Issuer does not know of any actual or proposed additional material tax assessments. There are no transfer taxes or other similar fees or charges under Federal law or the laws of any state, or any political subdivision thereof, required to be paid in connection with the execution and delivery of this Agreement or the issuance by the Issuer or sale by the Issuer of the Shares.

(y) No Labor Dispute. No labor dispute with the employees of the Issuer exists or, to the Issuer's knowledge, is threatened or imminent, and the Issuer is not aware of any existing or imminent labor dispute by the employees of any of its principal suppliers, contractors or customers, that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(z) Insurance. The Issuer carries or is covered by insurance from financially sound insurers, in such amounts and covering such risks as, to the Issuer's knowledge, is adequate for the conduct of its business and the value of its properties and as is customary for companies engaged in the same or similar business and at the same or a similar stage of development. All policies of insurance insuring the Issuer or its business, assets, products, employees, officers and directors are in full force and effect, and the Issuer is in compliance with the terms of such policies in all material respects. The Issuer has no reason to believe that it will not be able to (i) renew its existing insurance coverage as and when such policies expire, or (ii) obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not have a Material Adverse Effect. There are no claims by the Issuer under any such policy or instrument as to which an insurance company is denying liability (or under which it has denied liability in the last three years) or defending under a reservation of rights clause.

(aa) ERISA Compliance. The Issuer is in compliance in all material respects with all presently applicable provisions of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder ("**ERISA**"). No "reportable event" (as defined in ERISA) has occurred with respect to any "pension plan" (as defined in ERISA) for which the Issuer would have any liability. The Issuer has not incurred and does not expect to incur liability under (i) Title IV of ERISA with respect to termination of, or withdrawal from, any "pension plan", or (ii) Section 412 or Section 4971 of the Internal Revenue Code of 1986, as amended, including the regulations and published interpretations thereunder (the "**Code**"). Each "pension plan" for which the Issuer would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified in all material respects and nothing has occurred, whether by action or by failure to act, which could reasonably be expected to cause the loss of such qualification.

(bb) FINRA Matters. To the Issuer's knowledge, neither the Issuer nor any of its "affiliates" (within the meaning of FINRA Conduct Rule 5220(b)(1)) directly or indirectly controls, is controlled by, or is under common control with, or is an "associated person" (within the meaning of Article I, Section 1(ee) of the By-laws of FINRA) of, any member firm of FINRA. To the Issuer's knowledge, no proceeds of the Offering (excluding compensation

or fees paid, or expenses reimbursed, to the Placement Agent) will be paid to any FINRA member, or any person or entity associated or affiliated with a member of FINRA. To the Issuer's knowledge, no person or entity to whom securities of the Issuer have been privately issued within the 180-day period prior to either: (i) the initial filing date of the Registration Statement, or (ii) the date hereof, has any relationship or affiliation or association with any member of FINRA.

(cc) Exchange Act Compliance and Registration. The Issuer is subject to and in compliance with the reporting requirements of Section 13 or Section 15(d) of the Exchange Act, and has filed all reports required to be filed pursuant to Section 13 or Section 15(d) of the Exchange Act for at least twelve (12) months prior to the initial filing date of the Registration Statement. The Common Stock is registered pursuant to Section 12(g) of the Exchange Act, and the Issuer has taken no action designed to, or reasonably likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act.

(dd) Trading on OTC QB. The Common Stock is traded on the Over-the-Counter Bulletin Board ("**OTC QB**") and the Issuer has taken no action designed to, or reasonably likely to have the effect of, suspending or terminating the trading of the Common Stock on the OTC QB. No consent, approval, authorization or order of, or filing with, the OTC QB is required to allow for the trading of the Shares and the Warrant Shares on the OTC QB.

(ee) Absence of Manipulation. Neither the Issuer, nor to the Issuer's knowledge, any of its current or former affiliates, has taken or authorized the taking of, directly or indirectly, any action designed to cause or result in, or which has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of the shares of Common Stock to facilitate the sale or resale of the Shares.

(ff) Investment Company Act. The Issuer is not, and after giving effect to the offering and sale of the Shares and the application of proceeds therefrom as described in the Prospectus and the Disclosure Package, will not be, an "investment company" within the meaning of such term under the Investment Company Act of 1940, and the rules and regulations of the Commission thereunder (collectively, the "**Investment Company Act**").

(gg) No Fees or Commissions. Except as described in the Prospectus and the Disclosure Package, the Issuer is not a party to any contract, agreement or understanding with any person that would give rise to a valid claim against the Issuer or the Placement Agent for a brokerage commission, finder's fee or like payment in connection with the execution, delivery and performance of this Agreement and the consummation of the Offering.

(hh) Compliance with the Sarbanes-Oxley Act. The Issuer is and has been in material compliance with all applicable provisions of the Sarbanes Oxley Act of 2002 (the "**Sarbanes-Oxley Act**"). The Issuer has no reasonable basis to believe that it will not continue to be in compliance with the Sarbanes-Oxley Act as in effect on the Closing Date (including, without limitation, the requirements of Section 404 thereof).

(ii) Compliance with the Dodd-Frank Act. The Issuer is and has been in material compliance with all applicable provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "**Dodd-Frank Act**").

(jj) No Loans to Officers or Directors. There are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees of indebtedness by the Issuer to or for the benefit of any of the officers or directors of the Issuer (or any entities controlled by officers or directors of the Issuer) or any of their respective family members. The Issuer has not directly or indirectly extended or maintained credit, arranged for the extension of credit, or renewed an extension of credit, in the form of a personal loan to or for any director or officer of the Issuer (or any entities controlled by officers or directors of the Issuer).

(kk) Compliance with Anti-Corruption Laws. No payments or inducements have been made or given, directly or indirectly, to any federal or local official or candidate for, any federal or state office in the United States or foreign offices by the Issuer or, to the knowledge of the Issuer, by any of its officers or directors (or any entities controlled by officers or directors of the Issuer), employees or agents or any other person in connection with any opportunity, contract, permit, certificate, consent, order, approval, waiver or other authorization relating to the business of the Issuer. Neither the Issuer, nor, to the knowledge of the Issuer, any director, officer, agent, employee or other person associated with or acting on behalf of the Issuer (including any entities controlled by officers or directors of the Issuer), (i) has used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity, (ii) made any direct or indirect unlawful payment to any government official or employee from corporate funds, (iii) violated or is in violation of any applicable provision of the Foreign Corrupt Practices Act of 1977, or (iv) made any bribe, unlawful rebate, payoff, influence payment, kickback or other unlawful payment in connection with the business of the Issuer.

(ll) Compliance with Anti-Money Laundering Laws. The operations of the Issuer are and have been conducted at all times in material compliance with all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable anti-money laundering statutes of jurisdictions in which the Issuer conducts business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the “**Anti-Money Laundering Laws**”), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Issuer with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Issuer, threatened.

(mm) Compliance with Sanctions.

(i) Neither the Issuer nor, to the Issuer’s knowledge, any director, officer, employee, agent, affiliate or representative of the Issuer, is an individual or entity that is, or is owned or controlled by a person that is (1) the subject of any sanctions administered or enforced by the United States Department of Treasury’s Office of Foreign Assets Control (collectively, “**Sanctions**”), or (2) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, Burma/Myanmar, Cuba, Iran, North Korea, Sudan and Syria).

(ii) The Issuer will not, directly or indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any



subsidiary, joint venture partner or other person (1) to knowingly fund or facilitate any activities or business of or with any person or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions, or (2) in any other manner that knowingly will result in a violation of Sanctions by any person (including any person participating in the offering, whether as underwriter, advisor, investor or otherwise).

(iii) To the Issuer's knowledge, the Issuer has not engaged in and will not engage in any dealings or transactions with any person, or in any country or territory, that at the time of the dealing or transaction was or will be the subject of Sanctions.

(nn) Related Party Transactions. No relationship, direct or indirect, exists between or among the Issuer, on the one hand, and the employees, officers, directors, stockholders, customers or suppliers of the Issuer (including any entities controlled by officers or directors of the Issuer), on the other hand, that is required by the Rules and Regulations to be described in the Registration Statement, the Prospectus or the Disclosure Package which is not so described.

(oo) Dividends. All dividends paid or accrued by the Issuer prior to the Effective Date have been paid or accrued, as applicable, in accordance with applicable Law, including the Delaware General Corporation Law and the California General Corporation Law except where the failure to do so would not, singularly or in the aggregate, have a Material Adverse Effect. There is no claim pending, or to the Issuer's knowledge threatened, which seeks to challenge the amount or validity of any dividend previously accrued or paid by the Issuer. The obligation of the Issuer to pay or accrue dividends on the Series D Preferred Stock and the Series G Preferred Stock has been effectively waived pursuant to a Waiver Agreement, a copy of which is attached as an exhibit to the Registration Statement. Following the execution of the Waiver Agreement, the Issuer is not obligated to pay or accrue any dividends on any of the shares of Preferred Stock. All dividends required to be accrued or paid on any shares of Preferred Stock have been accrued or paid prior to the Applicable Time.

(pp) No Integration of Securities Offerings. The Issuer has not, prior to the date hereof, made any offer or sale of any securities which could be "integrated" for purposes of the Securities Act or the Rules and Regulations with the offer and sale of the Shares, Warrants and Placement Agent Warrants. Except as disclosed in the Prospectus and the Disclosure Package and for issuance and exercise of equity-based compensation awards granted to the Issuer's officers, directors, employees or consultants in the ordinary course of business, the Issuer has not sold or issued any security during the six-month period preceding the date of the Prospectus, including but not limited to any sales pursuant to Rule 144A or Regulation D or Regulation S under the Securities Act.

(qq) Industry and Market Data. The statistical, industry-related and market-related data included in the Registration Statement, the Prospectus and the Disclosure Package are based on or derived from sources which the Issuer reasonably and in good faith believes are reliable and accurate.

(rr) Officer's Certificates. Any certificate signed by any officer of the Issuer and delivered to the Placement Agent or counsel for the Placement Agent in connection with the offering of the Shares contemplated hereby shall be deemed a representation and warranty by

the Issuer to the Placement Agent and shall be deemed to be a part of this Section 3 and incorporated herein by this reference.

4) Purchase and Sale of Shares and Warrants.

(a) The Shares are being sold to the Purchasers at a price of \$[•] per share. Purchasers will receive a Warrant to purchase one Warrant Share for every two shares of Common Stock that they purchase in the Offering. No additional consideration is being paid for the issuance of the Warrants being issued in connection with the Shares. The purchases of the Shares by the Purchasers shall be evidenced by the execution of Subscription Agreements by each of the Purchasers and the Issuer. The issuance of the Warrants to the Purchasers shall be evidenced by the delivery of Warrants to each of the Purchasers by the Issuer.

(b) Prior to or concurrently with the execution and delivery of this Agreement, the Issuer, the Placement Agent and Bank of New York Mellon, as escrow agent (the “**Escrow Agent**”), shall enter into an escrow agreement (the “**Escrow Agreement**”), pursuant to which an escrow account (the “**Escrow Account**”) will be established for the benefit of the Issuer and the Purchasers. Prior to the Closing Date, each Purchaser shall deposit into the Escrow Account an amount equal to the product of (x) the number of Shares such Purchaser has agreed to purchase pursuant to the Subscription Agreement, and (y) the purchase price per Share set forth in the Subscription Agreement (the “**Purchase Amount**”). The aggregate of the Purchase Amounts paid by the Purchasers pursuant to the Subscription Agreements is referred to herein as the “**Escrow Funds**”.

(c) The time and date of the closing and delivery of the documents required to be delivered to the Placement Agent hereunder shall be at 9:00 a.m., New York City time, on [—], 2012 (the “**Closing Date**”), at the office of Stradling Yocca Carlson & Rauth, 660 Newport Center Drive, Suite 1600, Newport Beach, California 92660, or at such other time or on such other date as may be agreed upon in writing by the Issuer and the Placement Agent, provided, however, that in no event shall the Closing Date be prior to the date on which the Escrow Agent shall have received all of the Escrow Funds.

(d) On the Closing Date, the Escrow Agent will disburse the Escrow Funds to the Issuer and the Placement Agent as provided in the Escrow Agreement and the Issuer shall cause its transfer agent to deliver the Shares purchased by such Purchasers and shall deliver (or cause to be delivered) the Warrants purchased by such Purchasers. The Shares shall be delivered through the facilities of The Depository Trust Company, to such persons, and shall be registered in such name or names and shall be in such denominations, as the Placement Agent may request at least one business day before the Closing Date. For purposes of this Agreement, “**business day**” means a day on which banks in The City of New York are open for business and are not permitted by law or executive order to be closed. The cost of original issue tax stamps and other transfer taxes, if any, in connection with the issuance and delivery of the Shares and the Warrants by the Issuer to the respective Purchasers shall be borne by the Issuer.

(e) No Shares which the Issuer has agreed to sell pursuant to this Agreement and the Subscription Agreements shall be deemed to have been purchased and paid for, or sold by the Issuer, until such Shares (and the related Warrants) shall have been delivered to the Purchaser thereof against payment by such Purchaser. If the Issuer shall default in its

obligations to deliver the Shares and the Warrants to a Purchaser (under this Agreement or pursuant to the Escrow Agreement, or otherwise) whose offer it has accepted, the Issuer shall indemnify and hold the Placement Agent harmless against any loss, claim, damage or expense arising from or as a result of such default by the Issuer in accordance with the procedures set forth in Section 8 hereof.

5) Covenants of the Issuer. The Issuer covenants to the Placement Agent as follows:

(a) Filing of Securities Act and Exchange Act Documents. The Issuer will give the Placement Agent notice of its intention to prepare or file any amendment to the Registration Statement, or any amendment or supplement to any Preliminary Prospectus (including any Preliminary Prospectus included in the Registration Statement at the time it became effective) or to the Prospectus, and will furnish the Placement Agent with copies of any such documents a reasonable amount of time prior to such proposed filing or use, as the case may be, and will not file or use any such document to which the Placement Agent or counsel for the Placement Agent shall timely object. Without limiting the foregoing, the Issuer will prepare and timely file with the Commission under Rule 424(b) of the Rules and Regulations (without reliance on Rule 424(b)(8)) a Prospectus in a form approved by the Placement Agent containing information previously omitted at the time of effectiveness of the Registration Statement in reliance on Rule 430A of the Rules and Regulations and will otherwise comply with the requirements of Rule 430A. The Issuer has previously provided the Placement Agent with (or made available to the Placement Agent) any documents that it has filed pursuant to the Exchange Act (including pursuant to the rules and regulations of the Commission under the Exchange Act) prior to the Applicable Time. The Issuer will give the Placement Agent notice of its intention to prepare or file any documents pursuant to the Exchange Act (including pursuant to the rules and regulations of the Commission under the Exchange Act) from the Applicable Time through the Closing Date and will furnish the Placement Agent with copies of any such documents a reasonable amount of time prior to such proposed filing, as the case may be, and will not file or use any such document to which the Placement Agent or counsel for the Placement Agent shall reasonably timely object. In addition, without limiting the foregoing, during any period when the Prospectus is required to be delivered under the Securities Act, the Issuer will file all documents required to be filed with the Commission pursuant to the Exchange Act (including pursuant to the rules and regulations of the Commission under the Exchange Act) within the time periods required thereby.

(b) Compliance with Commission Requests. The Issuer will advise the Placement Agent promptly (i) of receipt of any comments from the Commission relating to the Registration Statement, the Prospectus, or otherwise relating to the Issuer or the offering of the Securities, (ii) of any request of the Commission for amendment of the Registration Statement, or amendment or supplement to the Prospectus or any Preliminary Prospectus, or for any additional information,

(c) Notification of Commission Proceedings. The Issuer will advise the Placement Agent promptly (i) of any order preventing or suspending the use of the Prospectus or any Preliminary Prospectus, or of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes or of any examination pursuant to Section 8(e) of the Securities Act concerning the Registration Statement, or (ii) if the Issuer becomes the subject of a proceeding

under Section 8A of the Securities Act in connection with the offering of the Securities. The Issuer will use its “best efforts” to prevent the issuance of any stop order and, if any stop order is issued, to obtain the lifting thereof at the earliest possible moment.

(d) Delivery of Registration Statements. To the extent not available on the Commission’s EDGAR system or any successor system (unless reasonably requested by the Placement Agent), the Issuer has delivered or will deliver to the Placement Agent, without charge, conformed copies of the Registration Statement and of each amendment thereto (including exhibits filed therewith) and conformed copies of all consents and certificates of experts. The copies of the Registration Statement and each amendment thereto furnished to the Placement Agent will be identical to the electronically transmitted copies thereof filed with the Commission.

(e) Delivery of Prospectuses. The Issuer has delivered to the Placement Agent, without charge, as many copies of each Preliminary Prospectus as the Placement Agent may reasonably request, and the Issuer hereby consents to the use of such copies for purposes permitted by the Securities Act. The Issuer will furnish to the Placement Agent, without charge, during the period when the Prospectus is required to be delivered under the Securities Act, such number of copies of the Prospectus (as amended or supplemented) as the Placement Agent may reasonably request. The Prospectus and any amendments or supplements thereto furnished to the Placement Agent will be identical to the electronically transmitted copies thereof filed with the Commission.

(f) Continued Compliance with Securities Laws.

(i) The Issuer will comply with the Securities Act and the Rules and Regulations so as to permit the completion of the distribution of the Shares and Warrants as contemplated in this Agreement and in the Prospectus (as amended or supplemented).

(ii) If, in the judgment of the Issuer or in the reasonable opinion of the Placement Agent, it becomes necessary to amend or supplement the Prospectus in order to make the statements therein (taken together with the Issuer Free Writing Prospectuses and other documents listed in Schedule I(a) hereto), in the light of the circumstances existing at such time, not misleading, or any event shall occur as a result of which, the information in the Prospectus (taken together with the Issuer Free Writing Prospectuses and other documents listed in Schedule I(a) hereto) conflicts with information contained in the Registration Statement then on file, or, if it is necessary at any time to amend or supplement the Prospectus (taken together with the Issuer Free Writing Prospectuses and other documents listed in Schedule I(a) hereto) to comply with any Laws, the Issuer promptly will prepare and file with the Commission an appropriate amendment to the Registration Statement, or amendment or supplement to the Prospectus, so that the Prospectus as so amended or supplemented will not, in the light of the circumstances at such time, be misleading, or so that Prospectus will comply with the applicable Laws and the Issuer will furnish to the Placement Agent such number of copies of the Prospectus (as amended or supplemented) as the Placement Agent may reasonably request.

(iii) If during any period in which the Prospectus is required by law to be delivered by the Placement Agent or by a dealer (or in lieu thereof the notice referred to in Rule 173 of the Rules and Regulations), any event shall occur as a result of which, in the judgment of the Issuer or in the reasonable opinion of the Placement Agent, it becomes necessary to amend or supplement the Prospectus in order to make the statements therein, in the light of the circumstances existing at the time the Prospectus (or in lieu thereof the notice referred to in Rule 173 of the Rules and Regulations) is delivered to a purchaser, not misleading, or, if it is necessary at any time to amend or supplement the Prospectus to comply with any Laws, the Issuer promptly will prepare and file with the Commission an appropriate amendment to the Registration Statement or supplement to the Prospectus so that the Prospectus as so amended or supplemented will not, in the light of the circumstances when it (or in lieu thereof the notice referred to in Rule 173 of the Rules and Regulations) is so delivered, be misleading, or so that the Prospectus will comply with the applicable Laws and the Issuer will furnish to the Placement Agent such number of copies of such Prospectus (as amended or supplemented) as the Placement Agent may reasonably request.

(iv) If at any time following the issuance of an Issuer Free Writing Prospectus any event occurs as a result of which, in the judgment of the Issuer or in the reasonable opinion of the Placement Agent, it becomes necessary to amend or supplement the Issuer Free Writing Prospectus in order to make the statements therein, in the light of the circumstances existing at such time, not misleading, or any event shall occur as a result of which, the information in the Issuer Free Writing Prospectus conflicts with information contained in the Registration Statement or the Prospectus, or, if it is necessary at any time to amend or supplement the Issuer Free Writing Prospectus to comply with any Laws, the Issuer promptly will prepare and file with the Commission an appropriate amendment or supplement to the Issuer Free Writing Prospectus so that the Issuer Free Writing Prospectus as so amended or supplemented will not, in the light of the circumstances at such time, be misleading, or so that the Issuer Free Writing Prospectus will comply with the applicable Laws and the Issuer will furnish to the Placement Agent such number of copies of such Issuer Free Writing Prospectus (as amended or supplemented) as the Placement Agent may reasonably request.

(g) **Issuer Free Writing Prospectuses.** The Issuer represents and agrees that, unless it obtains the prior consent of the Placement Agent, and the Placement Agent represents and agrees that, unless it obtains the prior consent of the Issuer, it has not made and will not make any offer relating to the Shares and Warrants that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a Free Writing Prospectus, required to be filed with the Commission. Any such Issuer Free Writing Prospectus or Free Writing Prospectus consented to by the Placement Agent or by the Issuer and the Placement Agent, as the case may be, is hereinafter referred to as a “**Permitted Free Writing Prospectus**.” The prior written consent of the Issuer and the Placement Agent shall be deemed to have been given in respect of the Free Writing Prospectuses, if any, specified in Schedule I(a) hereto, each of which shall therefore be considered a Permitted Free Writing Prospectus. The Issuer represents that it has treated and agrees that it will treat each Permitted Free Writing Prospectus as an Issuer Free Writing Prospectus and has complied and will comply with the requirements of Rule 433 of the Rules and Regulations.

(h) No Market Manipulation. The Issuer will not take, and will not permit any of its affiliates that it controls to take, directly or indirectly, any action designed to cause or result in, or that has constituted or might reasonably be expected to constitute, the stabilization or manipulation of the price of any securities of the Issuer.

(i) Blue Sky Qualifications. The Issuer will cooperate with the Placement Agent in registering or qualifying the Securities for sale under (or obtaining exemptions from the application of) the securities laws of such jurisdictions as the Placement Agent may have reasonably requested, and will make such applications, file such documents, and furnish such information as may be reasonably required for that purpose, provided, however, that the Issuer shall not be required to qualify as a foreign corporation, to file a general consent to service of process in any jurisdiction where it is not now so qualified or required to file such a consent or to subject itself to taxation in any jurisdiction where it is not now subject. The Issuer will, from time to time, prepare and file such statements, reports, and other documents, as are or may be required to continue such registrations or qualifications in effect for so long a period as the Placement Agent may reasonably request for distribution of the Securities.

(j) Compliance with Rule 158. The Issuer will make generally available to its stockholders, as soon as it is practicable to do so, but in any event not later than 15 months after the Effective Date, an earnings statement, in reasonable detail, covering a period of at least 12 consecutive months beginning after the Effective Date, which earnings statement shall satisfy the requirements of Section 11(a) of the Securities Act and Rule 158 of the Rules and Regulations and will advise you in writing when such statement has been so made available.

(k) Restriction on Sale of Securities; Waiver and Release. For the period specified below in this Section 5(k) (the “**Lock-Up Period**”), the Issuer will not, directly or indirectly, without the written consent of the Placement Agent: (i) offer, pledge, announce the intention to sell, sell, contract to sell, grant any option, right or warrant to purchase, make any short sale or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into, exercisable or exchangeable for or that represent the right to receive Common Stock, (ii) enter into any swap or any other agreement that transfers, in whole or in part, any of the economic consequences of ownership of Common Stock, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise, or (iii) file with the Commission a registration statement under the Securities Act relating to the offering of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, or publicly disclose the intention to take any such action. The foregoing sentence shall not apply to (a) the offer and sale of the Shares to the Purchasers pursuant to the Subscription Agreements, (b) the issuance by the Issuer of shares of Common Stock upon the exercise of stock options or warrants or the conversion of securities outstanding on the date hereof that are described in the Prospectus and the Disclosure Package, (c) the grant by the Issuer of stock options, warrants or other stock-based awards (or the issuance of shares of Common Stock upon exercise or conversion thereof) to eligible participants pursuant to employee benefit or equity incentive plans of the Issuer described in the Prospectus and the Disclosure Package, provided, however, that, prior to the grant of any such stock options, warrants or other stock-based awards pursuant to this clause (c) that vest within the Lock-Up Period (as such may be extended as discussed below in this Section 5(k)), each recipient of such grant who is an officer or director of the Issuer (or an entity controlled by an officer or director of the Issuer, as applicable) shall sign and deliver a lock-up agreement substantially in the form of Exhibit C

hereto, or (d) the filing of a registration statement on Form S-8 or any successor form thereto with respect to the registration of securities to be offered under any employee benefit or equity incentive plans of the Issuer described in the Prospectus and the Disclosure Package to the Issuer's "employees" (as that term is used in Form S-8). The initial Lock-Up Period will commence on the date hereof and continue for 60 days after the date of the Prospectus or such earlier date that the Placement Agent consents to in writing. Notwithstanding the foregoing, if (i) during the last 17 days of the initial 60-day Lock-Up Period the Issuer releases earnings results or material news or a material event relating to the Issuer occurs, or (ii) prior to the expiration of the initial 60-day Lock-Up Period, the Issuer announces that it will release earnings results during the 16-day period beginning on the last day of the 60-day Lock-Up Period, then, in each case, the Lock-Up Period will be extended until the expiration of the 18-day period beginning on the date of release of the earnings results or the occurrence of the material news or material event. The Issuer shall promptly notify the Placement Agent of any earnings release, news or event that may give rise to an extension of the initial 60-day Lock-Up Period. In the event that the Placement Agent grants any release or waiver of any of the restrictions on transfer of the Common Stock (or any securities convertible into, exercisable or exchangeable for or that represent the right to receive Common Stock) set forth in this Section (which release or waiver will be communicated by the Placement Agent to the Issuer at least three business days before the effective date of the release or waiver), the Issuer will announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver.

(l) Lock-Up Agreements. The Issuer has caused each officer and director (and each entity controlled by an officer or director which holds shares of the Issuer's capital stock) to furnish to the Placement Agent, on or prior to the date of this Agreement, a lockup agreement in substantially the form attached hereto as Exhibit C (the "**Lockup Agreements**").

(m) Use of Proceeds. The Issuer shall apply the net proceeds of its sale of the Shares as described under the caption "Use of Proceeds" in the Prospectus and the Disclosure Package and shall report with the Commission with respect to the sale of the Shares and Warrants and the application of the proceeds therefrom to the extent required by the Rules and Regulations.

(n) Investment Company Act. The Issuer shall not invest, or otherwise use the proceeds received by the Issuer from its sale of the Shares and Warrants in such a manner as would require the Issuer to register as an investment company under the Investment Company Act.

(o) Transfer Agent. The Issuer will maintain a transfer agent and, if necessary under the jurisdiction of incorporation of the Issuer, a registrar for the Common Stock.

6) Payment of Expenses.

(a) Expenses. The Issuer will pay or cause to be paid (or reimburse if paid by the Placement Agent), whether or not the transactions contemplated by this Agreement are consummated or this Agreement is terminated, all (i) costs and expenses incident to the preparation, printing, filing and delivery of the Registration Statement (including financial statements and exhibits) as originally filed and of each amendment thereto, (ii) all costs and expenses incident to the preparation and delivery to the Placement Agent of this Agreement,

and such other documents as may be required in connection with the purchase, sale, issuance or delivery of the Shares and Warrants, (iii) all costs and expenses incident to preparation, issuance and delivery of the certificates for the Shares and Warrants to the Purchasers, including any stock or other transfer taxes and any stamp or other duties payable upon the sale, issuance or delivery of the Shares and Warrants to the Purchasers, (iv) the fees and disbursements of the Issuer's counsel, accountants and other advisors incurred in connection with the Offering, (v) all costs and expenses incident to the registration or qualification of the Securities under securities laws in accordance with the provisions of Section 5(i) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Placement Agent in connection therewith and in connection with the preparation and delivery of a Blue Sky Survey and any supplement thereto, (vi) all costs and expenses incident to the printing and delivery to the Placement Agent of copies of each Preliminary Prospectus, any Permitted Free Writing Prospectus and of the Prospectus (including any amendments or supplements to the foregoing) and any costs associated with electronic delivery of any of the foregoing by the Placement Agent to the Purchasers, (vii) the fees and expenses of any transfer agent or registrar for the Shares, (viii) the costs and expenses of the Issuer relating to investor presentations on any "road show" undertaken in connection with the marketing of the Shares and Warrants, including without limitation, any expenses advanced by the Placement Agent on the Issuer's behalf (which will promptly be reimbursed), (ix) the filing fees incident to the review by FINRA of the terms of the sale of the Shares and Warrants, and (x) the reasonable fees and disbursements of counsel to the Placement Agent incurred in connection with the Offering, not to exceed \$50,000; provided that, except to the extent otherwise provided in this Section 6(a), Section 8 and Section 11, the Placement Agent shall pay its own costs and expenses.

7) Conditions of Obligations of the Placement Agent. The respective obligations of the Placement Agent hereunder, and the Purchasers under the Subscription Agreements, are subject to the accuracy, when made and as of the Closing Date of the representations, warranties and covenants of the Issuer contained in Section 3, or in certificates of any officer of the Issuer delivered pursuant to this Agreement, and to the performance by the Issuer of its covenants and obligations hereunder and to the following additional conditions:

(a) Effectiveness of Registration Statement. The Registration Statement and all post-effective amendments thereto shall have become effective, any and all filings required by Rule 424(b) of the Rules and Regulations shall have been prepared and timely filed (which shall include any information previously omitted from the Registration Statement in reliance on Rule 430A of the Rules and Regulations), and any request of the Commission for additional information (to be included in the Registration Statement or otherwise) shall have been disclosed to the Placement Agent and complied with to their satisfaction. All material required to be filed by the Issuer pursuant to Rule 433(d) of the Rules and Regulations shall have been filed with the Commission within the applicable time period prescribed for such filing by Rule 433. No stop order suspending the effectiveness of the Registration Statement, as amended from time to time, shall have been issued and no proceedings for that purpose shall have been taken or, to the knowledge of the Issuer, shall be contemplated by the Commission. No stop order suspending or preventing the use of the Prospectus or any Issuer Free Writing Prospectus shall have been initiated or, to the knowledge of the Issuer, shall be contemplated by the Commission. All requests for additional information from the Commission shall have been complied with to the satisfaction of the Placement Agent. No injunction, restraining order, decree or judgment by any court of competent jurisdiction shall



have been issued as of the Closing Date, which would prevent or delay the issuance of the Shares.

(b) Opinion of Counsel for the Issuer. The Placement Agent shall have received, on the Closing Date, the opinion of DLA Piper, counsel for the Issuer, dated the Closing Date addressed to the Placement Agent in a form reasonably acceptable to counsel to the Placement Agent.

(c) Accountant's Comfort Letter. The Placement Agent shall have received, on each of the date hereof and the Closing Date, (i) a letter dated the date hereof and the Closing Date, in form and substance satisfactory to the Placement Agent, of Mayer Hoffman McCann P.C., with respect to the financial statements and schedules relating to the Issuer's fiscal year ended December 31, 2011, the fiscal quarter ended March 31, 2012, the fiscal quarter ended June 30, 2012 and the fiscal quarter ended September 30, 2012 incorporated by reference in the Registration Statement and the Prospectus, and (ii) a letter dated the date hereof and the Closing Date, in form and substance satisfactory to the Placement Agent, of Vasquez & Company LLC, with respect to the financial statements and schedules relating to the Issuer's fiscal year ended December 31, 2010 incorporated by reference in the Registration Statement and the Prospectus, with each such letter containing such statements and information as is ordinarily included in accountants' "comfort letters" to placement agents with respect to such financial statements and schedules according to Statement of Auditing Standards No. 72 and Statement of Auditing Standards No. 100 (or successor bulletins).

(d) Corporate Approvals. All corporate proceedings and other legal matters incident to (i) the authorization of this Agreement, the Subscription Agreements, the Escrow Agreement (and the other agreements and documents referred to herein), (ii) the issuance of the Shares, the Warrants and the Placement Agent Warrants (including the Warrant Shares to be issued upon exercise of the Warrants and the Placement Agent Warrants) hereunder, (iii) the authorization, form and validity of the Registration Statement, the Disclosure Package, each Issuer Free Writing Prospectus, if any, and the Prospectus, and (iv) the transactions contemplated by this Agreement shall be reasonably satisfactory in all material respects to counsel for the Placement Agent, and the Issuer shall have furnished to such counsel all documents and information that they may reasonably request to enable them to pass upon such matters.

(e) No Materially Adverse Changes to Business. Since the Effective Date and since the respective dates as of which information is provided in the Disclosure Package and the Prospectus, (i) the Issuer shall not have sustained any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, (ii) there shall not have occurred any Material Adverse Effect, and (iii) there shall not have been any change in the capitalization of the Issuer, the effect of which, in any such case described in clause (i), (ii) or (iii) hereof, is, in the judgment of the Placement Agent, so material and adverse as to make it, in the judgment of the Placement Agent, impracticable or inadvisable to market the Shares and Warrants on the terms and in the manner contemplated in the Disclosure Package or to enforce the Subscription Agreements relating to the sale of the Shares and Warrants.

(f) No Material Misstatement or Omission. The Placement Agent shall not have discovered and disclosed to the Issuer that the Registration Statement, the Disclosure

Package or the Prospectus (or any amendment or supplement thereto), contains an untrue statement of a fact which, in the opinion of counsel for the Placement Agent, is material or omits to state a fact which, in the opinion of such counsel, is material and is required to be stated therein or is necessary to make the statements therein not misleading.

(g) No Restrictions. No action shall have been taken and no Law shall have been enacted, adopted or issued by any governmental agency or body which would prevent the marketing, offer, sale or issuance of the Shares or that could have a Material Adverse Effect, and no injunction, restraining order, decree or judgment of any court of competent jurisdiction shall have been issued which would prevent the marketing, offer, sale or issuance of the Shares or that could have a Material Adverse Effect.

(h) No Material Adverse Events. Subsequent to the execution and delivery of this Agreement there shall not have occurred any of the following: (i) trading in securities generally on the New York Stock Exchange, Nasdaq Stock Market, the NYSE Amex or the OTCBB, or trading in any securities of the Issuer on any exchange or the OTCBB, shall have been suspended or materially limited, or minimum or maximum prices or maximum range for prices shall have been established on any such exchange or such market by the Commission, by such exchange or market, by FINRA, or by any other regulatory body or governmental authority having jurisdiction, (ii) a banking moratorium shall have been declared by Federal or state authorities or a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States, (iii) the United States shall have become engaged in hostilities, other than current hostilities, or the subject of an act of terrorism, or there shall have been an outbreak of or escalation in hostilities involving the United States, or there shall have been a declaration of a national emergency or war by the United States, or (iv) there shall have occurred such a material adverse change in general economic, political or financial conditions (or the effect of international conditions on the financial markets in the United States shall be such) as to make it, in the judgment of the Placement Agent, impracticable or inadvisable to proceed with the sale of the Shares on the terms set forth in this Agreement and as contemplated by the Disclosure Package and the Prospectus.

(i) Subscription Agreements. The Issuer shall have entered into Subscription Agreements with each of the Purchasers and such agreements shall be in full force and effect.

(j) Escrow Agreement. The Placement Agent and the Issuer shall have entered into the Escrow Agreement and such agreement shall be in full force and effect.

(k) Officers' Certificate. The Placement Agent shall have received on the Closing Date a certificate or certificates of the Issuer's Chief Executive Officer and Chief Financial Officer to the effect that, as of the Closing Date each of them severally represents as follows:

(i) The representations, warranties and covenants in Section 3 are true and correct with the same force and effect as though expressly made at and as of the Closing Date;

(ii) The Issuer has complied with all agreements and satisfied all conditions on its part to be performed or satisfied at or prior to the Closing Date;

(iii) The Registration Statement has been declared effective under the Securities Act and no stop order suspending the effectiveness of the Registration Statement has been issued, and no proceedings for such purpose have been taken or are, to such officer's knowledge, contemplated by the Commission;

(iv) There has been no Material Adverse Effect since the date of this Agreement or since the respective dates as of which information is given in the Disclosure Package or the Prospectus; and

(v) Such officer has carefully examined the Registration Statement and the Prospectus and, in such officer's opinion, as of the Effective Date and as of the Applicable Time, the statements contained in the Registration Statement and the Prospectus were true and correct, and such Registration Statement and Prospectus did not omit to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading, and since the Effective Date, no event has occurred which should have been set forth in a supplement to or an amendment of the Prospectus which has not been so set forth in such supplement or amendment.

(l) FINRA Clearance. The Placement Agent shall have received clearance from FINRA with respect to the amount of compensation payable to the Placement under this Agreement.

(m) Lockup Agreements. The Lockup Agreements described in Section 5(l) shall be in full force and effect.

(n) Additional Documents and Proceedings. On the Closing Date, counsel for the Placement Agent shall have been furnished with such documents and opinions as they may reasonably request for the purpose of enabling them to pass upon the issuance and sale of the Shares as herein contemplated, or in order to evidence the accuracy of any of the representations, warranties or covenants, or the fulfillment of any of the conditions, herein contained. On the Closing Date, all certificates and documents delivered, and all proceedings taken, by the Issuer in connection with the issuance and sale of the Shares as herein contemplated shall be reasonably satisfactory in form and substance to the Placement Agent and counsel for the Placement Agent.

#### 8) Indemnification.

(a) Indemnification of Placement Agent. The Issuer agrees to indemnify and hold harmless the Placement Agent, each of its directors, officers, employees, members, partners, representatives and agents, and each person, if any, who controls the Placement Agent within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act or who is an affiliate of the Placement Agent within the meaning of Rule 405 of the Rules and Regulations as follows:

(i) against any losses, claims, damages, liabilities or expenses to which the Placement Agent or any such controlling person may become subject under the Securities Act or otherwise, insofar as such losses, claims, damages, liabilities or expenses (or actions or proceedings in respect thereof) arise out of or are based upon (A) any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement, any

Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus (including any amendment or supplement to any of the foregoing), or any “issuer information” filed or required to be filed pursuant to Rule 433(d) of the Rules and Regulations, (B) the omission or alleged omission to state in any of the documents or information referred to in clause (A) a material fact required to be stated therein or necessary to make the statements therein not misleading, (C) any failure or alleged failure of the financial statements (together with the related notes and schedules) included or incorporated by reference in the Registration Statement, the Prospectus and the Disclosure Package to comply in all material respects with the Securities Act, the Exchange Act, and the Rules and Regulations and the rules and regulations under the Exchange Act or (D) any failure or alleged failure of the Issuer to perform its obligations hereunder or pursuant to any Laws applicable to the offering of the Shares and Warrants;

(ii) against any and all expenses (including the fees and disbursements of counsel chosen by the Placement Agent) reasonably incurred in connection with investigating or defending any such loss, claim, damage or liability, action or proceeding or in responding to a subpoena or governmental inquiry related to the offering of the Shares, whether or not the Placement Agent or controlling person is a party to any action or proceeding;

provided, however, that the Issuer will not be liable in any such case to the extent that any such loss, claim, damage, liability or expense arises out of or is based upon an untrue statement or alleged untrue statement, or omission or alleged omission, made in the Registration Statement, any Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus (including any amendment or supplement to any of the foregoing), or any “issuer information” filed or required to be filed pursuant to Rule 433(d) of the Rules and Regulations in reliance upon and in conformity with written information furnished to the Issuer by or through the Placement Agent specifically for use in the preparation thereof, such information being expressly limited to that information described in Section 13.

(b) Indemnification of Issuer. The Placement Agent will indemnify and hold harmless the Issuer, each of its officers and directors who signed the Registration Statement, and each person, if any, who controls the Issuer within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act as follows:

(i) against any losses, claims, damages or liabilities to which the Issuer or any such director, officer or controlling person may become subject under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) arise out of or are based upon (A) any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement, any Preliminary Prospectus, the Prospectus, or any Issuer Free Writing Prospectus (including any amendment or supplement to any of the foregoing), or (B) the omission or the alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances under which they were made; and

(ii) against any and all expenses reasonably incurred by the Issuer or any such director, officer or controlling person in connection with investigating or defending any such loss, claim, damage, liability, action or proceeding,

provided, however, that the Placement Agent will be liable in each case to the extent, and only to the extent, that such untrue statement or alleged untrue statement, or omission or alleged omission, has been made in the Registration Statement, any Preliminary Prospectus, the Prospectus, or any Issuer Free Writing Prospectus (including any amendment or supplement to any of the foregoing), in reliance upon and in conformity with written information furnished to the Issuer by or through the Placement Agent specifically for use in the preparation thereof, such information being expressly limited to that information described in Section 13, and provided, further, that the aggregate amount for which the Placement Agent may be liable pursuant to this Section 8(b) shall not exceed the aggregate amount of cash proceeds actually paid to the Placement Agent pursuant to Section 1(e) in connection with the sale of the Shares and Warrants by the Issuer hereunder (exclusive of any amounts reimbursed to the Placement Agent for its reasonable expenses pursuant to Section 1(e)).

(c) Actions Against Parties; Notification; Settlement. In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to this Section 8, such person (the “**indemnified party**”) shall promptly notify the person against whom such indemnity may be sought (the “**indemnifying party**”) in writing. No indemnification provided for in Section 8(a) or Section 8(b) shall be available to any party who shall fail to give notice as provided in this Section 8(c) if the party to whom notice was not given was unaware of the proceeding to which such notice would have related and was materially prejudiced by the failure to give such notice. In case any such proceeding shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party and shall pay as incurred the fees and disbursements of such counsel related to such proceeding. In any such proceeding, any indemnified party shall have the right to retain its own counsel at its own expense. Notwithstanding the foregoing, the indemnifying party shall pay as incurred the fees and expenses of the counsel retained by the indemnified party in the event (i) the indemnifying party and the indemnified party shall have mutually agreed to the retention of such counsel, (ii) representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them, or (iii) the indemnifying party shall have failed to assume the defense and employ counsel acceptable to the indemnified party within a reasonable period of time after notice of commencement of the action.

It is understood that the indemnifying party shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees and expenses of more than one separate firm for all such indemnified parties. Such firm shall be designated in writing by the Placement Agent in the case of parties indemnified pursuant to Section 8(a) and by the Issuer in the case of parties indemnified pursuant to Section 8(b). The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party from and against any loss or liability by reason of such settlement or judgment. In addition, the indemnifying party will not, without the prior written consent of the indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding of which indemnification may be sought hereunder (whether or not any

indemnified party is an actual or potential party to such claim, action or proceeding) unless such settlement, compromise or consent includes no admission of fault in addition to an unconditional release of each indemnified party from all liability arising out of such claim, action or proceeding.

9) Notices. All communications hereunder shall be in writing and, except as otherwise provided herein, will be mailed, delivered, or faxed and confirmed as follows:

if to the Placement Agent, to:	CRT Capital Group, LLC 262 Harbor Drive Stamford, CT 06902 Attention: John Calcagnini Fax: (310) 954-0706  and  Stradling Yocca Carlson & Rauth, P.C. 660 Newport Center Drive, Suite 1600 Newport Beach, CA 92660 Attention: Shivbir Grewal, Esq. Fax: (949) 823-5119
if to the Issuer, to:	International Stem Cell Corporation 5950 Priestly Drive Carlsbad, CA 92008 Attention: Chief Executive Officer Fax: (760) 476-0600  and  DLA Piper LLP (US) 4365 Executive Drive, Suite 1100 San Diego, CA 92121-2133 Attention: Douglas Rein, Esq. Fax: (858) 638-5043

Any party to this Agreement may change such address for notices and other communications by sending to the other parties to this Agreement notice of a new address for such purpose.

10) Termination. The obligations of the Placement Agent and the Purchasers hereunder and under the Subscription Agreements may be terminated by the Placement Agent, in its absolute discretion by notice given to the Issuer prior to the Closing Date if, prior to that time, any of the events described in Sections 7(e), 7(f), 7(g) or 7(h) have occurred, or if the Purchasers shall decline to purchase the Shares and Warrants for any reason permitted under this Agreement or the Subscription Agreements.

11) Reimbursement of the Placement Agent's Expenses. Notwithstanding anything to the contrary in this Agreement, if (a) this Agreement shall have been terminated pursuant to Section 10, (b) the Issuer shall fail to deliver (or cause to be delivered) the Shares or Warrants to the Purchasers

for any reason not permitted under this Agreement or the Subscription Agreements, or (c) the sale of the Shares and Warrants is not consummated because any condition to the obligations of the Purchasers or the Placement Agent set forth herein is not satisfied or because of the refusal, inability or failure on the part of the Issuer to perform any agreement herein or to satisfy any condition or to comply with the provisions hereof, then the Issuer shall reimburse the Placement Agent for the reasonable fees and expenses of the Placement Agent's counsel (not to exceed \$50,000) and for such other accountable out-of-pocket expenses (subject to receipt of reasonably acceptable documentation of such expenses) as shall have been reasonably incurred by the Placement Agent in connection with this Agreement, and promptly upon demand, the Issuer shall pay the full amount thereof to the Placement Agent.

12) Successors. This Agreement shall inure to the benefit of and be binding upon the Placement Agent, the Issuer and their respective successors. Nothing in this Agreement is intended or shall be construed to give any person, firm or corporation, other than the Placement Agent, the Issuer and their respective successors, and the controlling persons, officers and directors referred to herein, and their respective heirs and legal representatives, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained. Except as specifically contemplated by the Subscription Agreements, this Agreement and all conditions and provisions hereof are intended to be for the sole and exclusive benefit of the Placement Agent, the Issuer and their respective successors, and said controlling persons and officers and directors and their heirs and legal representatives, and for the benefit of no other person, firm or corporation.

13) Information Provided by Placement Agent. The Issuer and the Placement Agent acknowledge and agree that the only information furnished or to be furnished by the Placement Agent to the Issuer for inclusion in any Preliminary Prospectus, Prospectus, Issuer Free Writing Prospectus or the Registration Statement consists of the information contained in the final paragraph under the caption "Plan of Distribution."

14) Research Independence. The Issuer acknowledges that the Placement Agent's research analysts and research departments are required to be independent from their respective investment banking divisions and are subject to certain regulations and internal policies, and that such Placement Agent's research analysts may hold and make statements or investment recommendations and/or publish research reports with respect to the Issuer and/or the offering that differ from the views of its investment bankers. The Issuer hereby waives and releases, to the fullest extent permitted by law, any claims that the Issuer may have against the Placement Agent with respect to any conflict of interest that may arise from the fact that the views expressed by their independent research analysts and research departments may be different from or inconsistent with the views or advice communicated to the Issuer by such Placement Agent's investment banking divisions. The Issuer acknowledges that the Placement Agent is a full service securities firm and as such from time to time, subject to applicable securities laws, may effect transactions for its own account or the account of its customers and hold long or short position in debt or equity securities of the companies which may be the subject to the transactions contemplated by this Agreement.

15) No Fiduciary Duty. Notwithstanding any preexisting relationship, advisory or otherwise, between the parties or any oral representations or assurances previously or subsequently made by the Placement Agent, the Issuer acknowledges and agrees that:

(a) The Placement Agent has been retained solely to perform the services hereunder, and no fiduciary relationship between the Issuer and the Placement Agent has been

created in respect of any of the transactions contemplated hereunder (irrespective of whether the Placement Agent or its affiliates have advised or are advising the Issuer on other matters);

(b) the Placement Agent is not acting as an advisor to the Issuer in connection with the Offering or the sale of the Shares, including, without limitation, with respect to the public offering price of the Shares (or any related commissions or discounts), which shall be determined by discussions and arms-length negotiations between the Issuer and the Purchasers;

(c) the relationship between the Issuer and the Placement Agent is entirely and solely commercial, based on arms-length negotiations, and any duties and obligations that the Placement Agent may have to the Issuer shall be limited to those duties and obligations specifically stated herein; and

(d) it has been advised that the Placement Agent and its affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Issuer and the Placement Agent has no obligation to disclose such interest and transactions to the Issuer.

The Issuer hereby waives and releases, to the fullest extent permitted by law, any claims that the Issuer or its affiliates may have against the Placement Agent with respect to any breach or alleged breach of fiduciary duty. The Issuer hereby agrees that the Placement Agent shall have no liability (whether direct or indirect) to the Issuer or any of its affiliates in respect of such a fiduciary duty claim or to any person asserting a fiduciary duty claim on behalf of or in right of the Issuer, including stockholders, employees or creditors of the Issuer.

16) Governing Law and Jurisdiction. This Agreement shall be governed by and construed in accordance with the laws of the State of New York. No legal proceeding relating to or arising in connection with this Agreement may be commenced, prosecuted or continued in any court other than the courts of the State of New York located in the City and County of New York or in the United States District Court for the Southern District of New York, which courts shall have jurisdiction over the adjudication of such matters, and the Issuer and the Placement Agent each hereby consent to the jurisdiction of such courts and personal service with respect thereto and hereby irrevocably and unconditionally waive any objection to the laying of venue of any legal proceeding in such courts, and hereby further irrevocably and unconditionally waive and agree not to plead or claim in any such court that any such legal proceeding brought in any such court has been brought in an inconvenient forum.

17) Survival. The respective indemnities, covenants, agreements, representations, warranties and other statements of the Issuer and the Placement Agent, as set forth in this Agreement or made by them respectively, pursuant to this Agreement, shall remain in full force and effect, regardless of any investigation made by or on behalf of the Placement Agent, the Issuer, the Purchasers or any person controlling any of them and shall survive delivery of and payment for the Shares. Notwithstanding any termination or purported termination of this Agreement, including without limitation any termination pursuant to Section 10, the indemnity and contribution agreements contained in Section 8, and the covenants, representations, warranties set forth in this Agreement, shall not terminate and shall remain in full force and effect at all times.



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18) USA Patriot Act. In accordance with the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)), the Placement Agent is required to obtain, verify and record information that identifies its clients, including the Issuer, which information may include the name and address of its clients, as well as other information that will allow the Placement Agent to properly identify its clients.

19) Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

20) Headings. The Section headings herein are for convenience only and shall not affect the construction hereof.

21) Severability. The invalidity or unenforceability of any section, clause or provision of this Agreement shall not affect the validity or enforceability of any other section, clause or provision hereof. If any section, clause or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

22) Entire Agreement. This Agreement constitutes the entire agreement and understanding of the parties to this Agreement with respect to the subject matter hereof and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof.

23) Amendments; Waivers. This Agreement may only be amended or modified in writing, signed by each of the parties hereto, and no condition herein (express or implied) may be waived unless waived in writing by each party whom the condition is meant to benefit.

***[Remainder of Page Intentionally Left Blank]***

If the foregoing letter is in accordance with your understanding of our agreement, please sign and return to us a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement among the Issuer and the Placement Agent in accordance with its terms.

Very truly yours,  
  
INTERNATIONAL STEM CELL CORPORATION  
  
By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

The foregoing Placement Agent Agreement is hereby confirmed and accepted as of the date first written above.

CRT CAPITAL GROUP, LLC  
  
By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

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**SCHEDULE I(a)**



**Exhibit A**  
**INTERNATIONAL STEM CELL CORPORATION**  
**SUBSCRIPTION AGREEMENT**

November [—], 2012

International Stem Cell Corporation  
5950 Priestly Drive  
Carlsbad, CA 92008

The undersigned (the “**Purchaser**”) hereby confirms its agreement with International Stem Cell Corporation, a Delaware corporation (the “**Issuer**”), as follows:

1. This Subscription Agreement, including the Terms and Conditions for Purchase of Shares and Warrants attached hereto as Annex I (collectively, this “**Agreement**”) is made as of the date set forth below between the Issuer and the Purchaser. Capitalized terms utilized in this Agreement and not defined herein shall have the meanings ascribed to them in the Placement Agent Agreement (as defined on Annex I hereto).

2. The Issuer has authorized the sale and issuance to certain purchasers of up to an aggregate of (i) [—] shares (the “**Shares**”) of common stock, \$0.001 par value per share (the “**Common Stock**”), of the Issuer, and (ii) warrants (the “**Warrants**”) to purchase up to [—] shares of Common Stock. Purchasers of the Common Stock will receive a Warrant to purchase one share of Common Stock for every two shares of Common Stock that they purchase in the offering. The terms and conditions of the Warrants are set forth in a warrant agreement, the form of which is attached as Exhibit A hereto. The Shares issuable upon exercise of the Warrants are referred to herein as the “**Warrant Shares**”. The Shares, the Warrants and the Warrant Shares are collectively referred to herein as the “**Securities**”.

3. The Issuer and the Purchaser agree that the Purchaser will purchase from the Issuer and the Issuer will issue and sell to the Purchaser the Shares and Warrants set forth on the signature page below. The Shares are being purchased for a purchase price of \$[—] per Share (the “**Purchase Price**”). No additional consideration will be paid for the Warrants. The Shares shall be purchased pursuant to the Terms and Conditions for Purchase of Shares and Warrants attached hereto as Annex I and incorporated herein by this reference as if fully set forth herein.

4. The offering and sale of the Securities (the “**Offering**”) are being made pursuant to: (a) an effective Registration Statement on Form S-1 (Filing No. 333-184493) (the “**Registration Statement**”) filed by the Issuer with the Securities and Exchange Commission (the “**Commission**”), including the Preliminary Prospectus contained therein (the “**Preliminary Prospectus**”), and (b) if applicable, certain “free writing prospectuses” (as that term is defined in Rule 405 under the Securities Act of 1933, as amended (the “**Securities Act**”)), that have been or will be filed, if required, with the Commission and delivered to the Purchaser on or prior to the date hereof (each, an “**Issuer Free Writing Prospectus**”), containing certain supplemental information regarding the Securities, the terms of the Offering and the Issuer.

5. The Shares purchased by the Purchaser shall be delivered to the Purchaser by crediting the account of the Purchaser’s prime broker (as specified by the Purchaser on the signature page below) with the Depository Trust Company (“**DTC**”) through its Deposit/Withdrawal At Custodian (“**DWAC**”) system. On the Closing Date (as defined on Annex I hereto), the Purchaser’s prime broker shall initiate a DWAC transaction using its DTC participant identification number. Such DWAC instruction shall indicate the settlement date for the deposit of the Shares, which date shall be provided to the Purchaser by the Placement Agent. Simultaneously with the delivery to the Issuer by the Escrow Agent of the funds held in escrow pursuant to the Escrow Agreement, the Issuer shall direct Securities Transfer Corporation, the Issuer’s transfer agent (the “**Transfer Agent**”) to credit the Purchaser’s account with the Shares pursuant to the information contained in the DWAC.

6. The Purchaser represents that it has received (or otherwise had made available to it by the filing by the Issuer of an electronic version thereof with the Commission) the Prospectus, the documents incorporated by reference therein, and any Issuer Free Writing Prospectus (collectively, the “**Disclosure Package**”), prior to or in connection with the receipt of this Agreement. The Purchaser acknowledges that, prior to delivering this Agreement to the Issuer, the Purchaser will have received certain additional information regarding the Offering, including final pricing information (the “**Offering Information**”). Such information may be provided to the Purchaser by any means permitted under the Securities Act.

7. No offer by the Purchaser to buy Shares and Warrants will be accepted and no part of the Purchase Price will be delivered to the Issuer until the Purchaser has received the Disclosure Package and the Offering Information and the Issuer has accepted such offer by countersigning a copy of this Agreement, and any such offer may be withdrawn or revoked, without obligation or commitment of any kind, at any time prior to the Issuer (or Placement Agent on behalf of the Issuer) sending (orally, in writing or by electronic mail) notice of its acceptance of such offer. An indication of interest will involve no obligation or commitment of any kind until the Purchaser has been delivered the Disclosure Package and the Offering Information and this Agreement is accepted and countersigned by or on behalf of the Issuer. The Purchaser understands and agrees that the Issuer, in its sole discretion, reserves the right to accept or reject this subscription for Shares and Warrants, in whole or in part.

[Signature Page Follows]

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Please confirm that the foregoing correctly sets forth the agreement between us by signing in the space provided below for that purpose.

Dated as of: \_\_\_\_\_, 2012

**Purchaser:**

[ \_\_\_\_\_ ]

By:

Name:

Title:

Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Name and address of registered holder (if different):**

[ \_\_\_\_\_ ]

By:

Name:

Title:

Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Number of Shares and Warrants Purchased**

Number of Shares: [—]

Number of Warrant Shares: [—]\*

Purchase Price Per Share: \$[—]

Aggregate Purchase Price: \$[—]

\* The Purchase Price for the Shares includes a Warrant to purchase one share of Common Stock for every two Shares purchased.

### **Delivery of Shares**

NO LATER THAN ONE (1) BUSINESS DAY AFTER THE EXECUTION OF THIS AGREEMENT BY THE PURCHASER AND THE ISSUER, THE PURCHASER SHALL:

- (I) DIRECT THE BROKER-DEALER AT WHICH THE ACCOUNT OR ACCOUNTS TO BE CREDITED WITH THE SHARES ARE MAINTAINED TO SET UP A DWAC INSTRUCTING THE TRANSFER AGENT TO CREDIT SUCH ACCOUNT OR ACCOUNTS WITH THE SHARES, AND
- (II) REMIT BY WIRE TRANSFER THE AMOUNT OF FUNDS EQUAL TO THE AGGREGATE PURCHASE PRICE FOR THE SHARES BEING PURCHASED BY THE PURCHASER TO THE FOLLOWING ACCOUNT PURSUANT TO THE TERMS OF THE ESCROW AGREEMENT:

[Insert account information for Escrow Agent]

IT IS THE PURCHASER'S RESPONSIBILITY TO: (A) MAKE THE NECESSARY WIRE TRANSFER OR CONFIRM THE PROPER ACCOUNT BALANCE IN A TIMELY MANNER AND (B) ARRANGE FOR SETTLEMENT BY WAY OF DWAC IN A TIMELY MANNER.

### **Prime Broker Delivery Information**

Name of DTC Participant (broker-dealer at which account is maintained): \_\_\_\_\_

DTC Participant Number: \_\_\_\_\_

Name of Account at DTC Participant being credited with the Shares: \_\_\_\_\_

Account Number at DTC Participant being credited with the Shares: \_\_\_\_\_

### **Tax Information**

If the Purchaser is a "U.S. person" he, she or it must complete and sign IRS Form W-9 (or Substitute Form W-9) to certify the Purchaser's tax identification number. For federal tax purposes, you are considered a "U.S. person" if you are (1) an individual who is a U.S. citizen or U.S. resident alien, (2) a partnership, corporation, company or association created or organized in the United States or under the laws of the United States, (3) an estate (other than a foreign estate), or (4) a domestic trust (as defined in U.S. Treasury Regulations section 301.7701-7). A copy of IRS Form W-9 is attached for your convenience as Annex II hereto.

If the Purchaser is not a "U.S. person," complete and sign an applicable IRS Form W-8. IRS Forms W-8 may be obtained at [www.irs.gov](http://www.irs.gov) or by calling 1-800-829-3676.

Failure to provide a properly completed and signed IRS Form W-9 (or Substitute Form W-9) or a properly completed and signed IRS Form W-8 may result in backup withholding under federal tax laws on any portion of the Purchase Price which is returned to the Purchaser and may result in a penalty imposed by the IRS.

### **Delivery of Warrants**



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The Warrants purchased by the Purchaser in connection with the purchase of the Shares hereunder shall be delivered to the Purchaser at the address set forth above within five (5) business days of the Closing Date.

Agreed and Accepted

this    day of                    , 2012:

**INTERNATIONAL STEM CELL CORPORATION**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

## ANNEX I

### TERMS AND CONDITIONS FOR PURCHASE OF SHARES AND WARRANTS

Capitalized terms used but not defined on this Annex I shall have the meanings ascribed to such terms in the Subscription Agreement to which this Annex is attached.

**1. Authorization and Sale of the Shares and Warrants.** Subject to the terms and conditions of this Agreement, the Issuer has authorized the sale of the Shares and Warrants.

**2. Agreement to Sell and Purchase the Shares and Warrants.**

2.1 At the Closing (as defined in Section 3.1), the Issuer will sell to the Purchaser, and the Purchaser will purchase from the Issuer, upon the terms and conditions set forth herein, the number of Shares and Warrants set forth on the last page of the Agreement to which these Terms and Conditions for Purchase of Shares and Warrants are attached as Annex I (the “**Signature Page**”) for the Aggregate Purchase Price set forth on the Signature Page.

2.2 The Issuer proposes to enter into substantially this same form of Subscription Agreement with certain other purchasers (the “**Other Purchasers**”) and expects to complete sales of Shares and Warrants to them. The Purchaser and the Other Purchasers are hereinafter sometimes collectively referred to as the “**Purchasers**,” and this Agreement and the Subscription Agreements executed by the Other Investors are hereinafter sometimes collectively referred to as the “**Agreements**.”

**3. Placement Agent.**

3.1 The Purchaser acknowledges that (a) the Issuer has retained CRT Capital Group, LLC (the “**Placement Agent**”) to act as exclusive placement agent in connection with the Offering, (b) the Offering is not being underwritten by the Placement Agent, (c) the Issuer has agreed to pay the Placement Agent a cash fee and warrants to purchase shares of Common Stock in respect of the sale of the Shares and Warrants to the Purchasers, and (d) the Placement Agent has not been retained to negotiate the Purchase Price of the Shares and Warrants, and that the Purchase Price has been determined by discussions and arms-length negotiations between the Issuer and the Purchaser.

3.2 The Issuer has entered into a Placement Agent Agreement, dated [—], 2012 (the “**Placement Agent Agreement**”), with the Placement Agent that contains certain representations and warranties of the Issuer, each of which may be relied upon by the Purchaser as if fully set forth herein. Without limiting the foregoing, it is specifically agreed that the Purchaser shall be a third party beneficiary of the representations and warranties of the Issuer set forth in the Placement Agent Agreement.

**4. Closing and Delivery of the Shares, Warrants and Funds.**

**4.1 Closing.** The completion of the purchase and sale of the Shares and Warrants (the “**Closing**”) shall occur at a place and time (the “**Closing Date**”) to be specified by the Issuer and the Placement Agent, and of which the Purchasers will be notified in advance by the Placement Agent, in accordance with Rule 15c6-1 promulgated under the Securities Exchange Act of 1934, as

amended (the “**Exchange Act**”). At the Closing: (a) the Issuer shall cause the Transfer Agent to deliver to the Purchaser the number of Shares set forth on the Signature Page registered in the name of the Purchaser or, if so indicated on the Signature Page, in the name of a nominee designated by the Purchaser, (b) the Issuer shall cause to be delivered to the Purchaser a Warrant to purchase a number of Warrant Shares as set forth on the signature page and (c) the aggregate purchase price for the Shares and Warrants being purchased by the Purchaser will be delivered by or on behalf of the Purchaser to the Issuer.

#### **4.2 Conditions to the Obligations of the Parties.**

(a) Conditions to the Issuer’s Obligations. The Issuer’s obligation to issue and sell the Shares and Warrants to the Purchaser shall be subject to: (i) the receipt by the Issuer of the aggregate purchase price for the Shares being purchased hereunder as set forth on the Signature Page, (ii) the accuracy of the representations and warranties made by the Purchaser, and (iii) the fulfillment of those undertakings of the Purchaser to be fulfilled prior to the Closing Date.

(b) Conditions to the Purchaser’s Obligations. The Purchaser’s obligation to purchase the Shares and Warrants will be subject to the accuracy of the representations and warranties made by the Issuer, and the fulfillment of those undertakings of the Issuer to be fulfilled prior to the Closing Date, including without limitation, those contained in the Placement Agent Agreement, and to the condition that the Placement Agent shall not have: (i) terminated the Placement Agent Agreement pursuant to the terms thereof, or (ii) determined that the conditions to closing in the Placement Agent Agreement have not been satisfied. The Purchaser’s obligations are expressly not conditioned on the purchase by any or all of the Other Purchasers of the Shares and Warrants that they have agreed to purchase from the Issuer, it being understood that there is no minimum number of Shares and Warrants that the Issuer is required to sell in the Offering. The Purchaser understands and agrees that, in the event the Placement Agent in its sole discretion determines that the conditions to closing in the Placement Agent Agreement have not been satisfied or if the Placement Agent Agreement may be terminated for any other reason permitted by the Placement Agent Agreement, then the Placement Agent may, but shall not be obligated to, terminate the Placement Agent Agreement, which shall have the effect of terminating this Subscription Agreement pursuant to Section 15 below.

#### **5. Representations, Warranties and Covenants of the Purchaser.**

The Purchaser acknowledges, represents and warrants to, and agrees with, the Issuer and the Placement Agent that:

5.1 The Purchaser: (a) is knowledgeable, sophisticated and experienced in making, and is qualified to make decisions with respect to, investments in shares presenting an investment decision like that involved in the purchase of the Shares and Warrants, including investments in securities issued by the Issuer and investments in comparable companies, (b) has answered all questions on the Signature Page and the answers thereto are true and correct as of the date hereof and will be true and correct as of the Closing Date and (c) in connection with its decision to purchase the number of Shares and Warrants set forth on the Signature Page, has received and is relying only upon the Disclosure Package (including the documents incorporated by reference therein) and the Offering Information.

5.2 The Purchaser has full right, power, authority and capacity to enter into this Agreement and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Agreement, and (b) this Agreement constitutes a valid and binding obligation of the Purchaser enforceable against the Purchaser in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity, and except as to the enforceability of any rights to indemnification or contribution that may be violative of the public policy underlying any law, rule or regulation (including any federal or state securities law, rule or regulation).

5.3 The Purchaser understands that nothing in this Agreement, the Disclosure Package, the Prospectus, the Offering Information or any other materials presented to the Purchaser in connection with the purchase and sale of the Shares and Warrants constitutes legal, tax or investment advice. The Purchaser has consulted such legal, tax and investment advisors and made such investigation as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of the Shares. The Purchaser also understands that the Common Stock is not listed for trading on any securities exchange and that the Issuer is under no obligation to list the Common Stock on any securities exchange.

5.4 The Placement Agent is not authorized to make and has not made any representation, disclosure or use of any information in connection with the purchase and sale of the Shares and Warrants, except as set forth or incorporated by reference in the Prospectus or any Issuer Free Writing Prospectus.

5.5 No action has been or will be taken in any jurisdiction outside the United States by the Issuer or the Placement Agent that would permit an offering of the Shares and Warrants, or possession or distribution of offering materials in connection with the issue of the Securities in any jurisdiction outside the United States where action for that purpose is required.

5.6 Since the date on which the Placement Agent first contacted the Purchaser about the Offering, the Purchaser has not disclosed any information regarding the Offering to any third parties (other than its legal, accounting and other advisors for the purpose of assessing an investment in the Shares and Warrants who are bound by agreements or duties of confidentiality) and has not engaged in any purchases or sales involving the securities of the Issuer (including, without limitation, any Short Sales involving the Issuer's securities). The Purchaser covenants that it will not engage in any purchases or sales involving the securities of the Issuer (including Short Sales) prior to the time that the transactions contemplated by this Agreement are publicly disclosed. The Purchaser agrees that it will not use any of the Securities acquired pursuant to this Agreement to cover any short position in the Common Stock if doing so would be in violation of applicable securities laws. For purposes hereof, "**Short Sales**" include, without limitation, all "short sales" as defined in Rule 200 promulgated under Regulation SHO under the Exchange Act, whether or not against the box, and all types of direct and indirect stock pledges, forward sales contracts, options, puts, calls, short sales, swaps, "put equivalent positions" (as defined in Rule 16a-1(h) under the Exchange Act) and similar arrangements (including on a total return basis), and sales and other transactions through non-US broker dealers or foreign regulated brokers.

**6. Survival of Representations, Warranties and Agreements; Third Party Beneficiary.** Notwithstanding any investigation made by any party to this Agreement or by the Placement Agent, all covenants, agreements, representations and warranties made by the Issuer and the Purchaser herein will survive the execution of this Agreement, the delivery to the Purchaser of the Shares and Warrants being purchased and the payment therefor. It is specifically agreed that the Placement Agent shall be a third party beneficiary with respect to the representations, warranties and agreements of the Purchaser in Section 5 hereof.

**7. Notices.** All notices, requests, consents and other communications hereunder will be in writing, will be mailed (a) if within the domestic United States by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, or by facsimile or (b) if delivered from outside the United States, by International Federal Express or facsimile, and (c) will be deemed given (i) if delivered by first-class registered or certified mail domestic, three business days after so mailed, (ii) if delivered by nationally recognized overnight carrier, one business day after so mailed, (iii) if delivered by International Federal Express, two business days after so mailed and (iv) if delivered by facsimile, upon electronic confirmation of receipt and will be delivered and addressed as follows:

(a) if to the Issuer, to:

International Stem Cell Corporation  
5950 Priestly Drive  
Carlsbad, CA 92008  
Attention: Chief Executive Officer  
Fax: ( ) -

and

DLA Piper LLP (US)  
4365 Executive Drive, Suite 1100  
San Diego, CA 92121-2133  
Attention: Douglas Rein, Esq.  
Fax: (858) 638-5043

(b) if to the Purchaser, at its address on the Signature Page hereto, or at such other address or addresses as may have been furnished to the Issuer in writing.

**8. Amendments; Waivers.** This Agreement may only be amended or modified in writing, signed by each of the parties hereto, and no condition herein (express or implied) may be waived unless waived in writing by each party whom the condition is meant to benefit.

**9. Headings.** The Section headings herein are for convenience only and shall not affect the construction hereof.

**10. Severability.** The invalidity or unenforceability of any section, clause or provision of this Agreement (including any section, clause or provision of this Annex I) shall not affect the validity or enforceability of any other section, clause or provision hereof. If any section, clause or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall

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be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

**11. Governing Law.** This Agreement will be governed by, and construed in accordance with, the laws of the State of New York, without giving effect to the principles of conflicts of law that would require the application of the laws of any other jurisdiction.

**12. Counterparts.** This Agreement may be executed in two or more counterparts, each of which will constitute an original, but all of which, when taken together, will constitute but one instrument, and will become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. Delivery of a signed counterpart of this Agreement by facsimile or other electronic transmission shall constitute valid and sufficient delivery thereof. The Issuer and the Purchaser acknowledge and agree that the Issuer shall deliver its counterpart to the Purchaser along with the Prospectus Supplement (or the filing by the Issuer of an electronic version thereof with the Commission).

**13. Entire Agreement.** This Agreement constitutes the entire agreement and understanding of the parties to this Agreement with respect to the subject matter hereof and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof.

**14. Confirmation of Sale.** The Purchaser acknowledges and agrees that such Purchaser's receipt of the Issuer's signed counterpart to this Agreement, together with the Prospectus (or the filing by the Issuer of an electronic version thereof with the Commission), shall constitute written confirmation of the Issuer's sale of the Shares to such Purchaser.

**15. Termination.** In the event that the Placement Agent Agreement is terminated by the Placement Agent pursuant to the terms thereof, this Agreement shall terminate without any further action on the part of the parties hereto.

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**ANNEX II**

**IRS FORM W-9**



**SUBSCRIPTION ESCROW AGREEMENT**

By and Among

**INTERNATIONAL STEM CELL CORPORATION,**

**CRT CAPITAL GROUP LLC**

And

**THE BANK OF NEW YORK MELLON**

Dated as of November 30, 2012

ACCOUNT NUMBER: [To be assigned by the Escrow Agent]

SHORT TITLE OF ACCOUNT: "PROJECT STEM ESCROW ACCOUNT"

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## SUBSCRIPTION ESCROW AGREEMENT

Subscription Escrow Agreement (the “**Agreement**”), dated as of November 30, 2012, by and among International Stem Cell Corporation, a Delaware corporation, with its principal office at 5950 Priestly Drive, Carlsbad, California 92008 (the “**Company**”), CRT Capital Group LLC, a Delaware limited liability company, with its principal office at 262 Harbor Drive, Stamford, Connecticut 06902 (the “**Placement Agent**”), and The Bank of New York Mellon, a New York banking corporation with its principal corporate trust office at 101 Barclay Street, 8W, New York, New York 10286 (the “**Escrow Agent**”).

**WHEREAS**, the Placement Agent has been retained by the Company to act as the Company’s exclusive placement agent to solicit offers for the purchase of (i) shares (the “**Shares**”) of the Company’s common stock, \$0.001 par value per share (the “**Common Stock**”), and (ii) warrants to purchase shares of Common Stock (the “**Warrants**”). The Shares and the Warrants are collectively referred to herein as the “**Securities**”.

**WHEREAS**, the public offering and sale of the Securities (the “**Offering**”) are being made pursuant to a Registration Statement on Form S-1 (File No. 333-184493), which was initially filed by the Company with the Securities and Exchange Commission on October 18, 2012, and which contemplates the offer and sale of up to \$15,000,000 of Securities by the Company.

**WHEREAS**, the purchase and sale of the Securities will be made pursuant to a form of subscription agreement (the “**Subscription Agreement**”) to be entered into by and between the Company and each of the persons who subscribe to purchase Securities in the Offering (each a “**Subscriber**” and collectively, the “**Subscribers**”).

**WHEREAS**, the Company and the Placement Agent propose to engage the Escrow Agent for the purpose of receiving, depositing and holding in a segregated non interest-bearing account all funds received by the Escrow Agent in connection with the sale of the Securities in the Offering until such time as the funds are to be released to the Company (or returned to the Subscribers) in accordance with the terms of this Agreement.

**WHEREAS**, subject to the terms and conditions of this Agreement, the Escrow Agent has agreed to act as escrow agent in connection with the Offering of the Securities.

**NOW, THEREFORE**, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged by each of the parties hereto, the parties hereto, intending to be legally bound, do hereby agree as follows:

**Section 1. Appointment of Escrow Agent.** The Company hereby appoints The Bank of New York Mellon as Escrow Agent in accordance with the terms and conditions set forth herein, and the Escrow Agent hereby accepts such appointment.

**Section 2. Establishment of Escrow Account.** The Escrow Agent shall promptly cause to be opened a fully segregated non interest-bearing escrow account, which escrow account shall bear account number [To be assigned by the Escrow Agent] and be entitled the “Project Stem Escrow Account” (the “**Escrow Account**”). The purpose of the Escrow Account is for (a) the deposit of all subscription monies paid by wire transfer (or such other form of payment as agreed to by the Placement Agent in its sole discretion) from Subscribers pursuant to the Subscription Agreements,

which are delivered to the Escrow Agent, (b) the holding of subscription monies which are collected by the Escrow Agent, and (c) the disbursement (or return) of subscription monies collected and held, all on the terms and subject to the conditions described herein.

### Section 3. Deposits.

(a) Each Subscriber shall deliver to the Escrow Agent, using the instructions set forth on the signature page to the Subscription Agreement, all monies that such Subscriber has agreed to pay to the Company for the purchase of the Securities, which monies shall be in the form of a wire transfer of Federal Funds (unless another form of payment is agreed to by the Placement Agent in its sole discretion). In the event that any Subscriber has delivered any monies to purchase the Securities directly to the Placement Agent, the Placement Agent shall promptly deliver to the Escrow Agent all such monies. Wire transfer information for the Escrow Agent is as follows:

[To be provided by the Escrow Agent]

(b) Subscription monies shall be deemed received by the Escrow Agent on a particular business day to the extent received by 5:00 p.m. New York City Time on such day. Subscription monies received after 5:00 p.m. New York City time on a particular business day shall be deemed received on the following business day. As soon as practicable following receipt by the Escrow Agent of subscription monies from a Subscriber (determined in accordance with the foregoing two sentences), but in any event by 12:00 p.m. New York City time on the business day following receipt of such subscription monies, the Escrow Agent will notify the Placement Agent of such receipt, and the Placement Agent will determine whether or not the subscription is to be accepted or rejected in whole or in part. With respect to each subscription which is to be accepted, the Placement Agent will notify the Escrow Agent in writing (which may be in the form of an e-mail) of such acceptance. With respect to each subscription which is to be rejected (in whole or in part), the Placement Agent will notify the Escrow Agent in writing (which may be in the form of an e-mail) of such rejection, and upon receipt of such notification, the Escrow Agent will as promptly as practicable issue a check in the amount of the rejected Subscriber's subscription (without deduction, penalty or expense to the Subscriber) directly to the rejected Subscriber based on instructions set forth in the written rejection notice.

(c) Promptly after the receipt of subscription monies as described in Section 3(a) and the acceptance of subscription monies as described in Section 3(b), the Escrow Agent shall deposit the same into the Escrow Account. Amounts so deposited into the Escrow Account are hereinafter referred to as "**Proceeds**". Only those Escrow Amounts which have been deposited in the Escrow Account and which have cleared the banking system will constitute "Proceeds" for purposes of this Agreement.

(d) Promptly following each deposit into the Escrow Account, the Escrow Agent shall request of the Placement Agent, and the Placement Agent shall provide to the Escrow Agent, (i) the name and address of the Subscriber that made the deposit, (ii) a completed IRS Form W-9 (or Substitute Form W-9) or IRS Form W-8 (as applicable) for the Subscriber, including the tax identification number of the Subscriber that made the deposit, (iii) the amount of Securities subscribed for by such Subscriber, and (iv) the aggregate dollar amount of such subscription (collectively, the "**Subscription Information**"). The Subscription Information shall be provided to the Escrow Agent in writing (which may be in the form of an e-mail).

(e) Payments by Subscribers shall not be deemed deposited in the Escrow Account until the Escrow Agent has received the Subscription Information required with respect to such payments.

**Section 4. No Investment of Proceeds.** The parties do not intend for the Proceeds to be invested during the term of this Agreement. The Proceeds shall be maintained in a non interest-bearing account maintained by the Escrow Agent, which account shall not be subject to investment risk.

**Section 5. Disbursements from the Escrow Account.**

(a) Upon receipt of a written notice from the Placement Agent, in substantially the form attached hereto as Exhibit A (any such notice, a “**Disbursement Notice**”), indicating that all conditions precedent to the Closing (as defined in the Subscription Agreement) of the Offering have been met and that the Proceeds may be released, the Escrow Agent shall promptly disburse the Proceeds with respect to the Closing in accordance with such instructions.

(b) In the event that, as of 5:00p.m., New York City time, on January 31, 2013, the Offering has not otherwise been terminated or the Escrow Agent has not received the Disbursement Notice from the Placement Agent, the Escrow Agent shall promptly (and in any event within 15 days) pay to each of the Subscribers an amount equal to the subscription monies previously delivered to the Escrow Agent by such Subscriber (without deduction, penalty or expense to the Subscriber), which payment shall be made by check issued directly to the Subscriber. Such payments shall be made to the Subscribers based upon the information included in written (which may be in the form of an e-mail) instructions provided by the Placement Agent to the Escrow Agent. The Escrow Agent shall notify the Placement Agent of the distribution of such monies to the Subscribers.

**Section 6. Termination of Escrow.** Upon the release of all of the Proceeds in accordance with Section 5, this Agreement shall terminate and the Escrow Agent shall be relieved of further obligations and released from all liability under this Agreement, except claims which are occasioned by its bad faith, gross negligence or willful misconduct.

**Section 7. Compensation of Escrow Agent.**

(a) At the time of execution of this Agreement, the Company shall pay the Escrow Agent an initial account establishment fee of \$7,500. There shall be no recurring periodic fees incurred in connection with the establishment or operation of the Escrow Account.

(b) The Company shall reimburse the Escrow Agent upon request for all reasonable and documented expenses, disbursements, and advances actually incurred or made by the Escrow Agent in implementing any of the provisions of this Agreement, including reasonable and documented fees of its legal counsel incurred in connection with reviewing or negotiating this Agreement.

(c) The Company hereby grants to the Escrow Agent a lien on any of the Proceeds that the Company is entitled to receive hereunder such that, in the event that any and all charges payable under Section 7 and Section 8 shall not be timely paid by the Company, the Escrow Agent shall have the right to pay itself from such Proceeds the full amount owed, provided that written (which may be in the form of an e-mail) notice of the Escrow Agent’s intent to proceed under this Section 7 be given at least five (5) business days in advance of such action. For the sake of clarity, a lien shall not be

granted on any Proceeds that are subject to being returned to Subscribers, which Proceeds shall not be subject to any liens, offsets or deductions.

#### **Section 8. Responsibilities of Escrow Agent; Notices.**

(a) The Escrow Agent shall be under no duty to enforce payment of any subscription which is to be paid to and held by it.

(b) The Escrow Agent shall be under no duty to accept funds, checks, drafts or instruments for the payment of money from anyone other than the Placement Agent or to give any receipt therefor except to the Placement Agent.

(c) The Escrow Agent shall be obligated to perform only such duties as are expressly set forth in or contemplated by this Agreement. The Escrow Agent shall not be bound by the provisions of any agreement among the Company and the Placement Agent beyond the specific terms hereof.

(d) The Escrow Agent shall not be liable hereunder except for its own bad faith, gross negligence or willful misconduct in connection with its duties under the Agreement, and the Company and the Placement Agent agree to jointly and severally indemnify the Escrow Agent for and hold it harmless as to any loss, liability, or expense, including reasonable attorney's fees and expenses (collectively, "**Losses**"), incurred without bad faith, gross negligence or willful misconduct on the part of the Escrow Agent and arising out of or in connection with the Escrow Agent's duties under this Agreement. Without limiting the foregoing, the Company and the Placement Agent agree to jointly and severally indemnify the Escrow Agent for any Losses incurred without bad faith, gross negligence or willful misconduct on the part of the Escrow Agent and arising out of or in connection with the Escrow Agent's reliance upon and compliance with instructions or directions given by facsimile or electronic transmission, it being understood that the failure of the Escrow Agent to verify or confirm that the person giving such instructions or directions by facsimile or electronic transmission is, in fact, an authorized person, does not constitute gross negligence or willful misconduct.

(e) The Escrow Agent shall be entitled to rely upon any order, judgment, certification, instruction, notice, opinion or other writing delivered to it in compliance with the provisions of this Agreement without being required to determine the authenticity or the correctness of any fact stated therein or the propriety or validity of service thereof. The Escrow Agent may act in reliance upon any instrument comporting with the provisions of this Agreement or signature believed by it to be genuine and may assume that any person purporting to give notice or receipt or advice or make any statement or execute any document in connection with the provisions hereof has been duly authorized to do so.

At any time during the term of this Agreement the Escrow Agent may request in writing an instruction in writing from the Placement Agent, and may at its own option include in such request the course of action it proposes to take and the date on which it proposes to act, regarding any matter arising in connection with its duties and obligations hereunder. In the absence of bad faith, gross negligence or willful misconduct on the part of the Escrow Agent, the Escrow Agent shall not be liable for acting without the Placement Agent's consent in accordance with such a proposal on or after the date specified therein, provided that the specified date shall be at least two (2) business days after the Placement Agent receives the Escrow Agent's request for instructions and its proposed

course of action, and provided that, prior to so acting, the Escrow Agent has not received the written instructions requested.

(f) The Escrow Agent may act pursuant to the advice of counsel chosen by it with respect to any matter relating to this Agreement and shall not be liable for any action taken or omitted in accordance with such advice, except where the reliance on such advice was the result of bad faith, gross negligence or willful misconduct.

(g) No provision of this Agreement shall require the Escrow Agent to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder.

(h) The Escrow Agent shall be deemed conclusively to have given and delivered any notice required to be given or delivered if it is in writing (which may be in the form of an e-mail), signed by any one of its authorized officers and mailed, by express, registered or certified mail addressed to:

The Placement Agent at:  
CRT Capital Group LLC  
262 Harbor Drive  
Stamford, Connecticut 06902  
Attn: John Calcagnini  
Telephone: (310) 954-1525  
Facsimile: (310) 954-0706

The Escrow Agent shall be deemed conclusively to have received any notice required to be given or delivered to the Escrow Agent if it is in writing, signed by any one of the authorized officers of the Placement Agent, mailed, by express, registered or certified mail addressed to:

The Escrow Agent at:  
The Bank of New York Mellon  
101 Barclay St, 8W  
New York, New York 10286  
Attn: Filippo Triolo  
Telephone: (212) 815-3229  
Facsimile: (212) 815-5877/75

(i) The provisions of Section 7, Section 8 and Section 11 shall survive termination of this Agreement and/or the resignation or removal of the Escrow Agent.

#### **Section 9. Resignation of Escrow Agent; Successor.**

Notwithstanding anything to the contrary herein, the Escrow Agent may resign at any time by giving at least 15 days written notice thereof to the Placement Agent. The Placement Agent may remove the Escrow Agent at any time (with or without cause) by giving at least 15 days written notice thereof. Within 15 days after receiving such notice, the Placement Agent shall appoint a successor escrow agent at which time the Escrow Agent shall either distribute the funds held in the Escrow Account, less the fees owed to the Escrow Agent pursuant to this Agreement, as directed by the instructions of the Placement Agent or hold such funds, pending distribution, until such fees are

paid. If a successor escrow agent has not been appointed or has not accepted such appointment by the end of the 15-day period, the Escrow Agent may apply to a court of competent jurisdiction for the appointment of a successor escrow agent, or for other appropriate relief and the costs, expenses, and reasonable attorneys' fees which the Escrow Agent incurs in connection with such a proceeding shall be paid by the Company.

#### **Section 10. Dispute Resolution.**

In the event of any dispute between or conflicting claims by or among the Placement Agent and/or any other person or entity with respect to any Proceeds held in the Escrow Account, the Escrow Agent shall be entitled, at its sole discretion, to refuse to comply with any and all claims, demands or instructions with respect to such Proceeds so long as such dispute or conflict shall continue, and the Escrow Agent shall not be or become liable in any way to the Placement Agent for the Escrow Agent's failure or refusal to comply with such conflicting claims, demands or instructions, except to the extent under the circumstances such failure would constitute gross negligence, bad faith or willful misconduct on the part of the Escrow Agent. The Escrow Agent shall be entitled to refuse to act until, at its sole discretion, either such conflicting or adverse claims or demands shall have been finally determined in a court of competent jurisdiction or settled by agreement between the conflicting parties as evidenced in writing, satisfactory to the Escrow Agent, or the Escrow Agent shall have received security or an indemnity satisfactory to the Escrow Agent sufficient to save the Escrow Agent harmless from and against any and all loss, liability or expense which the Escrow Agent may incur by reason of the Escrow Agent's acting. The Escrow Agent may in addition elect at its sole discretion to commence an interpleader action or seek other judicial relief or orders as the Escrow Agent may deem necessary.

#### **Section 11. Extraordinary Expense.**

It is understood that fees and usual charges agreed upon for the Escrow Agent's services shall be considered compensation for its services as contemplated by this Agreement, and if the Escrow Agent renders any service not provided for in this Agreement, or if there is any assignment of any interest in the subject matter of this Agreement by the Placement Agent or the Company or any modification of this Agreement, or if any controversy arises under this Escrow Agreement or the Escrow Agent is made a party to any litigation pertaining to this Agreement or the subject matter of this Agreement, the Escrow Agent shall be reasonably compensated for those extraordinary services and reimbursed for all reasonable costs and expenses occasioned by such services, controversy or litigation and the Company hereby promises to pay such sums upon demand.

#### **Section 12. Governing Law.**

This agreement shall be governed and construed in accordance with the laws of the State of New York without reference to the principles thereof respecting conflicts of laws. This Agreement may be executed in counterparts, each of which so executed shall be deemed an original, and said counterparts together shall constitute one and the same instrument. Each of the parties hereby waives the right to trial by jury and to assert counterclaims in any such proceedings. To the extent that in any jurisdiction any party may be entitled to claim, for itself or its assets, immunity from suit, execution, attachment (whether before or after judgment) or other legal process, each hereby irrevocably agrees not to claim, and hereby waives, such immunity. Each party waives personal service of process and consents to service of process by certified or registered mail, return receipt

requested, directed to it at the address last specified for notices hereunder, and such service shall be deemed completed ten (10) calendar days after the same is so mailed.

### **Section 13. Maintenance of Records.**

The Escrow Agent shall maintain accurate records of all transactions made hereunder. Promptly after the termination of this Agreement, and as may from time to time be reasonably requested by the Company before such termination, the Escrow Agent shall provide the Company with a copy of such records, certified by the Escrow Agent to be a complete and accurate account of all transactions hereunder. The authorized representatives of the Placement Agent shall also have access to the Escrow Agent's books and records to the extent relating to its duties hereunder, during normal business hours upon reasonable notice to the Escrow Agent.

### **Section 14. Miscellaneous.**

(a) Nothing in this Agreement is intended or shall confer upon anyone other than the parties any legal or equitable right, remedy or claim.

(b) The invalidity of any portion of this Agreement shall not affect the validity of the remainder hereof.

(c) This Agreement is the final integration of the agreement of the parties with respect to the matters covered by it and supersedes any prior understanding or agreement, oral or written, with respect thereto.

(d) The rights and obligations of each party hereto may not be assigned or delegated to any other person without the written consent of the other parties hereto. Subject to the foregoing, the terms and provisions hereof shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

(e) No printed or other material in any language, including prospectuses, notices, reports, and promotional material which mentions "**The Bank of New York Mellon**" by name or the rights, powers, or duties of the Escrow Agent under this Agreement shall be issued by any other parties hereto, or on such party's behalf, without the prior written consent of Escrow Agent.

*[Remainder of Page Intentionally Left Blank]*



IN WITNESS WHEREOF, the undersigned have executed this Subscription Escrow Agreement as of the day and year first above written.

INTERNATIONAL STEM CELL CORPORATION  
as Company

By: /S/ LINH NGUYEN  
Name: LINH NGUYEN  
Title: CFO

CRT CAPITAL GROUP LLC as Placement Agent

By: /S/ JOHN CALCAGNINI  
Name: JOHN CALCAGNINI  
Title: MANAGING DIRECTOR

THE BANK OF NEW YORK MELLON as Escrow Agent

By: /S/ THOMAS HACKER  
Name: THOMAS HACKER  
Title: VICE PRESIDENT

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**EXHIBIT A**

**Disbursement Notice**

[Placement Agent Letterhead]

[DATE]

The Bank of New York Mellon  
101 Barclay Street, 8W  
New York, New York 10286  
Facsimile: (            )            -  
Attention:

Reference is hereby made to that certain Escrow Agreement, dated            , by and between The Bank of New York Mellon, a New York banking corporation (the “**Escrow Agent**”), and CRT Capital Group LLC, a Delaware limited liability company, (the “**Placement Agent**”). Capitalized terms used herein have the meanings given to them in the Escrow Agreement.

You are hereby notified that the Placement Agent has accepted Subscription Agreements for the Offering and that all conditions precedent to the closing of the Offering have been met. Accordingly, the Placement Agent hereby directs The Bank of New York Mellon, as Escrow Agent, to immediately distribute the Proceeds in the Escrow Account in the following manner:

[Insert Wire Instructions for the Company]

Sincerely,

CRT Capital Group LLC

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

## INTERNATIONAL STEM CELL CORPORATION

## SUBSCRIPTION AGREEMENT

November [—], 2012

International Stem Cell Corporation  
5950 Priestly Drive  
Carlsbad, CA 92008

The undersigned (the “**Purchaser**”) hereby confirms its agreement with International Stem Cell Corporation, a Delaware corporation (the “**Issuer**”), as follows:

1. This Subscription Agreement, including the Terms and Conditions for Purchase of Shares and Warrants attached hereto as Annex I (collectively, this “**Agreement**”) is made as of the date set forth below between the Issuer and the Purchaser. Capitalized terms utilized in this Agreement and not defined herein shall have the meanings ascribed to them in the Placement Agent Agreement (as defined on Annex I hereto).

2. The Issuer has authorized the sale and issuance to certain purchasers of up to an aggregate of (i) [—] shares (the “**Shares**”) of common stock, \$0.001 par value per share (the “**Common Stock**”), of the Issuer, and (ii) warrants (the “**Warrants**”) to purchase up to [—] shares of Common Stock. Purchasers of the Common Stock will receive a Warrant to purchase one share of Common Stock for every two shares of Common Stock that they purchase in the offering. The terms and conditions of the Warrants are set forth in a warrant agreement, the form of which is attached as Exhibit A hereto. The Shares issuable upon exercise of the Warrants are referred to herein as the “**Warrant Shares**”. The Shares, the Warrants and the Warrant Shares are collectively referred to herein as the “**Securities**”.

3. The Issuer and the Purchaser agree that the Purchaser will purchase from the Issuer and the Issuer will issue and sell to the Purchaser the Shares and Warrants set forth on the signature page below. The Shares are being purchased for a purchase price of \$[—] per Share (the “**Purchase Price**”). No additional consideration will be paid for the Warrants. The Shares shall be purchased pursuant to the Terms and Conditions for Purchase of Shares and Warrants attached hereto as Annex I and incorporated herein by this reference as if fully set forth herein.

4. The offering and sale of the Securities (the “**Offering**”) are being made pursuant to: (a) an effective Registration Statement on Form S-1 (Filing No. 333-184493) (the “**Registration Statement**”) filed by the Issuer with the Securities and Exchange Commission (the “**Commission**”), including the Preliminary Prospectus contained therein (the “**Preliminary Prospectus**”), and (b) if applicable, certain “free writing prospectuses” (as that term is defined in Rule 405 under the Securities Act of 1933, as amended (the “**Securities Act**”)), that have been or will be filed, if required, with the Commission and delivered to the Purchaser on or prior to the date hereof (each, an “**Issuer Free Writing Prospectus**”), containing certain supplemental information regarding the Securities, the terms of the Offering and the Issuer.

5. The Shares purchased by the Purchaser shall be delivered to the Purchaser by crediting the account of the Purchaser’s prime broker (as specified by the Purchaser on the signature page below) with the Depository Trust Company (“**DTC**”) through its Deposit/Withdrawal At Custodian (“**DWAC**”) system. On the Closing Date (as defined on Annex I hereto), the Purchaser’s prime broker shall initiate a DWAC transaction using its DTC participant identification number. Such DWAC instruction shall indicate the settlement date for the deposit of the Shares, which date shall be provided to the Purchaser by the Placement Agent. Simultaneously with the delivery to the Issuer by the Escrow Agent of the funds held in escrow pursuant to the Escrow Agreement, the Issuer shall direct Securities Transfer Corporation, the Issuer’s transfer agent (the “**Transfer Agent**”) to credit the Purchaser’s account with the Shares pursuant to the information contained in the DWAC.

6. The Purchaser represents that it has received (or otherwise had made available to it by the filing by the Issuer of an electronic version thereof with the Commission) the Prospectus, the documents incorporated by reference therein, and any Issuer Free Writing Prospectus (collectively, the “**Disclosure Package**”), prior to or in connection with the receipt of this Agreement. The Purchaser acknowledges that, prior to delivering this Agreement to the Issuer, the Purchaser will have received certain additional information regarding the Offering, including final pricing information (the “**Offering Information**”). Such information may be provided to the Purchaser by any means permitted under the Securities Act.

7. No offer by the Purchaser to buy Shares and Warrants will be accepted and no part of the Purchase Price will be delivered to the Issuer until the Purchaser has received the Disclosure Package and the Offering Information and the Issuer has accepted such offer by countersigning a copy of this Agreement, and any such offer may be withdrawn or revoked, without obligation or commitment of any kind, at any time prior to the Issuer (or Placement Agent on behalf of the Issuer) sending (orally, in writing or by electronic mail) notice of its acceptance of such offer. An indication of interest will involve no obligation or commitment of any kind until the Purchaser has been delivered the Disclosure Package and the Offering Information and this Agreement is accepted and countersigned by or on behalf of the Issuer. The Purchaser understands and agrees that the Issuer, in its sole discretion, reserves the right to accept or reject this subscription for Shares and Warrants, in whole or in part.

[Signature Page Follows]

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Please confirm that the foregoing correctly sets forth the agreement between us by signing in the space provided below for that purpose.

Dated as of: \_\_\_\_\_, 2012

**Purchaser:**

[ \_\_\_\_\_ ]

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Name and address of registered holder (if different):**

[ \_\_\_\_\_ ]

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Number of Shares and Warrants Purchased**

Number of Shares: [—]

Number of Warrant Shares: [—]\*

Purchase Price Per Share: \$[—]

Aggregate Purchase Price: \$[—]

\* The Purchase Price for the Shares includes a Warrant to purchase one share of Common Stock for every two Shares purchased.

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**Delivery of Shares**

NO LATER THAN ONE (1) BUSINESS DAY AFTER THE EXECUTION OF THIS AGREEMENT BY THE PURCHASER AND THE ISSUER, THE PURCHASER SHALL:

- (I) DIRECT THE BROKER-DEALER AT WHICH THE ACCOUNT OR ACCOUNTS TO BE CREDITED WITH THE SHARES ARE MAINTAINED TO SET UP A DWAC INSTRUCTING THE TRANSFER AGENT TO CREDIT SUCH ACCOUNT OR ACCOUNTS WITH THE SHARES, AND
- (II) REMIT BY WIRE TRANSFER THE AMOUNT OF FUNDS EQUAL TO THE AGGREGATE PURCHASE PRICE FOR THE SHARES BEING PURCHASED BY THE PURCHASER TO THE FOLLOWING ACCOUNT PURSUANT TO THE TERMS OF THE ESCROW AGREEMENT:

[Insert account information for Escrow Agent]

IT IS THE PURCHASER'S RESPONSIBILITY TO: (A) MAKE THE NECESSARY WIRE TRANSFER OR CONFIRM THE PROPER ACCOUNT BALANCE IN A TIMELY MANNER AND (B) ARRANGE FOR SETTLEMENT BY WAY OF DWAC IN A TIMELY MANNER.

**Prime Broker Delivery Information**

Name of DTC Participant (broker-dealer at which account is maintained): \_\_\_\_\_

DTC Participant Number: \_\_\_\_\_  
\_\_\_\_\_

Name of Account at DTC Participant being credited with the Shares: \_\_\_\_\_

Account Number at DTC Participant being credited with the Shares: \_\_\_\_\_

**Tax Information**

If the Purchaser is a "U.S. person" he, she or it must complete and sign IRS Form W-9 (or Substitute Form W-9) to certify the Purchaser's tax identification number. For federal tax purposes, you are considered a "U.S. person" if you are (1) an individual who is a U.S. citizen or U.S. resident alien, (2) a partnership, corporation, company or association created or organized in the United States or under the laws of the United States, (3) an estate (other than a foreign estate), or (4) a domestic trust (as defined in U.S. Treasury Regulations section 301.7701-7). A copy of IRS Form W-9 is attached for your convenience as Annex II hereto.

If the Purchaser is not a "U.S. person," complete and sign an applicable IRS Form W-8. IRS Forms W-8 may be obtained at [www.irs.gov](http://www.irs.gov) or by calling 1-800-829-3676.

Failure to provide a properly completed and signed IRS Form W-9 (or Substitute Form W-9) or a properly completed and signed IRS Form W-8 may result in backup withholding under federal tax laws on any portion of the Purchase Price which is returned to the Purchaser and may result in a penalty imposed by the IRS.

**Delivery of Warrants**

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The Warrants purchased by the Purchaser in connection with the purchase of the Shares hereunder shall be delivered to the Purchaser at the address set forth above within five (5) business days of the Closing Date.

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Agreed and Accepted

this    day of            , 2012:

**INTERNATIONAL STEM CELL CORPORATION**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_



## ANNEX I

### TERMS AND CONDITIONS FOR PURCHASE OF SHARES AND WARRANTS

Capitalized terms used but not defined on this Annex I shall have the meanings ascribed to such terms in the Subscription Agreement to which this Annex is attached.

**1. Authorization and Sale of the Shares and Warrants.** Subject to the terms and conditions of this Agreement, the Issuer has authorized the sale of the Shares and Warrants.

#### **2. Agreement to Sell and Purchase the Shares and Warrants.**

2.1 At the Closing (as defined in Section 3.1), the Issuer will sell to the Purchaser, and the Purchaser will purchase from the Issuer, upon the terms and conditions set forth herein, the number of Shares and Warrants set forth on the last page of the Agreement to which these Terms and Conditions for Purchase of Shares and Warrants are attached as Annex I (the “**Signature Page**”) for the Aggregate Purchase Price set forth on the Signature Page.

2.2 The Issuer proposes to enter into substantially this same form of Subscription Agreement with certain other purchasers (the “**Other Purchasers**”) and expects to complete sales of Shares and Warrants to them. The Purchaser and the Other Purchasers are hereinafter sometimes collectively referred to as the “**Purchasers**,” and this Agreement and the Subscription Agreements executed by the Other Investors are hereinafter sometimes collectively referred to as the “**Agreements**.”

#### **3. Placement Agent.**

3.1 The Purchaser acknowledges that (a) the Issuer has retained CRT Capital Group, LLC (the “**Placement Agent**”) to act as exclusive placement agent in connection with the Offering, (b) the Offering is not being underwritten by the Placement Agent, (c) the Issuer has agreed to pay the Placement Agent a cash fee and warrants to purchase shares of Common Stock in respect of the sale of the Shares and Warrants to the Purchasers, and (d) the Placement Agent has not been retained to negotiate the Purchase Price of the Shares and Warrants, and that the Purchase Price has been determined by discussions and arms-length negotiations between the Issuer and the Purchaser.

3.2 The Issuer has entered into a Placement Agent Agreement, dated [—], 2012 (the “**Placement Agent Agreement**”), with the Placement Agent that contains certain representations and warranties of the Issuer, each of which may be relied upon by the Purchaser as if fully set forth herein. Without limiting the foregoing, it is specifically agreed that the Purchaser shall be a third party beneficiary of the representations and warranties of the Issuer set forth in the Placement Agent Agreement.

#### **4. Closing and Delivery of the Shares, Warrants and Funds.**

**4.1 Closing.** The completion of the purchase and sale of the Shares and Warrants (the “**Closing**”) shall occur at a place and time (the “**Closing Date**”) to be specified by the Issuer and the Placement Agent, and of which the Purchasers will be notified in advance by the Placement Agent, in accordance with Rule 15c6-1 promulgated under the Securities Exchange Act of 1934, as

amended (the “**Exchange Act**”). At the Closing: (a) the Issuer shall cause the Transfer Agent to deliver to the Purchaser the number of Shares set forth on the Signature Page registered in the name of the Purchaser or, if so indicated on the Signature Page, in the name of a nominee designated by the Purchaser, (b) the Issuer shall cause to be delivered to the Purchaser a Warrant to purchase a number of Warrant Shares as set forth on the signature page and (c) the aggregate purchase price for the Shares and Warrants being purchased by the Purchaser will be delivered by or on behalf of the Purchaser to the Issuer.

#### **4.2 Conditions to the Obligations of the Parties.**

(a) Conditions to the Issuer’s Obligations. The Issuer’s obligation to issue and sell the Shares and Warrants to the Purchaser shall be subject to: (i) the receipt by the Issuer of the aggregate purchase price for the Shares being purchased hereunder as set forth on the Signature Page, (ii) the accuracy of the representations and warranties made by the Purchaser, and (iii) the fulfillment of those undertakings of the Purchaser to be fulfilled prior to the Closing Date.

(b) Conditions to the Purchaser’s Obligations. The Purchaser’s obligation to purchase the Shares and Warrants will be subject to the accuracy of the representations and warranties made by the Issuer, and the fulfillment of those undertakings of the Issuer to be fulfilled prior to the Closing Date, including without limitation, those contained in the Placement Agent Agreement, and to the condition that the Placement Agent shall not have: (i) terminated the Placement Agent Agreement pursuant to the terms thereof, or (ii) determined that the conditions to closing in the Placement Agent Agreement have not been satisfied. The Purchaser’s obligations are expressly not conditioned on the purchase by any or all of the Other Purchasers of the Shares and Warrants that they have agreed to purchase from the Issuer, it being understood that there is no minimum number of Shares and Warrants that the Issuer is required to sell in the Offering. The Purchaser understands and agrees that, in the event the Placement Agent in its sole discretion determines that the conditions to closing in the Placement Agent Agreement have not been satisfied or if the Placement Agent Agreement may be terminated for any other reason permitted by the Placement Agent Agreement, then the Placement Agent may, but shall not be obligated to, terminate the Placement Agent Agreement, which shall have the effect of terminating this Subscription Agreement pursuant to Section 15 below.

#### **5. Representations, Warranties and Covenants of the Purchaser.**

The Purchaser acknowledges, represents and warrants to, and agrees with, the Issuer and the Placement Agent that:

5.1 The Purchaser: (a) is knowledgeable, sophisticated and experienced in making, and is qualified to make decisions with respect to, investments in shares presenting an investment decision like that involved in the purchase of the Shares and Warrants, including investments in securities issued by the Issuer and investments in comparable companies, (b) has answered all questions on the Signature Page and the answers thereto are true and correct as of the date hereof and will be true and correct as of the Closing Date and (c) in connection with its decision to purchase the number of Shares and Warrants set forth on the Signature Page, has received and is relying only upon the Disclosure Package (including the documents incorporated by reference therein) and the Offering Information.

5.2 The Purchaser has full right, power, authority and capacity to enter into this Agreement and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Agreement, and (b) this Agreement constitutes a valid and binding obligation of the Purchaser enforceable against the Purchaser in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity, and except as to the enforceability of any rights to indemnification or contribution that may be violative of the public policy underlying any law, rule or regulation (including any federal or state securities law, rule or regulation).

5.3 The Purchaser understands that nothing in this Agreement, the Disclosure Package, the Prospectus, the Offering Information or any other materials presented to the Purchaser in connection with the purchase and sale of the Shares and Warrants constitutes legal, tax or investment advice. The Purchaser has consulted such legal, tax and investment advisors and made such investigation as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of the Shares. The Purchaser also understands that the Common Stock is not listed for trading on any securities exchange and that the Issuer is under no obligation to list the Common Stock on any securities exchange.

5.4 The Placement Agent is not authorized to make and has not made any representation, disclosure or use of any information in connection with the purchase and sale of the Shares and Warrants, except as set forth or incorporated by reference in the Prospectus or any Issuer Free Writing Prospectus.

5.5 No action has been or will be taken in any jurisdiction outside the United States by the Issuer or the Placement Agent that would permit an offering of the Shares and Warrants, or possession or distribution of offering materials in connection with the issue of the Securities in any jurisdiction outside the United States where action for that purpose is required.

5.6 Since the date on which the Placement Agent first contacted the Purchaser about the Offering, the Purchaser has not disclosed any information regarding the Offering to any third parties (other than its legal, accounting and other advisors for the purpose of assessing an investment in the Shares and Warrants who are bound by agreements or duties of confidentiality) and has not engaged in any purchases or sales involving the securities of the Issuer (including, without limitation, any Short Sales involving the Issuer's securities). The Purchaser covenants that it will not engage in any purchases or sales involving the securities of the Issuer (including Short Sales) prior to the time that the transactions contemplated by this Agreement are publicly disclosed. The Purchaser agrees that it will not use any of the Securities acquired pursuant to this Agreement to cover any short position in the Common Stock if doing so would be in violation of applicable securities laws. For purposes hereof, "**Short Sales**" include, without limitation, all "short sales" as defined in Rule 200 promulgated under Regulation SHO under the Exchange Act, whether or not against the box, and all types of direct and indirect stock pledges, forward sales contracts, options, puts, calls, short sales, swaps, "put equivalent positions" (as defined in Rule 16a-1(h) under the Exchange Act) and similar arrangements (including on a total return basis), and sales and other transactions through non-US broker dealers or foreign regulated brokers.

**6. Survival of Representations, Warranties and Agreements; Third Party Beneficiary.** Notwithstanding any investigation made by any party to this Agreement or by the Placement Agent, all covenants, agreements, representations and warranties made by the Issuer and the Purchaser herein will survive the execution of this Agreement, the delivery to the Purchaser of the Shares and Warrants being purchased and the payment therefor. It is specifically agreed that the Placement Agent shall be a third party beneficiary with respect to the representations, warranties and agreements of the Purchaser in Section 5 hereof.

**7. Notices.** All notices, requests, consents and other communications hereunder will be in writing, will be mailed (a) if within the domestic United States by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, or by facsimile or (b) if delivered from outside the United States, by International Federal Express or facsimile, and (c) will be deemed given (i) if delivered by first-class registered or certified mail domestic, three business days after so mailed, (ii) if delivered by nationally recognized overnight carrier, one business day after so mailed, (iii) if delivered by International Federal Express, two business days after so mailed and (iv) if delivered by facsimile, upon electronic confirmation of receipt and will be delivered and addressed as follows:

(a) if to the Issuer, to:

International Stem Cell Corporation  
5950 Priestly Drive  
Carlsbad, CA 92008  
Attention: Chief Executive Officer  
Fax: ( ) -

and

DLA Piper LLP (US)  
4365 Executive Drive, Suite 1100  
San Diego, CA 92121-2133  
Attention: Douglas Rein, Esq.  
Fax: (858) 638-5043

(b) if to the Purchaser, at its address on the Signature Page hereto, or at such other address or addresses as may have been furnished to the Issuer in writing.

**8. Amendments; Waivers.** This Agreement may only be amended or modified in writing, signed by each of the parties hereto, and no condition herein (express or implied) may be waived unless waived in writing by each party whom the condition is meant to benefit.

**9. Headings.** The Section headings herein are for convenience only and shall not affect the construction hereof.

**10. Severability.** The invalidity or unenforceability of any section, clause or provision of this Agreement (including any section, clause or provision of this Annex I) shall not affect the validity or enforceability of any other section, clause or provision hereof. If any section, clause or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall

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be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

**11. Governing Law.** This Agreement will be governed by, and construed in accordance with, the laws of the State of New York, without giving effect to the principles of conflicts of law that would require the application of the laws of any other jurisdiction.

**12. Counterparts.** This Agreement may be executed in two or more counterparts, each of which will constitute an original, but all of which, when taken together, will constitute but one instrument, and will become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. Delivery of a signed counterpart of this Agreement by facsimile or other electronic transmission shall constitute valid and sufficient delivery thereof. The Issuer and the Purchaser acknowledge and agree that the Issuer shall deliver its counterpart to the Purchaser along with the Prospectus Supplement (or the filing by the Issuer of an electronic version thereof with the Commission).

**13. Entire Agreement.** This Agreement constitutes the entire agreement and understanding of the parties to this Agreement with respect to the subject matter hereof and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof.

**14. Confirmation of Sale.** The Purchaser acknowledges and agrees that such Purchaser's receipt of the Issuer's signed counterpart to this Agreement, together with the Prospectus (or the filing by the Issuer of an electronic version thereof with the Commission), shall constitute written confirmation of the Issuer's sale of the Shares to such Purchaser.

**15. Termination.** In the event that the Placement Agent Agreement is terminated by the Placement Agent pursuant to the terms thereof, this Agreement shall terminate without any further action on the part of the parties hereto.

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**ANNEX II**

**IRS FORM W-9**

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

As independent registered public accountants, we hereby consent to the incorporation by reference in this Amendment No. 1 to Registration Statement No. 333-184493 on Form S-1/A of our report dated March 16, 2012 (which report includes an explanatory paragraph relating to the uncertainty of the Company's ability to continue as a going concern) included in the Form 10-K for the year ended December 31, 2011 of International Stem Cell Corporation and Subsidiaries (the Company), a development stage company, and to all references to our Firm included in this Registration Statement.

/s/ Mayer Hoffman McCann P.C.

San Diego, California  
December 6, 2012



801 South Grand Avenue, Suite 400 • Los Angeles, CA 90017-4646 • Ph. (213) 873-1700 • Fax (213) 873-1777 • [www.vasquezcpa.com](http://www.vasquezcpa.com)

**Consent of Independent Registered Public Accounting Firm**

**International Stem Cell Corporation  
Carlsbad, California**

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our report dated March 24, 2011 (except for notes 1, 2 and 10, as to which the date is June 22, 2011) relating to the consolidated financial statements of International Stem Cell Corporation and Subsidiaries (the Company) which appears on Page F-2 in the Company's Annual Report on Form 10-K for the year ended December 31, 2010.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/

**Los Angeles, California  
December 6, 2012**

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Registered with Public Company Accounting Oversight Board

Member of Private Companies Practice Section & Center for Public Company Audit Firms