# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

## 

## INTERNATIONAL STEM CELL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

2834

(Primary Standard Industrial Classification Code number)

2595 Jason Court

20-4494098

(I.R.S. Employer Identification No.)

Oceanside, CA 92056 (760) 940-6383 (Address and telephone number of principal executive offices)

> RAY WOOD 2595 Jason Court Oceanside, CA 92056 (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

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

f 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 1935
heck the following box.
f 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.
f 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 Ac egistration statement number of the earlier effective registration statement for the same offering.
f 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 egistration 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	acce	lerated	filer
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☐ Accelerated filer

□ Non-accelerated filer

## CALCULATION OF REGISTRATION FEE

		Proposed Maximum		Proposed Maximum		
Title of each class of securities to be registered	Amount to be Registered (1)		ring Price Security (2)		Aggregate fering Price	nount of tration Fee
Common Stock, par value \$0.001	290,698	\$	0.91	\$	264,536	\$ 15
Common Stock, par value \$0.001,						
<u>underlying warrants</u>	<u>7,848,837(3)</u>	\$	0.91	\$	7,142,442	\$ <u>399</u>
Total	8,139,535					\$ 414

- (1) All such shares are currently owned by the selling stockholder. In the event of a stock split, reverse stock split, stock dividend or similar transaction involving our common stock, the number of shares registered shall automatically be adjusted to cover the additional shares of common stock issuable pursuant to Rule 416 under the Securities Act of 1933, as amended.
- (2) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(c) under the Securities Act of 1933, using the average of the high and low prices as reported on the Over The Counter Bulletin Board on July 24, 2009, which was \$0.91 per share.
- (3) Computed assuming that all of the shares of Series E Preferred Stock are sold and the market price at the time of such sale is \$0.86 per share, which is the average closing price per share of the registrant's common stock over the three week period ended July 24, 2009.

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 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. The selling securityholders 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 neither International Stem Cell Corporation nor the selling securityholders are soliciting offers to buy these securities in any state where the offer or sale is not permitted.

#### SUBJECT TO COMPLETION, DATED JULY 31, 2009

International Stem Cell Corporation 8,139,535 Shares of Common Stock

This prospectus relates to the resale of up to 8,139,535 shares of our common stock by Optimus CG II, Ltd. (the "selling stockholder"), consisting c 290,698 shares of common stock issued pursuant to that certain Stock Purchase Agreement, dated June 30, 2009, between the Company and an affiliate of the selling stockholder (the "Purchase Agreement") and 7,848,837 shares of common stock issuable upon exercise of a warrant issued to the selling stockholder pursuant to the Purchase Agreement. The selling stockholder may sell such common stock from time to time in the principal market on which the stock is traded at the prevailing market price or in negotiated transactions. The selling stockholder may be deemed an underwriter within the meaning of the Securities Act of 1933, as amended, of the shares of common stock that it is offering. We will pay the expenses of registering these shares. We will not receive proceeds from the sale of our shares by the selling stockholder; however, we will receive payment in cash or notes issued by the selling stockholder upon any exercise of warrants.

The securities are being registered to permit the selling stockholder to sell the securities from time to time in the public market. The selling stockholder may sell the securities through ordinary brokerage transactions or through any other means described in the section titled "Plan of Distribution." We do not know when or in what amount the selling stockholder may offer the securities for sale. The selling stockholder may sell any, all or none of the securities offered by this prospectus.

Our common stock is quoted on the OTC Bulletin Board and trades under the symbol "ISCO.OB". The last reported sale price of our common stock the OTC Bulletin Board on July 30, 2009, was \$0.97 per share.

Investing in our common stock involves substantial risks. See "Risk Factors," beginning on page 5.

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

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

The date of this prospectus is\_\_\_\_\_\_, 2009.

INTERNATIONAL STEM CELL CORPORATION HAS NOT REGISTERED THE SHARES FOR SALE BY THE S SHAREHOLDERS UNDER THE SECURITIES LAWS OF ANY STATE. BROKERS OR DEALERS EFFECTING TRANSAC' THE SHARES SHOULD CONFIRM THAT THE SHARES HAVE BEEN REGISTERED UNDER THE SECURITIES LAWS OF THE STATE OR STATES IN WHICH SALES OF THE SHARES OCCUR AS OF THE TIME OF SUCH SALES, OR THAT THERE IS AN AVA 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. THIS PROSPECTUS IS OFFER TO SELL SECURITIES IN ANY CIRCUMSTANCES IN WHICH SUCH AN OFFER IS UNLAWFUL.

## INTERNATIONAL STEM CELL CORPORATION

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You may only rely 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 common stock offered by this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any common stock 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 biotechnology company currently focused on developing therapeutic products and research products. In the area of therapeutic product development, our objective is to create an unlimited source of human cells for use in the treatment of several diseases including diabetes, liver disease, corneal disease and retinal disease through cell transplant therapy. In furtherance of this objective, we are currently developing (i) pluripotent stem cells that are comparable in function to, but distinct in derivation from, embryonic stem cells from which cells for human transplant can be derived, (ii) techniques to cause those cells to be differentiated into the specific cell types required for transplant, and (iii) manufacturing protocols to produce these cells without contamination with animal byproducts in compliance with U.S. Food and Drug Administration requirements. While our cell lines are comparable to embryonic cell lines because they have the potential to become any cell in the human body through differentiation, the development of our cell lines does not require the use of fertilized eggs or the destruction of any embryos created through fertilization.

According to the National Institutes of Health, research on stem cells is advancing knowledge about how an organism develops from a single cell and how healthy cells replace damaged cells in adult organisms. This area of science is also leading scientists to investigate the possibility of cell-based therapies to treat disease, which is often referred to as regenerative or reparative medicine. A potential application of human stem cells is the generation of cells and tissues that may be used for cell-based therapies. Today, donated organs and tissues are often used to replace ailing or destroyed tissue, but the need for transplantable tissues and organs far outweighs the available supply. Stem cells, directed to differentiate into specific cell types, offer the possibility of a renewable source of replacement cells and tissues to treat diseases including diabetes, liver disease, corneal disease and retinal disease.

Pluripotent stem cells are undifferentiated primary cells that have the potential to become any tissues or organs of the body. However, stem cell therapies have technical, ethical and legal hurdles to overcome before they will be able to be used to effect tissue and organ repair. To realize the promise of cell-based therapies for the treatment of diseases, scientists must be able to manipulate stem cells so that they possess the necessary characteristics for successful differentiation, transplantation and engraftment. The following is a list of some of the major steps in successful cell-based treatments that scientists will have to learn to precisely control to ready such treatments for clinical use. To be useful for transplant purposes, stem cells must be reproducibly made to:

- proliferate extensively and generate sufficient quantities of stem cells;
- differentiate into the desired cell type(s) and generate sufficient quantities of those cell types;
- survive in the recipient after transplant;
- integrate into the surrounding tissue after transplant;
- function appropriately;
- avoid harming the recipient; and

• avoid or reduce the problem of immune rejection.

We believe that the market for our products will be substantial given the current limited supply of human cells required to make transplants possible, the need for cells that will not be rejected, and the need for cells produced without contamination by animal by-products. Addressing these core issues will provide an excellent opportunity for the commercialization of our products.

During 2007 and 2008, we had two peer review papers published describing our procedures for creating pluripotent stem cells through parthenogenesis.

In addition to the work we are doing to develop cells for therapeutic cell transplant, we are engaged in the development, production and sale of specialty research products (specialized cell systems, media and reagents for use in stem cell and other medical research) which we have commercialized and are selling to academic institutions, government entities, and commercial research companies. This portion of our business is focused on the needs of stem cell researchers for specialized cells, media and reagents used in the development of therapeutic products. The sale of these research products is expected to provide us with revenue to support a portion of the development of therapeutic products.

Our principal executive offices are located at 2595 Jason Court, Oceanside, California 92056, and our telephone number is (760) 940-6383.

T	he Offering
Common Stock outstanding prior to the offering	47,650,810
Common stock to be sold by the selling stockholder	8,139,535(1)
Common Stock to be outstanding after the offering	55,790,345(2)
Use of proceeds	We will not receive any proceeds from the sale of the common stock hereunder. We will receive the sale price of any common stock we sell to the selling stockholder upon exercise of warrants. We expect to use the proceeds received from the exercise of warrants, if any, for general working capital purposes.
OTCBB Symbol	ISCO

- (1) Includes 7,848,837 shares underlying a warrant, based on the assumed sale of \$5 million of Series E Preferred Stock at times when our stock price is \$0.86 per share.
  - (2) Assumes the exercise of the full amount of the warrant.

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." The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently believe are immaterial may also impair our business operations. 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 Relating 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 and do not expect to be profitable in the near future.

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 revenues and may not have any in the foreseeable future. We will need additional capital to conduct our operations and develop our products and our ability to obtain the necessary funding is uncertain. We need to obtain significant additional capital resources from sources including equity and/or debt financings, license arrangements, grants and/or collaborative research arrangements in order to develop products. Our current burn rate is approximately \$450,000 per month excluding capital expenditures and the company has been funding this through private equity financings, as required. We believe that more formal financing in an amount sufficient to fund operations for a year or more will be required and we intend to seek such financing when the capital markets permit. However, if such financing is not available only on terms that are detrimental to the long-term survival of the company, 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 2009 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 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. Further, if additional funds are obtained 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 product lines, any of which could have a material adverse affect on our financial condition or business prospects.

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.

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 also 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 delayed by several factors, including:

- unforeseen safety issues;
- determination of dosing issues;
- lack of 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.

Patents obtained 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, there can be no assurance that we would 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.

## We may not be able to adequately protect against piracy of intellectual property in foreign jurisdictions.

Considerable research in the areas of stem cells, cell therapeutics and regenerative medicine is being performed in countries outside of the United States, and  $\varepsilon$  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 competition includes fully integrated biotechnology and pharmaceutical 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 pharmaceutical companies and more established biotechnology and stem cell companies. These companies are developing stem cell-based products and they have significantly greater capital resources in research and development, manufacturing, testing, obtaining regulatory approvals, 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 adversely affected.

## 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.

Research in the field of nuclear transfer and 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.

Our business is 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 stem cells derived from unfertilized oocytes, certain aspects of that work may involve the use of nuclear transfer technology or material deemed to be embryonic material. Nuclear transfer technology, commonly known as therapeutic cloning, and research utilizing embryonic stem cells is controversial, and currently subject to intense scrutiny, particularly in the area of nuclear transfer of human cells and the use of human embryonic material. Cloning for research purposes is unlawful in many states and this type of prohibition may expand into other states, including some where we now operate.

Federal law no longer restricts the use of federal funds for human embryonic cell research, commonly referred to as hES cell research, however, research using parthenogenic stem cells or cells derived from somatic cell nuclear transfer are not currently eligible for Federal funding and there can be no assurance that our operations will not be restricted by any future legislative or administrative efforts by politicians or groups opposed to the development of hES cal technology, parthenogenesis or nuclear transfer technology. Further, there can be no assurance that legislative or administrative restrictions directly or indirectly delaying, limiting or preventing the use of hES technology, parthenogenesis or nuclear transfer technology, the use of human embryonic material, or the sale, manufacture or use of products or services derived from parthenogenesis, nuclear transfer technology or other hES technology will not be adopted in the future.

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 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 have been or are being funded in part by government grants and our research may be so funded in the future. In connection with certain grants, the governmental entity involved retains 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 it the right to practice the invention without payment of royalties.

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. 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 our primary sources 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 will 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 products, or those of our licensees or collaborators, must demonstrate the safety and efficacy of such products to the extent necessary to obtain appropriate regulatory approvals. Similarly, the testing of such 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 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 be successful in these efforts.

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 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.

## 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 or to timely achieve development and commercialization benchmarks). 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.

## Patents pending may not be granted.

Our business is based in large part on technology which we have developed and on which we have filed domestic and international patent applications. However, although we have researched prior art in the fields covered by our patents and believe that they will ultimately be granted, some or all of such patent applications may not be granted. We may not have the resources to defend them in the event of infringement.

## 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. 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

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.

## 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 scientists, particularly, Mr. Aldrich, Dr. Semechkine, Mr. Janus or Dr. Revazova, would be significantly detrimental to us. In addition, recruiting and retaining qualified scientific personne 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. There is intense competition for qualified personnel in the areas of our present and planned activities, and we may not be able to continue to attract and retain the qualified personnel necessary for the development of our business. The failure to attract and retain such personnel or to develop such expertise would adversely affect 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

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.

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 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 has been 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 Ruk 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 volume 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, almost all 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 create and issued shares of five series of preferred stock. The preferred stock may be issued in one or more series, the terms of which may be determined at the time of issuance by the Board of Directors without further action by the stockholders. These terms may include voting rights including the right to vote as a series or particular matters, preferences as to dividends and liquidation, conversion rights, redemption rights and sinking fund provisions. The issuance of any preferred stock could diminish the rights of holders of our common stock, and therefore could reduce the value of such common stock. In addition, specific rights granted to future holders of preferred stock could be used to restrict our ability to merge with, or sell assets to, a third party. The ability of the Board of Directors to issue preferred stock could make it more difficult, delay, discourage, prevent or make it more costly to acquire the Company or affect a change-in-control.

## 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.

## 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 will be 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 ove financial reporting and certify the effectiveness of those controls. The standards that must be met for management to assess the internal controls over financial reporting as now in effect are complex, 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. In addition, the attestation process is new for us and we may encounter problems or delays in completing the implementation of any requested improvements and receiving an attestation of the assessment by our independent registered public accountants. If we cannot perform the assessment or certify that our internal controls over financial reporting are effective, or our independent registered public accountants are unable to provide an unqualified attestation on such assessment, investor confidence and share value may be negatively impacted.

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

## 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 5 of this Prospectus.

## **USE OF PROCEEDS**

All shares of our common stock offered by this prospectus are being registered for the account of the selling stockholder. We will not receive any of the proceeds from the sale of these shares. We will receive the exercise price of any common stock we issue to selling stockholder upon exercise of the warrants. We expect to use the proceeds received from the exercise of the warrants, if any, for general working capital purposes.

## MARKET FOR REGISTRANT'S COMMON EQUITY

Our common stock is approved for quotation on the OTC Bulletin Board under the trading symbol "ISCO.OB." From January 8, 2007 until January 29, 200 we traded under the symbol "BTHC.OB." A trading market for our common stock did not begin until January 8, 2007. The OTC Bulletin Board is a regulat quotation service that displays real-time quotes, last-sale prices and volume information in over-the-counter equity securities. The OTC Bulletin Board securitie are traded by a community of market makers that enter quotes and trade reports. This market is extremely limited and any prices quoted may not be a reliable indication of the value of our common stock.

On July 29, 2009 the last reported sales price of our common stock as reported by the OTC Bulletin Board was \$0.95 per share. As of July 29, 2009, we ha 47,650,810 shares of common stock outstanding, and approximately 750 holders of record of our common stock, and we had 3,200,040 shares of preferred stock outstanding, and approximately 10 holders of record of our preferred stock, with the outstanding shares of preferred stock being convertible into 28,800,000 shares of common stock.

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 Bulletin Board for each quarter during fiscal years 2007, 2008 and 2009, are reported below:

	Ma	Market Price				
	High		Low			
Fiscal Year 2009						
Second Quarter	\$ 1.2	0 \$	0.40			
First Quarter	\$ 0.6	3 \$	0.18			
Fiscal Year 2008						
Fourth Quarter	\$ 0.4	5 \$	0.14			
Third Quarter	\$ 0.4	1 \$	0.15			
Second Quarter	\$ 0.5	5 \$	0.32			
First Quarter	\$ 1.0	2 \$	0.40			
Fiscal Year 2007						
Fourth Quarter	\$ 1.4	7 \$	0.54			
Third Quarter	\$ 3.0	5 \$	0.86			
Second Quarter	\$ 3.2	0 \$	2.54			
First Quarter	\$ 3.5	0 \$	2.50			

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 future earnings, operations, capital requirements and availability, restrictions in future financing agreements and other business and financial considerations.

The transfer agent of our common stock is Securities Transfer Corp., 2591 Dallas Parkway, Suite 102 Frisco, Texas, 75034.

## DIVIDEND POLICY

We have not declared any dividends on our common stock to date. We have no present intention of paying any cash dividends on our common stock in the foreseeable future, as we intend to use earnings, if any, to generate growth. The payment by us of dividends, if any, in the future, rests within the discretion of our Board of Directors and will depend, among other things, upon our earnings, our capital requirements and our financial condition, as well as other relevant factors. As long as we have paid any accrued but unpaid dividends on our Series D Preferred Stock and Series E Preferred Stock, there are no restrictions i our articles of incorporation or bylaws that restrict us from declaring dividends on shares of our common stock, except that we would be required to pay dividends on outstanding shares of preferred stock in an amount equal to the dividend those shares would receive if they were converted to shares of common stock.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF

## FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes and other financial information included elsewhere in this prospectus. The discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties, such as our plans, expectations and intentions. Our actual results may differ significantly from management's expectations. This discussion should not be construed to imply that the results discussed herein will necessarily continue into the future, or that any conclusion reached herein will necessarily be indicative of actual operating results in the future. Such discussion represents only the best present assessment of our management.

## Overview

We were originally incorporated in Delaware on June 7, 2005 as BTHC III, Inc. to effect the reincorporation of BTHC III, LLC, a Texas limited liabi company, mandated by a plan of reorganization. Pursuant to the plan of reorganization, an aggregate of 500,000 shares of our common stock were issued to holders of administrative and tax claims and unsecured debt, of which 350,000 shares were issued to Halter Financial Group. The plan of reorganization required BTHC III, Inc. to consummate a merger or acquisition prior to June 20, 2007. Until the Share Exchange Agreement described below, BTHC III, I conducted no operations. In October 2006, BTHC III, Inc. affected a 4.42-for-one stock split with respect to the outstanding shares of common stock.

On December 28, 2006, pursuant to a Share Exchange Agreement, BTHC III, Inc. issued 33,156,502 shares of common stock, representing approximate 93.7% of the common stock outstanding immediately after the transaction, to the shareholders of International Stem Cell Corporation, a California corporation ("ISC California"), in exchange for all outstanding stock of ISC California. This transaction is being accounted for as a "reverse merger" for accounting purposes. Consequently, the assets and liabilities and the historical operations that are reflected in our financial statements are those of ISC California.

ISC California was incorporated in California in June 2006 for the purpose of restructuring the business of Lifeline Cell Technology, LLC, which was organize in California in August 2001. As a result of the restructuring, Lifeline became wholly-owned by ISC California, which in turn is wholly-owned by us. All of ou current operations are conducted by Lifeline. Our principal executive offices are located at 2595 Jason Court, Oceanside, California 92056, and our telephon number is (760) 940-6383.

## Results of Operations

## Quarter Ended March 31, 2009 Compared to Quarter Ended March 31, 2008

## Revenues

We are a development stage company and as such have generated nominal revenues. For the three months ended March 31, 2009, our product sales have continued to increase. We recognized \$183,299 of product revenue, compared to \$32,332 for the three months ended March 31, 2008. The primary reason for the increase is due to collaboration agreements we signed during 2008 to provide stem cells and reagents, as well as the increased efforts by our sales and marketing team as well as our remaining marketing consultants promoting our products.

## Cost of sales

Cost of sales for the quarter ended March 31, 2009 was \$290,162, compared to \$20,859 for the quarter ended March 31, 2008. As our revenues increased so has the cost of manufacturing our products. During the quarter ended March 31, 2009, in our cost of sales amount, we recorded an inventory adjustment of approximately, \$181,500. The inventory adjustment related to a physical inventory and revaluation of inventory costs. We do not anticipate significant inventory adjustments to recur in the future, but we do anticipate some inventory adjustments to occur. Excluding the inventory adjustment, cost of sales for the quarter was \$108,651, or 60% of sales, compared to \$20,859, or 64% of sales for the three months ended March 31, 2008. As we refine our manufacturing processes, and our volume continues to increase, we anticipate our cost of sales to continue to decrease.

## General and Administrative Expenses

General and administrative expenses were \$1,094,608 for the three months ended March 31, 2009, an increase of \$208,949 or 24%, compared to \$885,659 for the three months ended March 31, 2008. The reason for this increase primarily relates to the issuance of common stock and the recording of stock-based compensation for services rendered for general corporate purposes. Although general and administrative expenses increased for the quarter, other general and administrative expenses decreased as a result of the company's overall cost cutting measures put into place at the end of 2008. The Company has made efforts to reduce expenses in salaries, consultants and other administrative expenses. We continue to incur general and administrative expenses related to the development of our support staff and other corporate services needed to develop our business and general corporate expenses related to being a public company.

## Research and Development

Research and development expenses were \$547,601 for the three months ended March 31, 2009, a decrease of \$40,440, or 7%, compared to \$588,041 for the three months ended March 31, 2008. During the quarter in an effort to manage our cash position, we continued to review all research and development expenses for cost savings opportunities. During the three months ended March 31, 2009, the decrease in research and development costs is primarily due to a decrease in research being conducted at our Russian Lab and reduced expenses related to our research consultants, as well as our reduced research efforts and expenses on certain collaboration activities. We gained efficiencies in our laboratory activities and streamlined our production activities to reduce costs for our labs located in Oceanside, California and Walkersville, Maryland.

Research and development expenses are expensed as they are incurred, and are not yet accounted for on a project by project basis since, to date, all of our research has had potential applicability to each of our projects.

## Marketing Expense

Marketing expenses were \$135,499 for the three months ended March 31, 2009, a decrease of \$13,848, compared to \$149,347, or 9%, for the three months ended March 31, 2008. During 2009, we continued our cost saving measures and have reduced expenses related to our marketing consultants and our cost of advertising. We continued to develop our marketing and sales strategies, as well as, our marketing infrastructure to support our sales team and our sales goals. Our primary marketing expenses for the three months ended March 31, 2009, related to our professional sales representatives, sales literature, development and placement of print ads for trade journals, trade shows and marketing consultants.

## Liquidity and Capital Resources

At March 31, 2009, we had an increase in cash of \$573,207 for the three month period ended March 31, 2009, resulting from \$2,000,000 of cash provided by our financing activities, \$1,231,979 cash used in operating activities and \$94,814 used in investment activities. The funds generated from financing activities during the first quarter of 2009 were used mainly to support our operating losses.

## Operating Cash Flows

Net cash used in operating activities of \$1,231,979 for the three months ended March 31, 2009 was primarily attributable to a net loss of \$1,956,622. The adjustments to reconcile the net loss to net cash used in operating activities include depreciation and amortization expense of \$37,812, non-cash warrants for services of \$281,416, non-cash stock option expense of \$99,262, stock issued for services of \$116,058, a decrease in inventory of \$107,022, decrease in prepaid assets of \$53,764, a decrease in deposits and other assets of \$1,679, an increase in accounts payable of \$121,033, a decrease in accrued expenses of \$77,803, and an increase in related party payables of \$6,595, attributable to repayments. The major portion of this increase in cash used resulted from increased spending in general and administrative expenses.

## Investing Cash Flows

Net cash used in investing activities of \$94,814 for the three months ended March 31, 2009 was primarily attributable to purchases of property and equipment of \$67,478 consisting primarily of laboratory equipment for use in a variety of research projects and building leasehold improvements related to new research labs. In addition we made payments for patent licenses of \$27,336 for the three months ending March 31, 2009.

## Financing Cash Flows

Net cash provided by financing activities of \$1,900,000 for the three months ended March 31, 2009 was attributable to closing a Series D Preferred Stock financing round during the quarter. The Series D Preferred financing during the quarter was part of an existing agreement to raise between one million and five million dollars by issuing Series D Preferred Stock. A total of \$2,000,000 had been raised through March 31, 2009 and payment on loans of \$100,000.

## Year Ended December 31, 2008 Compared to Year Ended December 31, 2007

#### Revenues

We are a development stage company and as such have generated nominal revenues. For the year ended December 31, 2008, our product sales have continued to increase. We recognized \$367,771 of product revenue and \$135,000 of licensing revenue during 2008, compared to \$38,764 of product sales for the year ended December 31, 2007. The increase in product sales is due to our strategic marketing efforts executed over the years on advertising and our continued increased efforts by our sales and marketing team as well as our marketing consultants promoting our products.

#### General and Administrative Expenses

General and administrative expenses for the year ended December 31, 2008 were \$3,579,044 an increase of \$489,081, or 16%, compared to \$3,089,963 for the same period in 2007. The increase primarily related to the development of a support staff, which included payroll related expenses of \$1,554,821, financial consultants to assist with various Securities and Exchange Commission filings of \$70,753, audit and accounting \$192,537, deferred compensation charges of \$559,500 and general corporate expenses of \$1,201,432.

## Research and Development

Research and development expenses were \$1,946,704 for the year ended December 31, 2008, a decrease of \$539,713, or 22%, compared to \$2,486,417 for the same period in 2007. Research and development expenses decreased from the prior year primarily due to our efforts to manage our cash position. We reviewed all research and development expenses for cost reduction opportunities and during the year decreased research and development activities being conducted at our Russian Lab. We also reduced expenses related to our research consultants, as well as our reduced research efforts and expenses on certain collaboration activities. We gained efficiencies in our laboratory activities and streamlined our production activities to reduce costs.

R&D operations consisted primarily of the development of additional stem cell lines through parthenogenesis, the development of new techniques of parthenogenesis, the development of differentiation techniques for retinal, corneal and definitive endoderm cells, and the development of research products for sale. Expenses related to these projects have not been separately accounted for on our books as yet since the research involved often involves multiple projects, including the use of the same employees and equipment for multiple purposes.

The development of cells for therapeutic use will be an ongoing endeavor for many years and it is impossible to make any meaningful estimate of the nature and timing of costs related thereto. Future R&D related to research cells and media products will be ongoing as products are developed and offered for sale and will be accounted for separately at such time as specific allocations can be meaningfully made based on demand and sales. We have not yet reached that stage of development. The project at UCI described below will be the first for which separate allocation will be feasible.

Other than with respect to the research agreement described previously, no specific completion dates have been established for any particular project since most of our work is experimental. No revenues are expected from any R&D efforts directed toward cell based therapy for several years and may never develop if our research is not successful. Some revenues are expected from research cells and media, but it is too early in our history to make meaningful predictions as to the amount of such revenues.

Research and development expenses are expensed as they are incurred, and are not yet accounted for on a project by project basis since, to date, all of our research has had potential applicability to each of our projects.

## Marketing Expense

Marketing expenses for the year ended December 31, 2008 were \$380,895, a decrease of \$114,114, or 23%, compared to \$495,009 for 2007. During 2008, as part of our cost saving measures, we reduced expenses related to our marketing consultants and our cost of advertising. We continued to develop marketing and sales strategies, as well as, our marketing infrastructure to support our sales team and our sales goals. Our primary marketing expenses for the year ended 2008, related to our professional sales representatives, sales literature, development and placement of print ads for trade journals, trade shows and marketing consultants.

## Liquidity and Capital Resources

At December 31, 2008, our cash and cash equivalents totaled \$381,822. Overall, we had an increase in cash of \$216,478 for the year ended December 31 2008, resulting from \$4,750,326 cash used in operating activities and \$318,196 used in investment activities, offset by \$5,285,000 of cash provided by our financing activities. The funds generated from financing activities during 2008 were used mainly to support our operating losses.

## Operating Cash Flows

Net cash used in operating activities of \$4,750,326 for the year end December 31, 2008 was primarily attributable to a net loss of \$6,571,324. The adjustments to reconcile the net loss to net cash used in operating activities include depreciation and amortization expense of \$163,055, non-cash stock option expense of \$734,867, amortization of discounts on convertible notes of \$1,013,735, a decrease in inventory of \$241,707, an increase in prepaid assets of \$43,607, a decrease in accounts receivable of \$70,473, a decrease in other assets of \$3,779, a decrease in accounts payable of \$28,392, an increase in accrued expenses of \$98,816, and a decrease of \$485,130 in related party payables.

## Investing Cash Flows

Net cash used in investing activities of \$318,196 for the year ended December 31, 2008 was primarily attributable to purchases of property and equipment of \$254,353 consisting primarily of laboratory equipment for use in a variety of research projects, and building leasehold improvements related to new research labs. In addition we made payments for patent licenses of \$63,843 during 2008.

## Financing Cash Flows

Net cash provided by financing activities of \$5,285,000 for the year ended December 31, 2008 was primarily attributable to closing the Series A, B, C and I Preferred Stock financings of \$4,550,000, net proceeds from loan of \$1,110,000 and advances of \$250,000, offset by a loan payment of \$625,000. Management believes that we will need to obtain significant additional capital resources from sources including equity and/or debt financings, license arrangements, grants and/or collaborative research arrangements in order to develop products. Thereafter, we will need to raise additional working capital. Our current burn rate is approximately \$450,000 per month excluding capital expenditures. The timing and degree of any future capital requirements will depend on many factors. Based on the above, there is substantial doubt about the Company's ability to continue as a going concern.

## **Off-Balance Sheet Arrangements**

There were no off-balance sheet arrangements.

## **Recently Issued Accounting Pronouncements**

In September 2006, the FASB issued Statement No. 157, Fair Value Measurements, ("SFAS 157"), which defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. SFAS 157 does not require any new fair value measurements, but provides guidance on how to measure fair value by providing a fair value hierarchy used to classify the source of the information. This statement is effective for the Company beginning January 1, 2008 and did not have an impact on the financial statements as the Company does not have financial instruments subject to the expanded disclosure requirements. In February 2008, the FASB issued FASB Staff Position FAS 157-2, Effective Date FASB Statement No. 157, which provides a one year delay of the effective date of FAS 157 as it relates to nonfinancial assets and liabilities, except those tha are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). The provisions of SFAS 157 relating to nonfinancial assets and liabilities will be effective for the Company on January 1, 2009. The Company assessed the potential impact that adoption of FASB 157 as it relate to nonfinancial assets and liabilities would have on its consolidated financial statements and have concluded that there will be no material impact in 2009

In February 2007, the FASB issued Statement No. 159, The Fair Value Option for Financial Assets and Financial Liabilities ("SFAS 159"). Under t provisions of SFAS 159, companies may choose to account for eligible financial instruments, warranties and insurance contracts at fair value on a contract-by-contract basis. Changes in fair value will be recognized in earnings each reporting period. FASB 159 is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. The adoption of SFAS 159 had no impact on our consolidated financia statements as the Company did not elect the fair value option.

In December 2007, the FASB issued Statement No. 141 (revised 2007), Business Combinations. (SFAS 141(r)"). The new standard requires the acquirit entity in a business combination to recognize all (and only) the assets acquired and liabilities assumed in the transaction; establishes the acquisition-date fair value as the measurement objective for all assets acquired and liabilities assumed; and requires the acquirer to disclose to investors and other users all of the information they need to evaluate and understand the nature and financial effect of the business combination. This is effective for the Company beginning January 1, 2009 and has assessed that it will have no impact on the consolidated financial statements.

In December, 2007, the FASB issued Statement No. 160, Noncontrolling Interests in Consolidated Financial Statements—an amendment of ARB N 51("SFAS 160"). This statement establishes accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of  $\epsilon$  subsidiary. This statement is effective prospectively, except for certain retrospective disclosure requirements, for fiscal years beginning after December 15, 2008. The Company expects that this will have no impact on its consolidated financial statements.

In December 2007, FASB ratified the consensus reached by EITF on EITF Issue 07-1, Accounting for Collaborative Arrangements, or EITF 07-1. EITF (requires collaborators to present the results of activities for which they act as the principal on a gross basis and report any payments received from (made to) other collaborators based on other applicable GAAP or, in the absence of other applicable GAAP, based on analogy to authoritative accounting literature or a reasonable, rational, and consistently applied accounting policy election. Further, EITF 07-1 clarified that the determination of whether transactions within a collaborative arrangement are part of a vendor-customer (or analogous) relationship subject to EITF 01-9, "Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)." EITF 07-1 will be effective beginning on January 1, 2008. The Company assessed the potentia impact adopting this pronouncement would have on the consolidated financial statements and have concluded that there is no material impact as of December 31, 2008.

In March 2008, the FASB issued Statement No. 161, Disclosures about Derivative Instruments and Hedging Activities ("SFAS 161"). This statement requir companies with derivative instruments to disclose information that should enable financial statement users to understand how and why a company uses derivative instruments, how derivative instruments and related hedged items are accounted for under FASB Statement No. 133, Accounting for Derivative Instruments and Hedging Activities, and how derivative instruments and related hedged items affect a company's financial position, financial performance and cash flows. SFAS 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008. The adoption of this statement is not expected to have a material effect on our financial position or results of operations.

In May 2008, the FASB issued Statement No. 162, The Hierarchy of Generally Accepted Accounting Principles ("SFAS 162"). SFAS 162 identifies consistent framework, or hierarchy, for selecting accounting principles to be used in preparing financial statements that are presented in conformity with U.S. generally accepted accounting principles for nongovernmental entities (the "Hierarchy"). The Hierarchy within SFAS 162 is consistent with that previously defined in the AICPA Statement on Auditing Standards No. 69, The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principle ("SAS 69"). SFAS 162 is effective 60 days following the United States Securities and Exchange Commission's (the "SEC") approval of the Public Compa Accounting Oversight Board amendments to AU Section 411, The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principle The adoption of SFAS 162 will not have a material effect on the consolidated financial statements because the Company has utilized the guidance within SA' 69.

In May 2008, the FASB issued Statement No. 163, Accounting for Financial Guarantee Insurance Contracts—an interpretation of FASB Statement No. ("SFAS No. 163"). SFAS 163 requires recognition of an insurance claim liability prior to an event of default when there is evidence that credit deterioration has occurred in an insured financial obligation. SFAS 163 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and al interim periods within those fiscal years. Early application is not permitted. The Company expects that the adoption of SFAS 163 will not have a material effect on the consolidated financial statements.

## **DESCRIPTION OF BUSINESS**

## **Business Overview**

We are a biotechnology company currently focused on developing therapeutic products and research products. In the area of therapeutic product development, our objective is to create an unlimited source of human cells for use in the treatment of several diseases including diabetes, liver disease, corneal disease and retinal disease through cell transplant therapy. In furtherance of this objective, we are currently developing (i) pluripotent stem cells that are comparable in function to, but distinct in derivation from, embryonic stem cells from which cells for human transplant can be derived, (ii) techniques to cause those cells to be "differentiated" into the specific cell types required for transplant, and (iii) manufacturing protocols to produce these cells without contamination with animal byproducts in compliance with U.S. Food and Drug Administration requirements. While our cell lines are comparable to embryonic cell lines because they have the potential to become any cell in the human body through differentiation, the development of our cell lines does not require the use of fertilized eggs or the destruction of any embryos created through fertilization.

According to the National Institutes of Health, research on stem cells is advancing knowledge about how an organism develops from a single cell and how healthy cells replace damaged cells in adult organisms. This area of science is also leading scientists to investigate the possibility of cell-based therapies to treat disease, which is often referred to as regenerative or reparative medicine. A potential application of human stem cells is the generation of cells and tissues that may be used for cell-based therapies. Today, donated organs and tissues are often used to replace ailing or destroyed tissue, but the need for transplantable tissues and organs far outweighs the available supply. Stem cells, directed to differentiate into specific cell types, offer the possibility of a renewable source of replacement cells and tissues to treat diseases including diabetes, liver disease, corneal disease and retinal disease.

Pluripotent stem cells are undifferentiated primary cells that have the potential to become any tissues or organs of the body. However, stem cell therapies have technical, ethical and legal hurdles to overcome before they will be able to be used to effect tissue and organ repair. To realize the promise of cell-based therapies for the treatment of diseases, scientists must be able to manipulate stem cells so that they possess the necessary characteristics for successful differentiation, transplantation and engraftment. The following is a list of some of the major steps in successful cell-based treatments that scientists will have to learn to precisely control to ready such treatments for clinical use. To be useful for transplant purposes, stem cells must be reproducibly made to:

- proliferate extensively and generate sufficient quantities of stem cells;
- differentiate into the desired cell type(s) and generate sufficient quantities of those cell types;
- survive in the recipient after transplant;
- integrate into the surrounding tissue after transplant;
- function appropriately;
- · avoid harming the recipient; and
- avoid or reduce the problem of immune rejection.

We believe that the market for our products will be favorably affected by the current limited supply of human cells required to make transplants possible, the need for cells that will not be rejected, and the need for cells produced without contamination by animal by-products. Addressing these core issues will provide an excellent opportunity for the commercialization of our products.

During 2007 and 2008, we had two peer review papers published describing our procedures for creating pluripotent stem cells through parthenogenesis. In addition to the work we are doing to develop cells for therapeutic cell transplant, we are engaged in the development, production and sale of specialty research products (specialized cell systems, media and reagents for use in stem cell and other medical research) which we have commercialized and are selling to academic institutions, government entities, and commercial research companies. This portion of our business is focused on the needs of stem cell researchers for specialized cells, media and reagents used in the development of therapeutic products. We expect the sale of these research products to provide us with funds to support a portion of the development of therapeutic products.

During the first six months of 2009 we commenced animal trials to study the effects of Retinal cells derived from our proprietary parthenogenetic stem cells in the treatment of macular degeneration and separate trials for liver disease, and have also commenced animal trials using corneal epithelial cells derived from donors to accelerate healing and reduce pain in patients who have undergone the vision enhancement procedure known as PRK, an alternative to LASIK None of these trials have been completed and no data has been published.

## History

We were incorporated in Delaware on June 7, 2005 under the name BTHC III, Inc. to effect the reincorporation of BTHC III, LLC, a Texas limited liabi company, mandated by a plan of reorganization. Pursuant to the plan of reorganization, an aggregate of 500,000 shares of our common stock were issued to holders of administrative and tax claims and unsecured debt, of which 350,000 shares were issued to Halter Financial Group. The plan of reorganization required the consummation of a merger or acquisition prior to June 20, 2007. Until the Share Exchange Agreement described below, BTHC III, Inc. conducts no operations. In October 2006, BTHC III, Inc. affected a 4.42-for-one stock split with respect to the outstanding shares of common stock. After giving effect to the stock split and eliminating fractional shares, there were 2,209,993 shares of common stock outstanding.

On December 28, 2006, pursuant to a Share Exchange Agreement, BTHC III, Inc. issued 33,156,502 shares of common stock, representing approximate 93.7% of the common stock outstanding immediately after the transaction, to the shareholders of International Stem Cell Corporation, a California corporation ("ISC California"), in exchange for all outstanding stock of ISC California. As a result of this transaction, ISC California became wholly owned by us. TI transaction was accounted for as a "reverse merger" for accounting purposes. Consequently, the assets and liabilities and the historical operations that are reflected in our financial statements are those of ISC California and its subsidiary. On January 29, 2007, we changed our name to International Stem Ce Corporation and in connection therewith our trading symbol changed to ISCO.OB.

ISC California was incorporated in California in June 2006 for the purpose of restructuring the business of Lifeline Cell Technology, LLC, which was organize in California in August 2001. As a result of the restructuring, Lifeline became wholly-owned by ISC California. Our principal executive offices are located  $\epsilon$  2595 Jason Court, Oceanside, California 92056, and our telephone number is (760) 940-6383.

## Frequently Asked Questions

What are Stem Cells?

Cells are the basic living units that make up a human being. Stem cells have two important characteristics that distinguish them from other types of cells. First they are unspecialized cells that renew themselves for long periods of time. Second, under certain physiologic or experimental conditions, they can be induced to become cells with special functions such as the beating cells of the heart muscle or the insulin-producing cells of the pancreas. Until recently, scientists have worked with two kinds of stem cells from animals and humans: *embryonic stem cells* and *adult stem cells*, which have different functions and characteristics. We have developed a third category of stem cells that we believe will have the therapeutic advantages of embryonic stem cells without the difficulties discussed below.

What are Pluripotent Stem Cells?

Pluripotent stem cells are important because of their ability to be differentiated, or developed into virtually any other cell made by the human body. Both embryonic stem cells and the parthenogenetic stem cells developed by International Stem Cell Corporation and discussed below, are pluripotent stem cells.

## What are Embryonic Stem Cells?

Embryonic stem cells are derived from embryos that develop from eggs that have been fertilized in vitro—(typically in an in vitro fertilization clinic)—which are donated for research purposes with informed consent of the donors. They are not derived from eggs fertilized in a woman's body. The embryos from which human embryonic stem cells are derived are typically four or five days old and are a hollow microscopic ball of cells called the *blastocyst*. Embryonic stem cells are grown in a laboratory through a process known as cell culture.

Human embryonic stem cells, or hES cells, are isolated by transferring the inner cell mass into a laboratory culture dish that contains a nutrient broth known as a culture medium. The cells then divide and spread over the surface of the dish. Over the course of several days, the cells of the inner cell mass proliferate and begin to crowd the culture dish. When this occurs, they are removed and plated into several fresh culture dishes. The process of replating the cells is repeated many times and for many months. After six months or so, the original small cluster of cells of the inner cell mass yields millions of embryonic stem cells. Once cell lines are established, or even before that stage, batches of them can be frozen and shipped to other laboratories for further culture and experimentation.

## What are Adult Stem Cells?

An adult stem cell is an undifferentiated cell found among differentiated cells in a tissue or organ. An adult stem cell can renew itself and can differentiate to yield the major specialized cell types of the tissue or organ. These cells can be isolated from many tissues, including the brain. The most common places to obtain these cells are from the bone marrow that is located in the center of some bones and from umbilical cord blood obtained at birth.

## Why are Embryonic Stem Cells Important?

Embryonic stem cells are of interest because of their ability to be differentiated, or develop into virtually any other cell made by the human body. In theory, if stem cells can be grown and their development directed in culture, it would be possible to grow cells for the treatment of specific diseases. The first potential applications of human embryonic stem cell technology may be in the area of drug discovery. The ability to grow pure populations of specific cell types offers a proving ground for chemical compounds that may have medical importance in that it may ultimately permit the rapid screening of chemicals. Treating specific cell types and measuring their response may offer an expedited methodology to ascertain test agents such as chemicals that can be used to treat the diseases that involve those specific cell types.

The study of human development may also benefit from embryonic stem cell research in that understanding the events that occur at the first stages of development has potential clinical significance for preventing or treating birth defects, infertility and pregnancy loss. The earliest stages of human development have been difficult or impossible to study. Human embryonic stem cells offer insights into developmental events that cannot be studied directly in humans in vivo or fully understood through the use of animal models.

What are Parthenogenetic Stem Cells and how are they different?.

The cells and cell lines used by International Stem Cell Corporation for therapeutic purposes are "Parthenogenetic Stem Cell Lines" and differentiated cel derived from those lines. Our research is based on perfecting proprietary techniques for deriving stem cells through a technology based on parthenogenesis, which results in the creation of human parthenogenetic stem cell lines that have the same capacity to become all cells found in the human body just as do embryonic stem cells.

However, the parthenogenetic process does not use fertilized human eggs or cause the destruction of such eggs. From the parthenogenetic stem cell lines we have created, we will conduct research to develop specialized cells (such as liver, pancreatic, corneal and retinal cells) needed for transplantation. We do not obtain stem cells from fetal tissue from abortion clinics and our technology does not require the use of discarded frozen human embryos. We do not anticipate using such sources of stem cells in the future.

## Why Not Use Stem Cells Derived from Adults?

There are several approaches now in human clinical trials that utilize mature stem cells (such as blood-forming cells, neuron-forming cells and cartilage-forming cells). However, adult stem cells are limited in their inability to proliferate in culture. Unlike pluripotent stem cells, which have a capacity to reproduce indefinitely in the laboratory, adult stem cells are difficult to grow in the lab and their potential to reproduce diminishes with age. Therefore, obtaining clinically significant amounts of adult stem cells may prove to be difficult.

What is Therapeutic Cloning?

Cloning is simply using the natural process of cell division to make exact copies of a cell. Cloning to make cells creates many identical cells called a "cell line" and cloning to make cells for medical use is generally called "therapeutic cloning." Therapeutic cloning is not the same thing as cloning an entire animal, which is called "reproductive cloning." Therapeutic cloning never creates a complete human being. We work only in the field of therapeutic cloning.

Why is Stem Cell Research Controversial?

The sources of some types of stem cells cause social and religious controversy. Some scientists obtain stem cells from aborted fetal tissue, causing opposition from those opposed to abortion. Another controversial source of stem cells is the residual frozen human fertilized eggs (embryos) that remain after vitro fertilization procedures and are used to create embryonic stem cell lines. A final controversial source of stem cells are those obtained from very early stage embryos created by therapeutic cloning because this process of obtaining stem cells results in the destruction of these early-stage embryos.

Is Stem Cell Research Banned in the United States?

Embryonic stem cell research, in general, is not banned in the United States. Work by private organizations is not restricted except by the restrictions applicable to all human research. In addition, Proposition 71 in California, which voters approved in November 2004, specifically allows state funds to be used for stem cel research.

Why Not Use the Currently "Approved" Embryonic Stem Cells Lines?

The NIH has recently issued new Guidelines that allow Federal funding for research using a broader range of human embryonic stem cells (hESC) lines. The new Guidelines still do not permit Federal funding for the use of other techniques for stem cell creation that depend on the use of human eggs, including parthenogenesis. This does not directly affect our work since we have never depended on Federal funding and we do not anticipate using hESC lines because they appear to our scientists to have a far greater chance of creating an immune rejection response in patients and because we do not wish to become involved in the ethical debates concerning the destruction of fertilized human embryos that is required for the creation of hESC lines. Parthenogenesis, our proprietary technique uses only unfertilized eggs and thus never involves the destruction of a fertilized and potentially viable human embryo. Of particular significance is that, unlike hESC lines, parthenogenesis allows a single stem cell line to match the immune systems, to organ donor standards, of up to 300 million or more potential patients. This creates the potential for a human stem cell bank (conceptually similar to a blood bank) from which any patient who needs human cells for therapy can obtain cells to match his or her immune system and avoid or minimize the need for drugs that suppress the body's natural immune system.

Why Not use Adult Cells Reprogrammed to become Pluripotent Cells?

Cells produced in this manner process have received much recent publicity, primarily because they are not derived from human embryos. These cells, known as Induced Pluripotent Stem Cells, or "iPS" cells, are produced by introducing foreign agents known as vectors, and the vectors currently being used involvence causing agents. The process also involves genetic manipulation not required for embryonic or parthenogenetic stem cells. As a result, the current use of iPS cells is primarily as research tools for drug discovery and the study of disease development pathways.

## **Ethical Issues**

The use of embryonic stem cells derived from fertilized human eggs has created an ethical debate in the United States and around the world. However, since no fertilized human eggs are used in creating our cells and no fertilized human embryo is being created or destroyed, our hope is that our success in perfecting parthenogenesis will resolve many of the current ethical controversies that surround traditional embryonic stem cell research.

We also own the worldwide rights to use in our chosen therapeutic fields, a technology known as Somatic Cell Nuclear Transfer to create human stem cells. The President's Council on Bioethics, as reported in the publication "Reproduction and Responsibility —The Regulation of New Biotechnologies," 2004, he agreed on a series of recommendations for the use of such technology, addressed to both the government and to the relevant scientific and medical practitioners for professional self-scrutiny. In addition, countries such as the United Kingdom have made similar recommendations. Although we have chosen for now to pursue our own proprietary technology, we have implemented the relevant recommendations from this study into our research practices and will continue to adhere to internationally accepted standards regarding the use of this technology in obtaining and using human embryonic stem cells for our therapeutic research.

## Our Technology

With the assistance of our Chief Scientist, Dr. Elena Revazova, M.D., Ph.D., we have developed a proprietary patent pending process, based o parthenogenesis, for the creation of new stem cell lines that we believe will have all the beneficial characteristics of traditional embryonic stem cells. Our technology allows embryonic-like stem cells, called parthenogenetic stem cells, to be created without the use of fertilized embryos or fertilized human eggs (called "oocytes").

Because of their DNA complement, parthenogenetic stem cells have the potential to become cells that will not be rejected by some patients. These cells could be used to create stem cell "banks" in which cells could be stored and matched to a patient's immune system when needed for transplantation. Though not currently our primary area of focus, Somatic Cell Nuclear Transfer, a process to which we also hold a license, can use a patient's own cells to create stem cells having the same genetic makeup as the patient, thus avoiding immune rejection, the most common cause of transplant failure. We also own patent rights to certain key processes now used in creating iPS cells, which we may elect to develop in the future if such cells prove therapeutically useful or valuable as research products. These technologies, however, are not currently within our primary areas of focus.

#### **Our Products**

Specialty Research Products

A critical element for any researcher seeking to develop a therapeutic cell from either a human pluripotent stem cell or an adult stem cell is causing the stem cell to change ("differentiate") into the specific cell needed for a particular therapy. The challenge is to discover the proper set of culture conditions (combinations of proteins, salts, temperatures and hundreds of other environmental factors) to change stem cells into the specific cell types that can be used to cure specific diseases; then develop the procedures needed to produce such cells on demand as needed for human therapy. This process is driven in large part by the "media" and the other added chemicals (called "reagents") used to develop the cells. The type of media and reagents used can dictate what kind of cells will be produced and is critical to the process of developing cell transplants from differentiated stem cells. Our research products consist of cells, growth media and related cell-based products essential to the process of creating and differentiating stem cells. The customers for these products are academic research centers, government research centers, and corporations engaged in developing cell-based therapies. Our research products include:

- FibrolifeTM human fibroblast medium, available as a serum-free or low serum formats.
- Human fibroblast cells for use as feeder layers to grow human embryonic stem cells (eliminates contamination from mouse cells).

- Two types of low serum human endothelial media
  - 1. VascuLifeTM VEGF-Microvascular
  - 2. VascuLifeTM EnGS.-Microvasular
- Human endothelial cells. (Endothelial cells form blood vessels).
- DermaLifeTM human serum-free keratinocyte medium for the culture of human epidermal.
- Human epidermal keratinocyte cells for use as a model to study healing, toxicology or basic cell biology.
- Line of adult neural stem cells with the ability to produce neurons that can survive in low-oxygen and low glucose conditions, a product useful for the discovery of drugs for the treatment of strokes.
- Two types of media for the culture of the adult neural cells
  - 1. NeuralLifeTM ags NSC expansion medium kit
  - 2. NeuralLifeTM ags NSC differentiation medium kit.
- An assortment of cell culture reagents and supplements for the growth of human cells.

We believe products such as these are essential to the development of our own proprietary therapeutic products and are a natural adjunct to that endeavor. The sale of these products to other stem cell-related researchers and businesses will benefit us in several ways: (1) it provides revenue to help support our therapeutic research, (2) it may provide us with an opportunity to preview stem cell work being conducted throughout the world, and (3) if our products are adopted by a successful producer of therapeutic cells, we have the potential of becoming a supplier in a much broader market than research.

Further, because of the process by which therapeutic products are developed and submitted to the FDA for approval, the media and reagents used in developing cells for clinical trials tend to a large degree to become "baked in" to the final therapeutic product. Because of a reluctance or legal inability to change the process of creating the therapeutic product once it has been approved, if another company uses our media and reagents to develop an FDA approved product, we may become the sole approved supplier of these media and reagents for the manufacture of that product.

Our human cell culture products also consist of standardized living cells, including fully functional adult cells and (non-embryonic) stem cell lines. The cells are provided frozen in vials containing approximately 500,000 cells each, or are plated into flasks. Each cell system is quality tested for the expression of specific markers (to assure the cells are the correct type) for proliferation rate, viability, morphology and for the absence of pathogens. Each cell system also contains associated donor information.

In addition to our cell systems, pursuant to the terms of License Agreements with Advanced Cell Technology, Inc. ("Advanced Cell Technology"), we expect to manufacture and sell embryonic stem cell products based on technology developed by Advanced Cell Technology. Some of the products previously owned by Advanced Cell Technology have been sold to BioTime, Inc., and we have rights to distribute those products also under a separate agreement with BioTime entered into in 2008. Under the agreement with BioTime we intend to develop jointly with BioTime stem cell products for the research market based on the ACTCellerate technology that we licensed from Advanced Cell Technology.

Our long term plans for additional product offerings that may be based on the technology licensed from Advanced Cell Technology include:

- Two types of media for the culture of the adult neural cells
  - 1. NeuralLifeTM ags NSC expansion medium kit
  - 2. NeuralLifeTM ags NSC differentiation medium kit.

- An assortment of cell culture reagents and supplements for the growth of human cells.
- Stem cell derived functional human liver cells provided in plates or frozen (a byproduct of therapeutic research). These cells must have active and inducible enzyme systems, they must have a correct morphology, they must express albumin and they must attach to the cell culture dish.
- Stem cell derived functional islet cells provided in plates or frozen. These cells must produce and express insulin in response to glucose.
- Reagents for the culture and differentiation of embryonic stem cells.
- Stem cell derived retinal cells provide frozen for the study of retinal disease.

## Therapeutic Products

We have already used human stem cells to create retinal cells known as retinal pigment epithelial, or RPE. We are currently expanding these cells as part of pre-clinical trials, and commenced animal trials in January 2009 in collaboration with the University of California, Irvine. We are also in the process of developing specialized liver cells for use in the treatment of liver disease and pancreatic "islet" cells to treat diabetes as the third target. During the derivation of retinal cells from stem cells we made a discovery that lead to the in vitro growth of a tissue sphere that closely resembles a human cornea. Studies by an independent pathology laboratory confirmed that the tissue spheres were consistent with human cornea. We have reproduced this work and are continuing to develop methods to perfect the "corneal construct" and the methods of manufacture. We have filed patents to protect our Intellectual Property. Further research will be done in 2009 to confirm that the corneal constructs have a critical "endothelial layer", to confirm that they have proper optical properties and to confirm that they can be reproducibly manufactured in commercial quantities. The goal of this project is to manufacture human corneas for implantation to cure corneal blindness. Techniques of implantation have already been developed and can be applied using cultured corneas.

As discussed below, each of these product candidates will require extensive additional testing and cost through clinical tests and regulatory approval before they can be sold for therapeutic use.

#### **Our Markets**

## Therapeutic Market

Retinal Diseases — Diseases involving retinal degeneration include age-related macular degeneration ("AMD") and retinitis pigmentosa ("RP"). Thes diseases are characterized by the death of critical photoreceptor cells called rods and cones. Photoreceptor death is due to an abnormality and/or to disruption or death of supportive cells called retinal pigment epithelial ("RPE") cells. The use of RPE derived from parthenogenetic stem cells may prove beneficial in the treatment of AMD and RP as retinal cell transplant therapy has been shown to be clinically feasible for the treatment of AMD and RP and the differentiation procedures to derive human retinal cells from parthenogenetic stem cells have been worked out. We are working toward the manufacture of these cells for the treatment of the treatm

Because the therapeutic use of retinal cells is one of the more advanced applications in stem cell therapy and we have already produced human retinal pigment epithelial cells from human embryonic and parthenogenetic stem cell lines, we are focusing on retinal cells as our first therapeutic market target. Our goal is to manufacture retinal cells derived from hES cells to replace the limited supply of donor derived cells for therapeutic use. We will collaborate with academic research and other research institutions to develop FDA-approved therapeutic methodologies for producing retinal cells for therapeutic use.

Corneal Disease — Concern over donor-to-recipient disease transmission and the increasing use of LASIK treatment has reduced the availability of donate corneas and increased costs. Demand for corneal tissue is growing based on advances in corneal transplant techniques.

Diabetes — Another area of focus is on diabetes. Normally, certain cells in the pancreas, called the islet ß cells, produce insulin which promotes the uptake of the sugar glucose by cells in the human body. Degeneration of pancreatic islet ß cells results in a lack of insulin in the bloodstream which results in diabetes. Although diabetics can be treated with daily injections of insulin, these injections enable only intermittent glucose control.

The transplantation of insulin producing cells called "islet cells" from one person to another has been shown to relieve the suffering and serious side effects caused by current therapies. As the primary source of islet cells today is organ donations, available supply is extremely limited. Therefore, our objective in the field of diabetes therapy is to increase the availability of pancreatic islet cells by inducing stem cells derived from our parthenogenic cell lines to grow and become islets or the individual cells found in the islets.

Liver Disease —The only effective treatment currently available for people with liver failure is full or partial organ transplantation. Unfortunately, as with islets, the demand for organs far exceeds the number of organs available.

Liver cell transplantation has been used in early stage clinical trials to treat patients with liver failure caused by acute or chronic disease and in patients with genetically caused metabolic defects. This therapy has proven to be especially useful as a "bridge" to keep patients alive until they can receive a whole liver transplant, as well as an alternative to whole-organ transplantation in specific cases. The procedure involves supplementing a patient's liver function by injecting a donor's liver cells (obtained from livers donated from brain dead, heart beating donors) into a patient's liver or spleen where the liver cells remain and function. Our objective is to provide an alternate source of liver cells for the treatment of liver disease through cell transplant therapy.

## Research Market

The research market for cell systems is made up of scientists performing basic research and applied research in the biological sciences. Basic research involves the study of cell biology, and the biochemical pathways to human disease. Applied research involves drug discovery, vaccine development, clinical research including cell engineering, and cell transplantation.

The domestic market can be broken into three segments. These include: (i) academic researchers in universities and privately-funded research organizations; (ii) government institutions such as the National Institutes of Health, the U.S. Army, the U.S. Environmental Protection Agency and others; and (iii) industric organizations such as pharmaceutical companies and consumer product companies.

We believe the following are the main drivers in the research market for commercial cell systems:

- The need for experimental human cells which are more predictive of human biology than non-human cells or genetically modified cell lines.
- 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 the necessity to formulate media in-house, obtain tissue or perform cell isolations.
- The need to reduce animal testing in the consumer products industry.

Our internal projections for the global market for human cell systems for use in basic research are several hundred million dollars annually with an anticipated growth rate between 10% and 20%.

#### Cosmeceuticals

The Company is engaged in research and testing of a possible new product for skin moisturizing and rejuvenation.

#### **Intellectual Property**

#### Patents

We have filed patent applications covering our proprietary technology to create stem cells without the use of fertilized eggs or transferred DNA. In addition, we have obtained exclusive worldwide licenses to a portfolio of patents and patent applications from Advanced Cell Technology. Our patent portfolio consists of 30 families of patents consisting of over 110 separate patents (including international filings) and patent applications in the field of stem cell culture. We also have an exclusive license to the only patent issued by the U.S. Patent & Trademark Office for the creation of human embryonic stem cells, or hES cells usin nuclear transfer technology for human therapeutic use. Of these, eight are issued patents and a majority of the patents and applications have been filed in the United States and in foreign countries through the Patent Corporation Treaty or by direct country filings in those jurisdictions deemed significant to our operations.

As of June 29, 2009, we had a total of 36 internally-generated patent applications pending, including 6 in the US and 30 in various foreign countries. Two of these pending patents cover both composition of matter for our parthenogenetic stem cell lines and the methods of deriving them. We have also filed patents on unique methods of differentiating parthenogenetic stem cells. We have protected our research products and branding through both patents and trademarks. Lifeline has patents pending on its unique packaging for research products. We have registered trademarks on our company name, logo and various product names to protect our branding investment.

The patentability of human cells in countries throughout the world reflects widely differing governmental attitudes. In the United States, hundreds of patents covering human embryonic stem cells have already been granted, including those on which we rely. In certain countries in Europe, the European Patent Office currently appears to take the position that hES cells themselves are not patentable, while the United Kingdom has decided that some types of hES cells can b patented. As a result, we plan to file internationally wherever feasible and focus our research strategy on cells that best fit the United States and United Kingdom Patent Offices' definitions of patentable cells.

## License Agreements

In May 2005, we entered into three exclusive license agreements with Advanced Cell Technology for the production of therapeutic products in the fields of diabetes, liver disease, retinal disease, and the creation of research products in all fields. The license agreements give us access to all aspects of Advanced Cel Technology's human cell patent portfolio as it existed on that date, plus a combination of exclusive and non-exclusive rights to future developments. A significant feature of the licensed technology is that it allows us to isolate and differentiate hES stem cells directly from a "blastocyst." The hES cells can be immediately differentiated into stem cells capable of expansion and differentiation into islet cells, liver cells, and retinal cells.

Pursuant to the terms of our agreements with Advanced Cell Technology, in exchange for worldwide therapeutic rights to Advanced Cell Technology's portfolio of patents and patent applications in the fields of diabetes, liver disease and retinal disease, we are required to make a payment of \$150,000 in May 2010 and annual payments thereafter of \$150,000, plus milestone payments linked to the launch of therapeutic products (not research products) ranging from \$250,000 at first launch to \$1 million upon reaching sales of \$10 million, with a maximum of \$1.75 million in the aggregate. The agreements also require us to pay royalties on sales and meet minimum research and development requirements. The agreements continue until expiration of the last valid claim within the licensed patent rights. Advanced Cell Technology is required to defend any patent infringement claims. Either party may terminate the agreements for an uncured breach, or we may terminate the agreements at any time with 30 days notice.

The agreements with Advanced Cell Technology further provide that any technology either party currently owns, develops or licenses in the future may be licensed on a non-exclusive basis by the other party for use in specific fields. This arrangement gives us continuing access to future discoveries made or licensed by Advanced Cell Technology in our fields of diabetes, liver disease, retinal disease, plus all research products, and obligates us to provide similar license rights to Advanced Cell Technology in the fields of blood and cardiovascular diseases.

Exclusive License Agreement Number One, as amended, covers patent rights and technology that are relevant to:

- the research, development, manufacture and sale of human and non-human animal cells for commercial research; and
- the manufacture and selling of hES cells for therapeutic and diagnostic use in the treatment of human diabetes, liver diseases, retinal diseases and retinal degenerative diseases.

Exclusive License Agreement Number Two, as amended, covers patent rights and technology that are relevant to:

- the research, development, manufacture and sale of human and non-human animal cells and defined animal cell lines for commercial research;
- the manufacture and selling of human cells for therapeutic and diagnostic use in the treatment of human diabetes, liver diseases, retinal diseases and retinal degenerative diseases; and
- the use of defined animal cell lines in the process of manufacturing and selling human cells for therapeutic and diagnostic use in the treatment of human diabetes, liver diseases and retinal diseases.

Exclusive License Agreement Number Three, as amended, covers patent rights and technology relevant to the research, development, manufacture and sale of human cells for cell therapy in the treatment of therapeutic and diagnostic use in the treatment of human diabetes and liver diseases, and retinal diseases and retinal degenerative diseases.

## Research Agreements

Dr. Revazova, our Chief Scientific Officer, currently is conducting basic research at the Scientific Center for Federal State Founding Research Center for Obstetrics, Gynecology and Perinatology in Moscow, Russia. This laboratory contains all of the necessary equipment and scientific resources to complete ou preliminary research in parthenogenesis and Somatic Cell Nuclear Transfer technology. Through a research agreement, Dr. Revazova continues to conduc research into the creation and characterization of embryonic stem cell lines. The Institute provides Dr. Revazova access to the equipment and technicians needed to create and fully characterize human parthenogenic and embryonic stem cells. This includes equipment for immunofluorescence, karyotyping, gene expression, and equipment for molecular biology and cell biology. Under the terms of the agreement, we retain all intellectual property rights in the United States and the Institute retains such rights in Russia. We share equally in any royalty payments from the rest of the world, but we retain control of all marketing and distribution anywhere in the world, except Russia. The agreement expires by its terms on August 5, 2009, and is expected to be renewed. If not renewed we will seek a similar relationship with another laboratory in Russia. We do not consider the availability of such a laboratory to be necessary for our current operations.

During 2007, we entered into sponsored research agreements with the University of California at Irvine (UCI) and are in negotiations to develop collaborativ research agreements with domestic and international research organizations from both the public and private sector. These agreements allow us to team up with nationally and internationally known research scientists to study stem cell technologies developed or licensed by ISC for possible use in therapeutic fields Dr. Hans Keirstead at UCI has been working with our proprietary stem cells on the further development of retinal pigment epithelial cells as well as toward the derivation of photoreceptors to treat macular degeneration and retinitis pigmentosa. We expect that other developing collaborative agreements will focus on the creation of liver cells for the treatment of liver disease, beta cells for the treatment of diabetes and continuing work on our corneal tissues for use in transplantation therapy for corneal-caused vision loss. In addition to the sponsored research agreement with UCI, we provide our stem cell lines to researchers at many universities and other research facilities. Ordinarily, the stem cell lines are provided without charge, but we retain the right to either an exclusive or non-exclusive right to use any technology that may be developed that is necessary in order for us to make therapeutic products based on the research that uses our cells.

- the research, development, manufacture and sale of human and non-human animal cells for commercial research; and
- the manufacture and selling of hES cells for therapeutic and diagnostic use in the treatment of human diabetes, liver diseases, retinal diseases and retinal degenerative diseases.
- the research, development, manufacture and sale of human and non-human animal cells and defined animal cell lines for commercial research;
- the manufacture and selling of human cells for therapeutic and diagnostic use in the treatment of human diabetes, liver diseases, retinal diseases and retinal degenerative diseases; and
- the use of defined animal cell lines in the process of manufacturing and selling human cells for therapeutic and diagnostic use in the treatment of human diabetes, liver diseases and retinal diseases.

## Competition

The development of therapeutic and diagnostic agents for human disease is intensely competitive. Pharmaceutical companies currently offer a number of pharmaceutical products to treat diabetes, liver diseases, retinal disease, corneal disease and other diseases for which our technologies may be applicable. Many pharmaceutical and biotechnology companies are investigating new drugs and therapeutic approaches for the same purposes, which may achieve new efficacy profiles, extend the therapeutic window for such products, alter the prognosis of these diseases, or prevent their onset. We believe that our therapeutic products, when and if successfully developed, will compete with these products principally on the basis of improved and extended efficacy and safety and their overall economic benefit to the health care system. We believe that our most significant competitors will be fully integrated pharmaceutical companies and more established biotechnology companies. Smaller companies may also be significant competitors, particularly through collaborative arrangements with large pharmaceutical or biotechnology companies. Some of our primary competitors in the development of stem cell therapies are Geron Corporation, Genzyma Corporation, StemCell Inc., Advanced Cell Technology, Aastrom Biosciences, Inc. and ViaCell, Inc., most of which have substantially greater resources an experience. In the field of research products, our primary competitors for stem cells, media and reagents are Lonza, Chemicon, Life Technologies Corp (formerly Invitrogen Corp.), StemCell Technologies Inc., Millipore and Specialty Media. These companies primarily provide standard media that have not bee optimized for human embryonic stem cell growth.

## Sales and Marketing

To date, sales of our research products have been derived primarily through our in-house sales force and distribution agreements with American Tissue Culture Collection ("ATCC") and CellSystems Biotechnologies Vertrieb GmbH. We have also recently signed a worldwide distribution agreement with Millipore Corp a worldwide supplier of bioscience products and tools, but the agreement is too recent to have made a major contribution to sales yet. As of March 16, 2009, we had 3 full-time sales and marketing employees.

## **Government Regulation**

Regulation by governmental authorities in the United States and other countries is a significant factor in the development, manufacture and marketing of our proposed therapeutic products and in our ongoing research and product development activities. The nature and extent to which such regulation applies to us will vary depending on the nature of any products that may be developed by us. We anticipate that many, if not all, of our proposed therapeutic products will require regulatory approval by governmental agencies prior to commercialization. In particular, human therapeutic products are subject to rigorous preclinical and clinical testing and other approval procedures of the FDA, and similar regulatory authorities in European and other countries. Various governmental statutes and regulations also govern or influence testing, manufacturing, safety, labeling, storage and recordkeeping related to such products and their marketing. The process of obtaining these approvals and the subsequent compliance with appropriate statutes and regulations require the expenditure of substantial time and money, and there can be no guarantee that approvals will be granted.

## FDA Approval Process

Prior to commencement of clinical studies involving humans, preclinical testing of new pharmaceutical products is generally conducted on animals in the laboratory to evaluate the potential efficacy and safety of the product candidate. The results of these studies are submitted to the FDA as a part of ar Investigational New Drug (IND) application, which must become effective before clinical testing in humans can begin. Typically, human clinical evaluation involves a time-consuming and costly three-phase process. In Phase 1, clinical trials are conducted with a small number of people to assess safety and to evaluate the pattern of drug distribution and metabolism within the body. In Phase 2, clinical trials are conducted with groups of patients afflicted with a specific disease in order to determine preliminary efficacy, optimal dosages and expanded evidence of safety. In some cases, an initial trial is conducted in diseased patients to assess both preliminary efficacy and preliminary safety and patterns of drug metabolism and distribution, in which case it is referred to as a Phase 1-2 trial. In Phase 3, large-scale, multi-center, comparative trials are conducted with patients afflicted with a target disease in order to provide enough data to demonstrate the efficacy and safety required by the FDA. The FDA closely monitors the progress of each of the three phases of clinical testing and may, at it discretion, re-evaluate, alter, suspend, or terminate the testing based upon the data which have been accumulated to that point and its assessment of the risk/benefit ratio to the patient. Monitoring of all aspects of the study to minimize risks is a continuing process. All adverse events must be reported to the FDA.

The results of the preclinical and clinical testing on a non-biologic drug and certain diagnostic drugs are submitted to the FDA in the form of a New Drug Application ("NDA") for approval prior to commencement of commercial sales. In the case of vaccines or gene and cell therapies, the results of clinical trial are submitted as a Biologics License Application ("BLA"). In responding to a NDA or BLA, the FDA may grant marketing approval, request addition information or refuse to approve if the FDA determines that the application does not satisfy its regulatory approval criteria. There can be no assurance that approvals will be granted on a timely basis, if at all, for any of our proposed products.

## European and Other Regulatory Approval

Whether or not FDA approval has been obtained, approval of a product by comparable regulatory authorities in Europe and other countries will likely be necessary prior to commencement of marketing the product in such countries. The regulatory authorities in each country may impose their own requirements and may refuse to grant an approval, or may require additional data before granting it, even though the relevant product has been approved by the FDA or another authority. As with the FDA, the regulatory authorities in the European Union ("EU") and other developed countries have lengthy approval processe for pharmaceutical products. The process for gaining approval in particular countries varies, but generally follows a similar sequence to that described for FDA approval. In Europe, the European Committee for Proprietary Medicinal Products provides a mechanism for EU-member states to exchange information on a aspects of product licensing. The EU has established a European agency for the evaluation of medical products, with both a centralized community procedure and a decentralized procedure, the latter being based on the principle of licensing within one member country followed by mutual recognition by the other member countries.

## Other Regulations

We are also subject to various United States federal, state, local and international laws, regulations and recommendations relating to safe working conditions, laboratory and manufacturing practices and the use and disposal of hazardous or potentially hazardous substances, including radioactive compounds and infectious disease agents, used in connection with our research work. We cannot accurately predict the extent of government regulation which might result from future legislation or administrative action.

# **Employees**

In addition to our three executive officers, we utilize the services of 26 full-time and 4 part-time staff members.

# **Properties**

We have established our primary research facility in 8,215 square feet of leased office and laboratory space in Oceanside, California. Our lease for this facility expires in August 2011, with a five-year option to renew at our discretion. As of July 1, 2009 our base rent was \$7,783 per month. The facility has over \$1,000,000 of improvements which include clean rooms, segregated rooms for biohazard control and containment of human donor tissue. We are in the process of building and equipping a cGMP pilot manufacturing laboratory that will be uniquely suited for the creation, culture and differentiation of parthenogenetic stem cells. We believe that this facility is well suited to meet our research, development and therapeutic production needs.

We have a 3,240 square foot laboratory in Walkersville, Maryland. Our lease for this facility expires in April 2011, with a two-year renewal option, which at this time the Company plans to exercise that option. As of July 1, 2009 our rent is \$5,571 per month. This laboratory is being used to develop and manufacture our research products, as well as for sales and marketing and general administration. The Walkersville facility contains a 2,000 square foot manufacturing laboratory space with two clean rooms and is fitted with the necessary water purification, refrigeration, labeling equipment and standard manufacturing equipment to manufacture, package, store and distribute media products. There is a 500 square foot quality control and cell culture laboratory outfitted with the necessary cell isolation equipment, incubators, microscopes and standard cell culture equipment necessary to isolate and culture cells and conduct quality control tests to produce superior cell culture products. The manufacturing and quality control laboratories also serve as product development laboratories, and 300 square feet are devoted to administration, sales and marketing. This area contains the computers, communication equipment and the file systems necessary to establish technical offices, sales and marketing offices, finance and human resources. Equipment monitoring and security systems are in place.

Commencing February 1, 2007, we entered into a lease for approximately 1,700 sq. ft. of commercial space in Walkersville, Maryland. Our lease for this facility expires on January 31, 2010, subject to a three-year extension at our option. As of July 1, 2009, our base rent is \$1,300 per month. These facilities are close to our laboratory in Walkersville.

# Legal Proceedings.

We are not currently involved in any material legal proceedings.

# MANAGEMENT

We have a strong team of experienced business executives, scientific professionals and medical specialists. Our executive officers and directors, their ages and positions as of July 1, 2009 are as follows:

Name	Principal Occupation/Affiliation	Age	<b>Director Since</b>
Kenneth C. Aldrich	Chairman of the Board, CEO	71	2006
Andrey Semechkin	Executive Vice President, Strategy & Science, Director	50	2008
Jeffrey D. Janus	Senior Vice President, Operations, Director	53	2006
Ray Wood	Vice President, Finance and Secretary	48	N/A
Donald A. Wright	Director	57	2007
Paul V. Maier	Director	61	2007
Ruslan Semechkine	Director	24	2008

Kenneth C. Aldrich, Chairman and CEO, is a co-founder of International Stem Cell Corporation and has been active in venture capital investing an private equity since 1975. Having previously served as Chairman since 2001, Mr. Aldrich assumed the role of CEO in January 2008 upon the death of the incumbent CEO, Jeffrey Krstich. He is also a Managing Director of Convergent Ventures, an early-stage life sciences investment company, and an active member of Tech Coast Angels. Through those entities and predecessor companies, he has provided early-stage funding and management for a variety of biomedical and technology start-ups. During the last five years he has held the following positions: WaveTec Vision Systems, an ophthalmic device company (Director and co-founder), and Encode Bio, a drug discovery tools company (Director). He is also director of Green Dot Corporation, the world's largest issue of prepaid debit cards. Mr. Aldrich holds degrees, with honors, from both Harvard University and Harvard Law School.

Andrey Semechkin, Professor, Ph.D., is Executive Vice President, Strategy and Science. He became a director in December 2008. He is a member of Russian Academy of Sciences. Professor Semechkin was awarded the RF Government Award in Science and Technology in 2006. Since 2004 he has been the Deputy Director of the Institute of System Analysis of the Russian Academy of Sciences. From 2005 through 2006, he was Vice President Corporat Management, JSC Russian Railways. From 2006 through 2008, he was a Member of the Managing Board of JSC Russian Railways and General Director the Russian Railroad Transport Institute. Professor Semechkin has over 20 years of experience in the creation and managing of holding business structures in different industry and scientific sectors. He is the Chairman of X-Master, Inc., a company which holds real estate and other assets and investments, including shares of our preferred stock.

Jeffrey D. Janus, Sr. Vice President Operations, and CEO and President of Lifeline Cell Technology, has over twenty years of experience creating profitable commercial cell based businesses. Beginning in 1989, Mr. Janus helped build Clonetics Corporation, as a director of finance and marketing, to become a leading provider of human cells and media products to both the research and therapeutic markets, which culminated in that company's eventual purchase by BioWhitaker in the fourth quarter of 1995. Through 2001, he continued with BioWhittaker as Director of Marketing for Human Cell Systems. In 2002, M Janus founded PacGen Cellco, which later changed its name to Lifeline Cell Technology LLC, and served as its CEO and President. He has been w International Stem Cell Corporation since it acquired Lifeline in August 2006 and currently acts as its Executive Vice President, Operations and President ar CEO of the Lifeline Cell Technology subsidiary. Mr. Janus has an MBA from San Diego State University and a Bachelor's degree in Biochemistry from tl University California, Davis.

Ray Wood, Vice President, Finance and Secretary, has over 20 years of experience in the accounting and corporate finance arenas. Mr. Wood began his career working for Coopers and Lybrand CPAs from 1985 to 1988. >From 1989 to 1990 he worked for Jassoy Graff and Douglas, a San Diego based CPA firm. From 1990 to 1997, Mr. Wood held the position of Accounting Manager for General Instruments which was acquired by Motorola. He also worked at the Controller at LXN, a small biotech startup company, from 1998 to 2000. From there he held the position of Controller at Diversa Corporation, a San Diego based biotechnology company, from 2000 to 2006. Mr. Wood has been Vice President, Finance and Controller of International Stem Cell Corporation since 2007. He became our Chief Financial Officer in June 2009. He has extensive knowledge and experience working with public companies which includes taking a company through its initial public offering and the implementation process of the Sarbanes-Oxley Act of 2002. Mr. Wood holds a B.S. degree in Accounting from San Diego State University and is a CPA of the State of California.

Donald A. Wright became a director in March 2007. Mr. Wright is currently President and Founder of Everett, Washington-based Confluence Capita Group Inc., which provides consulting services to institutional investors, debt holders and public and private companies. Mr. Wright was Chief Executive Officer and President of Pacific Aerospace & Electronics, Inc., an engineering and manufacturing company that he helped to found and that designs, manufactures are sells components primarily for the aerospace, defense and transportation industries, from 1995 until 2006.

Paul V. Maier became a director in July 2007 and has over 20 years of experience as a senior executive in biotechnology and pharmaceutical companies. Mr. Maier is currently an independent financial consultant. Previously, Mr. Maier was Senior Vice President and Chief Financial Officer of Ligan Pharmaceuticals, Inc. (NASDAQ: LGND) a commercial stage biopharmaceutical company, a position he held from 1992 to 2007. From 1990 to 1992, No. Maier served as Vice President, Finance of DFS West, a division of DFS Group, LP a private multinational retailer. From 1984 to 1990, Mr. Maier was employed by ICN Pharmaceuticals, a pharmaceutical and biotechnology research products company, where he held various executive positions in finance and general management in ICN as well as SPI Pharmaceuticals, a publicly held subsidiary. Mr. Maier currently serves on public Boards for Pure Bioscience ar Hana Biosciences. Mr. Maier received an MBA from Harvard Business School and a BS from Pennsylvania State University.

Ruslan Semechkine became a director in October 2008 and is a Senior Research Scientist brings to International Stem Cell Corporation both scientific expertise and international relationships. He has for the past 5 years been pursuing an academic career and since May 2006 has been president of the New Hampshire Corporation, X-Master, Inc., which invests in different types of assets. He is an honors graduate of the Moscow State University and is a specialis in the analysis of biological processes and mathematical modeling in biology. He is a Member of the American Mathematical Society.

## **Board of Directors**

Our Directors are elected by the vote of a majority in interest of the holders of our voting stock and hold office until the expiration of the term for which he or she was elected and until a successor has been elected and qualified.

A majority of the authorized number of directors constitutes a quorum of the Board for the transaction of business. The directors must be present at the meeting to constitute a quorum. However, any action required or permitted to be taken by the Board may be taken without a meeting if all members of the Board individually or collectively consent in writing to the action.

Directors may receive compensation for their services and reimbursement for their expenses as shall be determined from time to time by resolution of the Board. Each of our directors currently receives no cash compensation for their service on the Board of Directors, but do receive a small amount of stocl options.

# Director Independence

The Board of Directors has determined that each of Mr. Maier and Mr. Wright satisfy the independence requirements specified in the listing requirements of Nasdaq Marketplace Rules.

# **Executive Sessions**

Our independent directors meet in executive session without management present each time the Board holds its regularly scheduled meetings.

# **Board Meetings and Committees**

The Board of Directors held five meetings during the fiscal year ended December 31, 2008. The Board of Directors has an Audit Committee, a Compensatic Committee, and a Governance Committee. During the last fiscal year, each director attended all of meetings of the Board and all of the committees of the Board on which such director served during that period.

Audit Committee.

The members of the Audit Committee are Paul V. Maier (Chairman) and Donald A. Wright. Mr. Edward O. Hunter also served on the Audit Committee 2008 until his resignation from the Board in December 2008. Each of the members of the Audit Committee satisfies the independence requirements established by the Nasdaq Marketplace Rules. Mr. Maier is an audit committee financial expert, as defined in the rules of the Securities and Exchange Commission. The Audit Committee operates under a written charter that is available on our website at: www.internationalstemcell.com. The Audit Committee conducts an annual review of this charter in addition to an annual review of the committee's overall performance. The primary purpose of the Audit Committee is to oversee our accounting and financial reporting processes and the function of the Audit Committee includes retaining our independent auditors, reviewing their independence, reviewing and approving the planned scope of our annual audit, reviewing and approving any fee arrangements with our auditors, overseeing their audit work, reviewing and pre-approving any non-audit services that may be performed by them, reviewing the adequacy of accounting and financial controls, reviewing our critical accounting policies and reviewing and approving any related party transactions. The Audit Committee held seven meetings during the fiscal year ended December 31, 2008. The Committee meets and confers at least quarterly with the outside auditors and conducts an executive session without management a each meeting.

# Governance Committee.

The members of the Governance Committee are Donald A. Wright (Chairman) and Paul V. Maier. Mr. Edward O. Hunter also served on the Governance Committee in 2008 until his resignation from the Board in December 2008. Each of the members of the Governance Committee satisfies the independence requirements established by the Nasdaq Marketplace Rules. The Governance Committee operates under a written charter that is available on our websit at: www.internationalstemcell.com. The Governance Committee conducts an annual review of this charter in addition to an annual review of the committee's overall performance. The primary responsibilities of the Governance Committee are to (i) recommend applicable corporate governance principles, codes of conduct and compliance mechanisms, (ii) evaluate the effectiveness of the board and board committees; (iii) evaluate the effectiveness of senior management and succession planning; (iv) review the corporation's directors policies, such as compensation, meeting attendance fees as well as other director compensation programs and policies; (v) examine board meeting policies, such as meeting schedule and location, meeting agenda, the presence and participation of non-director senior executives and written materials distributed in advance of meeting; (vi) review the board's committee structure, including each committee's charter and size; and (vii) review its procedures and policies to ensure that they fit the committee's circumstances and operations and are sufficiently formalized to satisfy the scrutiny of public disclosure. The Governance Committee held one meeting during the fiscal year ended December 31, 2008.

The Governance Committee's goal is to assemble a Board of Directors that brings a variety of perspectives and skills derived from high quality business and professional experience. There are no stated minimum criteria for director nominees, but the Governance Committee believes that at least one member of the Board should meet the criteria for an "audit committee financial expert" as defined by SEC rules, and that two members of the Board meet the definition o "independent director" under the Nasdaq Marketplace Rules. The Governance Committee also believes it appropriate for certain key members of managemen to participate as members of the Board. When considering whether to recommend any candidate for inclusion in the Board's slate of recommended director nominees, including candidates recommended by our stockholders, the Governance Committee will review the candidate's integrity, business acumen, age, experience, commitment, diligence, conflicts of interest, existing time commitments and the ability to act in the interests of all stockholders. Once a potential qualified candidate is identified, multiple members of the Governance Committee will interview that candidate. The committee may also ask the candidate to meet with non-committee members of the Board and/or members of management and, if the committee believes a candidate would be a valuable addition to the Board, it will recommend that candidate to the full Board. Pursuant to the terms of its charter, the Governance Committee will consider qualified directo candidates suggested by our stockholders. Stockholders may recommend individuals for the Governance Committee to consider as potential director candidates by submitting the candidate's name, contact information and biographical information in writing to the "International Stem Cell Corporation Governance Committee" c/o Corporate Secretary, 2595 Jason Court, Oceanside, California 92056. The biographical information and background materials will be forwarde to the Governance Committee for its review and consideration. The committee's review of candidates identified by our stockholders is essentially identical to the review process for candidates identified by the committee. The Governance Committee will review periodically whether a more formal policy regarding stockholder nominations should be adopted. In addition to the process discussed above regarding the consideration of the Governance Committee of candidates suggested by our stockholders, our Bylaws contain provisions that address the process by which a stockholder may nominate an individual to stand for election to our Board at our annual meeting of stockholders.

# Compensation Committee.

The members of the Compensation Committee are Donald A. Wright (Chairman, and Paul V. Maier. Mr. Edward O. Hunter also served on the Compensation Committee in 2008 until his resignation form the Board in December 2008. Each of the members of the Compensation Committee satisfies the independence requirements established by the Nasdaq Marketplace Rules. The Compensation Committee operates under a written charter that is available on our websit at: www.internationalstemcell.com. The Compensation Committee's responsibilities are to (i) establish and modify through consultation with senior management, the Company's general compensation philosophy and oversee the development and implementation of executive compensation programs and policies with respect to the engagement of individuals as independent contractors of the company; (ii) annually review and approve goals and objectives relevant to the compensation of the Chief Executive Officer, evaluate performance and set compensation (including base salary, incentive compensation and equity based awards of the Chief Executive officer; (iii) review and approve the compensation (including base salary, incentive compensation and equity-based awards) of officers above the level of Vice President, review and approve compensation guidelines for all other officers, review compensation of Managing Directors above the equivalent level of Vice President and review and approve the compensation guidelines for all other officers; (iv) review the terms of the Company's incentive compensation plans, equity based plans, retirement plans, deferred compensation plans and welfare benefit plans; (v) review policies with respect to post-service arrangements and perquisites provided to officers above the level of Vice President, including the Chief Executive Officer and perquisites policies for Vice Presidents; (vi) review the related tabular and other disclosures about director and executive compensation proposed by management for inclusion in the Company's annual report and proxy statement; (vii) produce an annual report for inclusion in the Company's annual proxy statement, in accordance with applicable rules and regulations; (viii) evaluate its own performance on an annual basis and develop criteria for such evaluation. The Compensation Committee held three meetings during the fiscal year ended December 31, 2008. In determining executive compensation, the Committee shall annually review and approve the Company's goals and objectives relevant to the compensation of Executive Officers and shall evaluate the performance of Executive Officer in light of those goals and objectives. Based on such evaluation, the Committee shall have the sole authority to set the compensation (including base salary, incentive compensation and equity-based awards) of the Executive Officers. In determining incentive compensation, the Committee shall consider, among other factors it deems appropriate, the Company's performance and relative shareholder return, the value of similar incentive awards to Executive Officers at comparable companies, and the awards given to management in prior years.

# **Communications with Directors**

Any stockholder who desires to contact any members of our Board of Directors may do so by writing to: Board of Directors, c/o Corporate Secretary, 259. Jason Court, Oceanside, California 92056. Communications received in writing are distributed to the Chairman of the Board or the other members of the Boar as appropriate depending on the facts and circumstances outlined in the communication received. Alternatively, any stockholder who desires to contact an independent member of our Board of Directors directly may contact the Chairman of our Board of Directors, Kenneth C. Aldrich, electronically by sending a email to the following address: <a href="mailto:kaldrich@intlstemcell.com">kaldrich@intlstemcell.com</a>.

# **Director Attendance at Annual Meetings**

Although we do not have a formal policy regarding attendance by members of the Board at our annual meeting of stockholders, we encourage directors to attend. Six directors attended last year's annual meeting.

# **Code of Conduct and Ethics**

The Board has adopted a Code of Conduct and Ethics that applies to all of our employees, officers and directors.

# EXECUTIVE AND DIRECTOR COMPENSATION

# **Compensation Discussion and Analysis**

# Goals of Compensation Program

The primary goals of our Compensation Program with respect to the compensation of our executive officers are: (i) to attract and retain talented and dedicated executives; (ii) to tie annual and long-term cash and stock incentives to the achievement of specified company and individual performance criteria; and (iii) to align executives' compensation incentives to achievements that we believe will lead to stockholder value creation. To achieve these goals, the Compensation Committee maintains compensation plans that tie a substantial portion of executives' overall compensation to the achievement of key operational, clinical and financial goals. The Compensation Committee also evaluates the performance of each individual executive officer against specific individual performance criteria. The Compensation Committee believes that the compensation for our executive officers is comparable with executives in other companies of similar size and stage of development operating in our industry, while taking into account our relative performance and our own strategic goals.

# Elements of Compensation

We currently have a relatively simple compensation structure that is comprised of: (i) base salary; (ii) annual cash and equity incentive awards; and (iii) stock options.

# Base Salary

Base salaries for our executive officers are established based on the scope of their responsibilities, taking into account competitive market compensation paid by other companies for similar positions. Generally, we target salaries for our executive officers near the median of the range of salaries for executives in similar positions with similar responsibilities at companies. Base salaries are reviewed annually, and adjusted from time to time to realign salaries with market levels after taking into account individual responsibilities, performance and experience as well as the company's financial position. For 2008, this review occurred in the first quarter and the annual base salaries for the executive officers named in the 2008 Summary Compensation Table below were set at the following levels:

# Cash and Equity Incentives

The 2009 annual base salary for our executive officers is as follows:

Name	2009 Annual Base Salary
Kenneth C. Aldrich	\$ 180,000
Andrey Semechkin	\$ 180,000
Jeffrey D. Janus	\$ 220,000
Ray Wood	\$ 125,000

Due to the cash needs of the company, Mr. Aldrich and Mr. Janus have agreed to deferrals of \$60,000 and \$63,400, respectively, in their 2009 pay.

# Stock Options

Our 2006 Stock Plan authorizes us to grant options to purchase shares of common stock to our employees, directors and consultants. Our Compensation Committee is the administrator of this stock plan. Stock option grants are made to employees after the commencement of employment and may also be made following a significant change in job responsibilities or to meet other special retention or performance objectives. The Compensation Committee reviews and recommends initial stock option awards for executive officers based upon a review of competitive compensation data. In appropriate circumstances, the Compensation Committee considers the recommendations of our Chief Executive Officer when determining the amount of an initial option grant or the amoun of an annual incentive option grant for executive officers. Stock options granted by us have an exercise price equal to the fair market value of our common stock on the day of grant, typically vest 2% per month based upon continued employment over approximately a four-year period, and generally expire ten years after the date of grant. Incentive stock options also include certain other terms necessary to assure compliance with the Internal Revenue Code of 1986, as amended.

# Restricted Stock Grant

On December 29, 2008 the Board of Directors approved a restricted stock grant at \$ .25 a share to the following officers and directors and employee:

Name	Share Issued	ste	value of ock at of grant
Kenneth C. Aldrich	664,608	\$	166,152
William B. Adams	420,920		105,230
Jeffrey Janus	147,652		36,913
Ray Wood	48,000		12,000
Paul Maier	280,000		70,000
Don Wright	280,000		70,000
Ed Hunter	280,000		70,000
	2,121,180		

The grant was in recognition of the fact that these officers and directors had earlier agreed to waive some or all of the cash compensation payable to them. These shares were not issued as part of the 2006 Stock Plan. Assuming the recipient continues to provide service to the company, the shares vest on the third anniversary of the date of grant, with accelerated vesting in the event of a change of control or certain terminations of service.

# Potential Components of Compensation

In addition to granting incentive and non-statutory stock options, our 2006 Stock Plan provides for the granting of restricted stock, restricted stock units, stock appreciation rights, performance units and shares, deferred compensation awards and other stock-based awards. The Compensation Committee may utilize some or all of these types of awards for executive officers if it believes that such awards are necessary to further the goals of the compensation program.

# **Compensation Committee Interlocks and Insider Participation**

During the fiscal year 2008, the compensation committee members were Mr. Wright, Mr. Hunter (until his resignation from the board in December 2008) and Mr. Maier. None of the members of the Compensation Committee are or have been an officer or employee of us. During fiscal 2008 and 2007, no member of the Compensation Committee had any relationship with us requiring disclosure under Item 404 of Regulation S-K. During the years 2008 and 2007, none of ou executive officers served on the compensation committee (or its equivalent) or board of directors of another entity any of whose executive officers served on our Compensation Committee or Board of Directors.

# **Summary Compensation Table**

The following table sets forth information concerning the compensation earned by our most highly compensated executive officers during the fiscal year ended December 31, 2008, 2007 and 2006.

	•			_		Option Awards Number of		Option wards in	Restricted Stock	I	Non Eq. ncentive Plan		l Other		T
Name	Year	`	Salary <sup>(1)</sup>		onus (2)	Options <sup>(6)</sup>	_	<b>\$</b> (3)	Grant		omp. (\$)	<u>C</u>	omp. <sup>(4)</sup>	_	Total
Jeffrey J.															
Krstich <sup>(5)</sup>	2008	\$	126,147											\$	126,147
	2007	\$	220,000	\$	50,000									\$	270,000
	2006	\$	117,090			1,000,000	\$	562,243				\$	25,000	\$	704,333
Kenneth C.															
Aldrich	2008	\$	13,846			400,000	\$	86,082	664,608	\$	166,152			\$	266,080
	2007	\$	180,000											\$	180,000
	2006	\$	100,000			250,000	\$	155,495						\$	255,495
			,			,		,							,
Jeffrey D. Janus	2008	\$	179,076			300,000	\$	64,561	147,652	\$	36,913			\$	280,550
•	2007	\$	220,000	\$	50,000	,		,	,		,	\$	20,129	\$	290,129
	2006	\$	153,757		,	250,000	\$	155,495					,	\$	309,252
		,	,			,	,	,						•	, -
William B.															
Adams <sup>(7)</sup>	2008	\$	88,893			150,000	\$	32,281	420,920	\$	105,230			\$	226,404
	2007	\$	180,000	\$	50,000	,	-	,	1-1,2-1	-				\$	230,000
	2006	\$	105,269	Ψ	20,000	250,000	\$	155,495						\$	260,764
	2000	Ψ	100,200			250,500	Ψ	100,100						Ψ	200,701
Ruslan															
Semechkine	2008					50,000	\$	4,619						\$	4,619
SCHICCHKIIC	2000					30,000	Φ	4,019						Φ	4,019

- (1) Actual amounts paid.
- Performance-based bonuses are generally paid pursuant to our annual compensation guidelines and reported as Non-Equity Incentive Plan Compensation. Except as otherwise noted, amounts reported as Bonus represent discretionary bonuses in addition to the amount (if any) earned under the annual compensation guidelines.
- (3) Valuation based on the dollar amount recognized for financial statement reporting purposes pursuant to FAS 123R. The assumptions used with respect to the valuation of option grants are set forth in the notes in the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2008.
- (4) Pursuant to the terms of Mr. Krstich's and Mr. Janus' employment agreement each was reimbursed for the moving expenses incurred in connection with relocating to the corporate headquarters located in Oceanside California.
- (5) In January 2008, Mr. Krstich passed away. With the approval of the Board of Directors Mr. Krstich's salary was extended six months after his demise. Total salary for the year was \$126,147.
- (6) In 2006, Mr. Aldrich, Mr. Adams and Mr. Janus were granted 250,000 options each at \$1 per share. These options expire December 1, 2016. On April 22, 2008 we granted additional options as follows: Mr. Aldrich 400,000 shares, Mr. Adams 150,000 shares and Mr. Janus 300,000 shares at \$ .45 per share. Those options expire April 22, 2018. The options are subject to the plan restrictions and vest at the rate of 2% per month commencing May 22,
- (7) Mr. Adams resigned as Chief Financial Officer and as a member of the Board of Directors of the Company effective June 30, 2009.

# 2008 Grants of Plan-Based Awards

On April 22, 2008 we granted additional options as follows: Mr. Aldrich 400,000 shares, Mr. Adams 150,000 shares and Mr. Janus 300,000 shares at \$ .45 per share. Those options expire April 22, 2018. The options are subject to the plan restrictions and vest at the rate of 2% per month commencing May 22, 2008.

On December 29, 2008 the Board of Directors approved restricted stock grants to the following officers and directors and one employee:

Name	Share Issued		Fair value of stock at date of grant
Kenneth C. Aldrich	664,608	\$	166,152
William B. Adams	420,920	Ψ	105,230
Jeffrey Janus	147,652		36,913
Ray Wood	48,000		12,000
Paul Maier	280,000		70,000
Don Wright	280,000		70,000
Ed Hunter	280,000		70,000
	2,121,180		

The grant was in recognition of the fact that these officers and directors had earlier agreed to waive some of all of the cash compensation otherwise payable to them. These shares were not issued as part of the 2006 Stock Plan. Assuming the recipient continues to provide service to the company, the shares vest on the third anniversary of the date of grant, with accelerated vesting in the event of a change of control or certain terminations of service.

# Outstanding Equity Awards at Fiscal Year-End

The following table sets forth certain information with respect to the value of all unexercised options previously awarded to our named executive officers as of December 31, 2008:

Outstanding Equity Awards at December 31, 2008

Name Jeffrey J. Krstich	Year Option Granted 2006	Number of Securities Underlying Unexcercised Options Exercisable	Number of Securities Underlying Unexcercised Options Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options	Restricted Stock Grant <sup>(2)</sup>	\$	Option Exercise Price	Option Exercise Date	Number of Shares or Units of Stock that have not Vested	of Sha Unita ha	et Value ares or s that ave /ested
Jenney J. Kistien	2000	1,000,000				Ψ	1.00	2010(4)			
Kenneth C.											
Aldrich	2006	172,000	78,000			\$	1.00	2016	78,000	\$	48,726
	2008	96,000	304,000			\$	0.45	2018	344,000	\$	74,030
	2008				664,608						
Jeffrey D. Janus	2006	172,000	78,000			\$	1.00	2016	78,000	\$	48,726
	2008	72,000	228,000			\$	0.45	2018	258,000	\$	55,523
	2008				147,652						

William B. Adams	2006	172,000	78,000	\$	1.00	2016	78,000 \$	48,726
	2008	36,000	114,000	\$	0.45	2018	129,000 \$	27,761
	2008			420,920				
Ruslan								
Semechkine	2008	1,000	49,000	\$	0.22	2018	49,000 \$	4,527

(1) Option exercise date has been changed to expire in 2012.

# 2006 Equity Participation Plan

The 2006 Equity Participation Plan (also referred to as "2006 Stock Plan") provides for the grant of stock options or restricted stock and other equity base awards to our employees, officers, directors and consultants. Options may be either "incentive stock options" or non-qualified options under the federal tax laws and will have an exercise price equal to at least fair market value as of the grant date. A total of 15,000,000 shares of common stock have been reserved for issuance under the Plan, subject to adjustments for certain corporate transactions or events. The purpose of the Plan is to enable us to offer non-employed directors, officers, other key employees and consultants of the Company and our subsidiaries and affiliates, equity-based incentives, thereby attracting, retaining and rewarding these participants and strengthening the mutuality of interests between these participants and our stockholders. The Plan is administered by the board of directors as a whole. The board of directors has the power to determine the terms of any restricted stock or options granted under the Plan. Grants under the Plan are generally not transferable, and each stock option is generally exercisable during the lifetime of the optionee only by such optionee.

# Stock Option Grants

The board may grant options qualifying as incentive stock options under the Internal Revenue Code and nonqualified stock options. The term of an option wi be fixed by the Board, but will not exceed ten years (or five years in the case of an incentive stock option granted to a person beneficially owning shares representing 10% or more of the total combined voting power of all classes of our stock, referred to as a 10% stockholder). The option price for any option will not be less than the fair market value of the common stock on the date of grant (or 110% of the fair market value in the case of an incentive stock option granted to a 10% stockholder). Generally, the fair market value will be the closing price of the common stock on the applicable trading market. Payment for shares purchased upon exercise of a stock option must be made in full at the time of purchase. Payment may be made (i) in cash; (ii) in a cash equivalent acceptable to the Board; (iii) by the transfer to us of shares owned by the participant for at least six months on the date of transfer; (iv) if the common stock is traded on an established securities market, the board may approve payment of the exercise price by a broker-dealer or by the option holder with cash advanced by the broker-dealer if the exercise notice is accompanied by the option holder's written irrevocable instructions to deliver the common stock acquired upon exercise of the option to the broker-dealer; or (v) any other method acceptable to the Board and in compliance with applicable laws.

# Restricted Stock

The board is authorized to grant restricted stock. Restricted stock is a grant of shares of common stock which may not be sold or disposed of and which shal be subject to such risks of forfeiture and other restrictions as the board may impose. Unless otherwise determined by the board, the purchase price for any restricted stock grant will be not less than 85% of the fair market value of common stock on the date of grant or at the time the purchase is consummated (or 100% of the fair market value in the case of restricted stock granted to a 10% stockholder). Generally, the fair market value will be the closing price of the common stock on the applicable trading market. Payment for shares purchased pursuant to a restricted stock grant may be made in (i) cash at the time of purchase; (ii) at the discretion of the board, according to a deferred payment or other similar arrangement with the participant; or (iii) in any other form of legal consideration that may be acceptable to the board in its discretion. A participant granted restricted stock generally has all of the rights of a stockholder of the Company, unless otherwise determined by the board. Option Exercises and Stock Vested During Last Fiscal Year. No named executive officer exercised ar option to purchase our Common Stock during the fiscal year ended December 31, 2008. No named executive officer holds a restricted stock grant, restricted stock unit or other similar instrument that vested in 2008.

# Potential Payments upon Termination or Change in Control

Assuming a change in control took place on December 31, 2008 and each of the named executive officers was terminated without cause immediately following the change in control, the foregoing individuals would have received the following amounts as a result of such accelerated vesting:

	Remaining
	Unamortized
	Option Expense
	Upon Change in
	Control <sup>(1)</sup>
Kenneth C. Aldrich	\$ 122,756
Jeffrey D. Janus	\$ 104,249
William B. Adams	\$ 76,487

(1) Amounts shown in this column reflect the remaining unamortized compensation costs as determined pursuant to FAS 123R for option awards that would be accelerated in connection with a termination following a change in control transaction. The assumptions used to calculate the value of option awards are set forth in Note 9 of the Notes to Consolidated Financial Statements included in our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2008. There can be no assurance that the options will ever be exercised (in which case no value will actually be realized by the executive) or that the value on exercise will be equal to the FAS 123R value shown in this column.

# Compensation of Directors

The following table sets forth information concerning the compensation earned during the last fiscal year by each individual who served as a director at any time during 2008, other than directors who are listed in the Summary Compensation Table:

	Fe	es Earned or			<b>Option Awards</b>			
Name		k Awards Paid in Cash <sup>(1)</sup>	Re	stricted Stock Awards	Number of Shares (2)	Oı	ption Awards	Total Option Awards <sup>(4)</sup>
Donald A. Wright	\$	0	\$	70,000	60,000	\$	3,371	\$ 73,371
Paul V. Maier	\$	0	\$	70,000	60,000	\$	3,371	\$ 73,371
Edward O. Hunter (3)	\$	0	\$	70,000	60,000	\$	3,371	\$ 73,371

- (1) On December 29, 2008 these members of the board were awarded a non qualified stock grant for \$70,000 each. The shares are held in escrow until December 29, 2011. The stock was valued at \$ .25 per share therefore each of the received 280,000 shares of common stock subject to restrictions.
- (2) On April 22, 2008 each of the directors received 60,000 options. Their options were awarded at \$ .45 per share and vest at 2% per month starting the following month.
- (3) On December 31, 2008 Mr. Edward O. Hunter resigned from the board.
- (4) Valuation based on the dollar amount recognized for financial statement reporting purposes pursuant to FAS 123R. The assumptions used with respect to the valuation of option grants are set forth in Note 2 of the Notes to Consolidated Financial Statements included in our Annual Report on Form 10-KSB/A for the fiscal year ended December 31, 2006 filed with the SEC on July 9, 2007.

Upon joining the Board, outside directors receive an initial option grant of 50,000 shares of Common Stock. The initial option grant will vest at a rate of 2% pe month, starting one month after they join the company. In December 2007, Mr. Wright received another option grant of 50,000 shares of Common Stock, with the same vesting rate. During 2008 each of the directors received an additional 60,000 options. In addition they were rewarded a Non Qualified Stock Gran for \$70,000 equaling 280,000 shares of common stock. During the year 2008 there was no cash compensation paid to the outside directors.

Outside directors receive an annual retainer of \$40,000 for service on the Board and for service on any committee of the Board of Directors, Audit Committee Compensation Committee or Governance Committee. In addition, an outside director serving as the chair of the Board of Directors, the Governance Committee or the Audit Committee will receive an additional annual retainer of \$20,000.

Directors who are also employees of International Stem Cell Corporation do not receive any additional compensation for their services as members of the Board of Directors.

# **Equity Compensation Plan Information**

The following table sets forth information regarding outstanding options and shares reserved for future issuance under our current equity compensation plans as of December 31, 2008:

			Number of
			Shares
	Number of		Remaining
	Shares to Be		Available for
	Issued upon		Future Issuance
	Exercise of	Weighted-Average	under Equity
	Outstanding	Exercise Price of	<b>Compensation</b>
	Options,	Outstanding	Plans (Excluding
	Warrants and	Options, Warrants	Shares Reflected
Plan Category	Rights (a)	and Rights (b)	in Column(a)) (c)
Equity compensation plans approved by stockholders (1)	15,000,000	\$ .61	8,832,500

(1) Represents stock options under the 2006 Equity Participation Plan (the "Plan"). The options granted under the Plan may be either qualified or non-qualified options. Up to 15,000,000 options may be granted to employees, directors and consultants under the Plan. Options may be granted with different vesting terms and expire no later than 10 years from the date of grant. In 2008, the company had 6,167,500 options outstanding granted under the plan with a weighted average exercise price of \$ .61. Stockholders approved the Plan effective December 1, 2006.

As of December 31, 2008, we had reserved 15,000,000 shares of our Common Stock for issuance under the 2006 Stock Plan. At December 31, 2008, ther were 6,167,500 shares issuable upon exercise of outstanding options under the 2006 Stock Plan, at a weighted average exercise price of \$ .61. Options granted under the 2006 Stock Plan will generally have a 10-year term and vest at the rate of 2% per month commencing the following month of grant. Options granted under our 2006 Stock Plan provide for full acceleration of the unvested portion of an option if the option is not assumed or substituted by an acquiring entity upon a "Change in Control," as defined under the 2006 Stock Plan.

# RELATED PERSON TRANSACTIONS

Pursuant to our Code of Business Conduct and Ethics, our executive officers, directors, and principal stockholders, including their immediate family member and affiliates, are prohibited from entering into transactions which create, or would appear to create, a conflict of interest with us. Our Audit Committee is responsible for reviewing and approving related party transactions. Our Audit Committee shall approve only those agreements that, in light of known circumstances, are in, or are not inconsistent with, our best interests, as our Audit Committee determines in the good faith exercise of its discretion. Except with respect to the transactions described below, none of our directors or executive officers, nor any person who beneficially owns, directly or indirectly, shares carrying more than 10% of the voting rights attached to our outstanding shares, nor any of our promoters, nor any relative or spouse of any of the foregoing persons has any material interest, direct or indirect, in any transaction for the past two years or in any presently proposed transaction to which we were or are to be party. None of our directors or executive officers is indebted to us.

As of December 31, 2008, we owed an aggregate of \$264,648 to Kenneth C. Aldrich, our Chief Executive Officer and Chairman, and William B. Adams, of Chief Financial Officer, Secretary and Director, for a management fee owed to them by ISC California. The management fee relates to the management of the Lifeline Cell Technology, LLC, the wholly-owned operating subsidiary of ISC California, from inception until November 1, 2006. Messrs. Aldrich and Adam each accrued the management fee at a rate of \$5,000 per month per person plus accrued interest at 10% per annum on the unpaid balance until June 1, 2006, when each person's management fee was increased to \$10,000 per month, per person. When Mr. Adams and Aldrich became employees of ISC California of November 1, 2006, accrual of the management fee ceased.

From time to time, various persons, including certain officers, directors, principal shareholders, and their affiliates, have advanced funds to our subsidiaries for operating expenses. All such advances have been repaid with the exception of a balance owed to Mr. Aldrich on December 31, 2008 of \$164,504. In connection with certain of such advances, warrants were issued to the lenders. During the last quarter of 2007, Mr. Aldrich loaned the company \$500,000, which was to be converted into preferred stock when the company started to raise money through its Series A Preferred Stock placement efforts. This loar was converted into shares of preferred stock in January 2008 on the same terms as were afforded to unaffiliated investors who purchased Series A preferred stock

On August 15, 2008, to provide funding for working capital and to convert short term advances to a term note, we issued a Multiple Advance Convertible Note to YKA Partners, Ltd, an accredited investor, in the amount of \$350,000, with warrants to purchase shares of Common Stock. The note provides for multiple advances, permits whole or partial repayments without penalty, and is intended to allow the company to borrow and repay indebtedness as needed to meet operating costs. It is unsecured and subordinate to our outstanding secured debt of \$1,000,000, carries an interest rate of 8% per annum, is convertible into shares of common stock at the rate of \$0.25 per share, and was due and payable on or before January 31, 2009. The warrants permit the holder to purchase up to 700,000 shares of common stock from us at \$0.25 per share until five years from the issuance of the warrants. The note and the warrants contain anti-dilution clauses. YKA Partners, Ltd. is controlled by Kenneth C. Aldrich, is Chairman and CEO of the Company. The balance outstanding on this note wa \$16,504 as of December 31, 2008.

On August 20, 2008, to obtain funding for working capital, we entered into a subscription agreement with X-Master, Inc. a corporation controlled by two of our directors, to sell up to 3,000,000 of Series C Preferred Stock at a price of \$1.00 per share. A total of two million shares were sold. On December 30, 2008, to obtain funding for both working capital and the eventual repayment of the outstanding obligation under an OID Senior Secured Convertible Note with a principa amount of \$1,000,000 issued in May 2008, we entered into a Series D Preferred Stock Purchase Agreement (the "Series D Agreement") with X-Master, Inc Andrey Semechkin and Ruslan Semechkine to sell for up to \$5,000,000 up to fifty shares of Series D Preferred Stock at a price of \$100,000 per Series 1 Preferred share. 10 shares were sold December 30, 2008; 10 shares were sold February 5, 2009; 10 shares were sold on March 16, 2009; and 10 shares were sold on June 30, 2009. At the Investors' sole discretion, 10 shares will be sold on September 20, 2009. In connection with the Series D Agreement, the Company also entered into an Investor Rights Agreement with the investors. Pursuant to the Investor Rights Agreement, the investors have a participation right, whereby they may purchase their pro rata share of any privately offered new securities being offered by the Company, subject to certain exceptions. The Investor Rights Agreement also requires that the Company obtain approval from the Board of Directors, including the affirmative vote of the director elected by the Series C Preferred Stock and the director elected by the Series D Preferred Stock, for specified transactions. Pursuant to the Series D Agreement, w entered into an employment agreement with Andrey Semechkin as the Executive Vice President of the Company, reporting to the Board and being responsible (in collaboration with the CEO) for developing the overall business strategy for the Company, tracking and allocating Company resources, overseeing the creation and implementation of personnel policy, defining target markets, identifying and developing new business opportunities, and developing international business opportunities. This employment agreement has a term of five years, subject to earlier termination for cause (as defined in the agreement) or upon voluntary resignation by the employee. Mr. Andrey Semechkin will receive an annual salary at least equal to the highest salary paid to any of our officers, other than the President or CEO, and in no event less than \$180,000 per year. Mr. Semechkin will also be eligible to participate in Company benefit and bonu programs.

Pursuant to the Series D Agreement, we also entered into an employment agreement with Mr. Ruslan Semechkine, who currently serves as a director of the Company. Pursuant to this employment agreement, we agreed to employ Mr. Ruslan Semechkine as a research scientist and, upon his attaining a PhD, as Senior Research Scientist. This employment agreement has a five-year term subject to earlier termination for cause (as defined in the agreement) or upor voluntary resignation by the employee. Mr. Ruslan Semechkine will receive a salary of \$80,000 per year while he is employed as a research scientist, with an increase to \$120,000 per year upon attaining his PhD and corresponding promotion to Senior Research Scientist. We have also agreed that Mr. Ruslan Semechkine's salary will not be less than the annual base salaries paid to employees of similar position and status within the Company. Mr. Semechkine will also be eligible to participate in Company benefit and bonus programs.

# STOCK OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

# AND RELATED STOCKHOLDER MATTERS

The following table sets forth information regarding the beneficial ownership of our common stock as of June 30, 2009, by (i) each person who is known by us to beneficially own 5% or more of our common stock, (ii) each of our directors and executive officers, and (iii) all executive officers and directors as a group. In general, a person is deemed to be a "beneficial owner" of a security if that person has or shares the power to vote or direct the voting of such security, or the power to dispose or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which the person has the right to acquire beneficial ownership within 60 days. To the best of our knowledge, all persons named have sole voting and investment power with respect to such shares, except as otherwise noted. In computing the number of shares of Common Stock beneficially owned by a person and the percentage ownership of such person, shares of Common Stock subject to warrants or options held by that person that are currently exercisable or exercisable within 60 days of June 30, 2009 were deemed to be outstanding, and shares of preferred stock owned by such person and convertible into Common Stock were deemed to be converted into Common Stock. Such shares were not deemed to be outstanding, however, for the purpose of computing the percentage ownership of any other person.

# Stock Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

		Actual	Percent of
		Beneficial	Beneficial
Name of Beneficial Owner		Owne rs hip	Owners hip <sup>(1)</sup>
Jeffrey Krstich (3)		1,000,000	2.24%
William Adams (2) (4) (6)		2,675,605	6.08%
Kenneth Aldrich (2) (4) (5)	Chairman of the Board and CEO	8,442,845	17.31%
Jeffrey Janus (2) (4)	Senior Vice President, Operations	2,501,459	5.68%
Andrey Semechkin (2) (4) (7)	Executive Vice President, Strategy & Science	24,026,630	35.46%
Ray Wood (2)(4)	Vice President, Finance and Secretary	104,700	0.24%
Ruslan Semechkine (2) (4) (7)	Director	24,034,630	35.46%
Donald Wright (4) (9)	Director	330,700	0.76%
Paul Maier (2) (4)	Director	326,200	0.74%
All Executive Officers and Directors			
as a Group (9 Persons)		39,416,139	68.51%
5% Holders			
X-Master, Inc. (7)		12,000,000	21.53%
William Peeples (8)		3,979,174	8.85%

<sup>(1)</sup> Based on 43,738,932 shares currently outstanding plus shares issuable under derivative securities which are exercisable within 60 days of June 30, 2009.

- (2) The business address for each director and officer is 2595 Jason Court, Oceanside, CA 92056.
- (3) In January 2008, Mr. Krstich passed away, the Board of Directors agreed to vest his non vested options.

- (4) Includes options to purchase shares of our common stock exercisable within 60 days of June 30, 2009.
- (5) Mr. Aldrich's shares are held, in part, through YKA Partners, a California limited partnership. Mr. Aldrich is the investment manager of YKA Partners and controls the disposition of these shares. The address for YKA Partners is 2595 Jason Court, Oceanside, CA 92056.
- (6) Mr. Adams resigned as Chief Financial Officer, Secretary and Director on June 30, 2009.
- (7) The business address for X-Master, Inc. is 1 Overlook Drive, Unit 11, Amherst, New Hampshire 03031. X-Master Inc. is owned by Andrey Semechkin. Ruslan Semechkine is the President of X-Master, Inc. Ruslan Semechkine and Andrey Semechkin are deemed to hold the same number of shares including shares held by X-Master. Additionally, Ruslan Semechkine has vested options exercisable within 60 days of February 28, 2009 to purchase 5,000 shares.
- (8) The address for William Peeples is 877 Gwyne Ave., Santa Barbara, CA 93111.
- (9) The address for Don Wright is 2829 Rucker Ave., Third Floor, Everett, WA 98201.

# DESCRIPTION OF SECURITIES

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 220,000,000 shares of capital stock, \$0.001 par value per share, of which 200,000,000 shares are designated common stock and 20,000,000 shares are designated preferred stock.

## 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.

# Preferred Stock

Our board of directors, without stockholder approval, 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 E 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.

# SELLING STOCKHOLDER

All of the shares of common stock registered for sale pursuant to this prospectus are shares issuable upon exercise of a warrant owned by the selling stockholder. All of the shares offered hereby were acquired or will be acquired by the selling stockholder in connection with that certain Stock Purchase Agreement, dated June 30, 2009, between us and Optimus Life Sciences Capital Partners, LLC, an affiliate of the selling stockholder. We have agreed to pa all expenses and costs to comply with our obligation to register the selling stockholder's shares of common stock. We have also agreed to indemnify and hold harmless the selling stockholder against certain losses, claims, damages or liabilities, joint or several, arising under the Securities Act of 1933.

The following table sets forth the name of the selling stockholder, the number of shares of common stock beneficially owned by the selling stockholder immediately prior to the date of this prospectus (assuming that we sell all \$5 million of Series E Preferred Stock and that those sales take place at times when our stock price is \$0.86 per share) and the total number of shares that may be offered pursuant to this prospectus. The table also provides information regarding the beneficial ownership of our common stock by the selling stockholder as adjusted to reflect the assumed sale of all of the shares offered under this prospectus. Percentage of beneficial ownership before this offering is based on 47,650,810 shares of our common stock outstanding as of July 29, 2009. The selling stockholder may offer the shares for sale from time to time in whole or in part. Except where otherwise noted, the selling stockholder named in the following table has, to our knowledge, sole voting and investment power with respect to the shares beneficially owned by it.

	Beneficial Ownership	p Before Offering			
	Number of Shares		Number of Shares	Beneficial Owners	ship After Offering
Selling Stockholder	Owned	Percent	Being Registered	Shares	Percent
Optimus CG II, Ltd.(1)	8,139,535	14.7%	8,139,535	_	*

<sup>\*</sup> Less than 1%.

(1) The sole stockholder of Optimus CG II, Ltd. is Optimus Capital Partners, LLC, dba Optimus Life Science Capital Partners, LLC. Voting and disposi power with respect to the shares held by Optimus CG II, Ltd. is exercised by Terry Peizer, the Managing Director of Optimus Life Science Capital Partner LLC, who acts as investment advisor to Optimus CG II, Ltd. Optimus CG II, Ltd. Is not a registered broker-dealer or an affiliate of a registered broker-dealer.

The selling stockholder provided us with information with respect to its share ownership. Because the selling stockholder may sell all, part or none of their shares, we are unable to estimate the number of shares that will be held by the selling stockholder upon resale of shares of common stock being registered hereby. We have, therefore, assumed for the purposes of the registration statement related to this prospectus that the selling stockholder will sell all of its shares. See "Plan of Distribution."

# PLAN OF DISTRIBUTION

The selling stockholder and any of its pledgees, assignees and successors-in-interest may, from time to time, sell any or all of the shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholder may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate
  the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;

- broker-dealers may agree with the selling stockholder to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise; or
- any other method permitted pursuant to applicable law.

The selling stockholder may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholder may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholder (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling stockholder does not expect these commissions and discounts relating to its sales of shares to exceed what is customary in the types of transactions involved.

In connection with the sale of our common stock or interests therein, the selling stockholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholder may also sell shares of our common stock short and deliver these securities to close out its short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholder may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

The selling stockholder and any broker-dealers that act in connection with the sale of the shares might be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act of 1933, and any commissions received by such broker-dealers and any profit on the resale of the shares sold by them while acting as principals might be deemed to be underwriting discounts or commissions under the Securities Act. The selling stockholder may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the shares against certain liabilities, including liabilities arising under the Securities Act. If the selling stockholder is deemed to be an "underwriter" within the meaning of Section 2(11) of the Securities Act, the selling stockholder will be subject to the prospectus delivery requirements of the Securities Act.

Under applicable rules and regulations under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to our common stock for a period of two business days prior to the commencement of the distribution. In addition, the selling stockholder may be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of our common stock by the selling stockholder or any other person. We will make copies of this prospectus available to the selling stockholder and have informed the selling stockholder of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale.

We will not receive any proceeds from the sale of the shares by the selling stockholder

# 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 financial statements and schedule of International Stem Cell Corporation as of December 31, 2008 and 2007, and the related consolidate statements of operations, stockholders' equity (deficit) and comprehensive loss and cash flows for the years then ended and for the period from inception (August 17, 2001) through December 31, 2008 have been incorporated by reference herein and in the registration statement in reliance upon the report of Vasquez & Company LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

# 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 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 at other information regarding EpiCept and other issuers that file electronically with the SEC. The address of the SEC internet site is 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.

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(A Development Stage Company)

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# PART I – FINANCIAL INFORMATION

# Item 1. Financial Statements

# International Stem Cell Corporation and Subsidiary (A Development Stage Company) Condensed Consolidated Statements of Financial Condition

	March 31, 2009 Unaudited)	De	ecember 31, 2008
Assets			
Cash and equivalents	\$ 955,029	\$	381,822
Accounts Receivable	60,434		81,898
Inventory	310,321		417,343
Prepaid assets	 129,192		75,428
Total Current Assets	1,454,976		956,491
Property and equipment, net	669,291		625,870
Patent licenses, net	650,786		637,205
Deposits and other assets	23,865		22,186
Total assets	\$ 2,798,918	\$	2,241,752
Liabilities, Members' Deficit and Stockholders' Equity			
Accounts payable	\$ 586,067	\$	465,034
Accrued expenses	201,630		231,488
Convertible debt and advances	250,000		690,994
Related party payables	 435,747		420,931
Total liabilities	1,473,444		1,808,447
Commitments and contingencies			
Members' Deficit and Stockholders' Equity			
Common Stock, \$.001 par value, 200,000,000 shares authorized, 40,630,675 shares and 38,410,675 shares issued.	40,631		38,410
Preferred Stock, \$.001 par value, 20,000,000 shares authorized, 3,400,030 shares and 3,550,010 shares issued.	3,400		3,550
Additional paid-in capital	28,865,976		24,491,311
Deficit accumulated during the development stage	 (27,584,533)		(24,099,966)
Total members' deficit and stockholders' equity	1,325,474		433,305
Total liabilities, members' deficit and stockholders' equity	\$ 2,798,918	\$	2,241,752

See accompanying notes to the unaudited condensed consolidated financial statements.

# International Stem Cell Corporation and Subsidiary (A Development Stage Company) Condensed Consolidated Statements of Operations (Unaudited)

		Three Months Ended March 31,		
	2009	2008	March 31, 2009	
Revenues	4.02.200		<b>4 500</b> 000	
Sales, net	\$ 183,299	\$ 32,332	\$ 592,820	
Royalties and licenses			135,000	
Total Revenue	\$ 183,299	\$ 32,332	\$ 727,820	
Development expenses				
Cost of sales	290,162	20,859	491,288	
Research and development	547,601	588,041	8,869,417	
Marketing	135,499	149,347	1,147,850	
General and administrative	1,094,608	885,659	12,507,419	
Total development expenses	2,067,870	1,643,906	23,015,974	
Loss from development activities	(1,884,571)	(1,611,574)	(22,288,154	
Other income (expense)				
Settlement with related company	-	_	(93,333	
Miscellaneous income	-	356	8,643	
Dividend income	41	-	33,452	
Interest income	-		22,602	
Interest expense	(74,192)	(6,044)	(2,190,600	
Sublease income	2,100	2,100	39,229	
Total other income (expense)	(72,051)	(3,588)	(2,180,007	
Loss before income taxes	(1,956,622)	(1,615,162)	(24,468,161	
Provision for income taxes	-	-	6,800	
Net loss	\$ (1,956,622)	\$ (1,615,162)	\$ (24,474,961	
Deemed dividend on preferred stock	1,480,000	-	3,061,627	
Net loss attributable to common shareholders	\$ (3,436,622)	\$ (1,615,162)	\$ (27,536,588	
Net loss per share computation:				
Weighted average shares outstanding	36,358,890	35,369,495		
Net loss per share – Basic and Diluted	\$ (0.09)	\$ (0.05)		

See accompanying notes to the unaudited condensed consolidated financial statements.

# International Stem Cell Corporation and Subsidiary (A Development Stage Company) Condensed Consolidated Statements of Cash Flows

(Unaudited)

		Three Months Ended March 31			
	2009	2008	Inception (August 2001) through March 31, 2009		
Cash flows from operating activities	\$ (1,956,622)	\$ (1,615,162)	\$ (24,474,961)		
Net loss Adjustments to reconcile net income (loss) to net cash used in operating activities:	\$ (1,930,022)	\$ (1,015,102)	\$ (24,474,901)		
Depreciation and amortization	37,812	39,289	490,284		
Accretion of discount on notes payable	-	-	103,304		
Accretion of discount on bridge loans	-	-	637,828		
Non-cash warrants for services	281,416	-	503,493		
Non-cash compensation expense	99,262	95,656	2,103,999		
Amortization of debt discount on convertible debt	67,227	-	1,080,962		
Stock issued for services	116,058	-	2,062,457		
Changes in operating assets and liabilities					
(Increase) decrease in accounts receivable	21,464	2,137	(60,434)		
(Increase) decrease in inventory	107,022	(19,205)	(310,321)		
(Increase) decrease in prepaid assets	(53,764)		(129,192)		
(Increase) decrease in deposits and other assets	(1,679)		(23,865)		
Increase (decrease) in accounts payable	121,033	345,453	586,067		
Increase (decrease) in accrued expenses	(77,803)		163,185		
Increase (decrease) in loan payable	-	100,000	-		
Increase (decrease) in related party payables	6,595	(503,956)	271,245		
Net cash used in operating activities	(1,231,979)	(1,452,402)	(16,995,949)		
Investing activities	( 1-0)	(12.212)	(0.61.0.1.0		
Purchases of property and equipment	(67,478)		(961,046)		
Payments for patent licenses and trademarks	(27,336)		(849,313)		
Net cash used in investing activities	(94,814)	(12,942)	(1,810,359)		
Financing activities  Manufaction in the second in the sec			2 695 000		
Members' contribution  Issuance of common stock	-	-	2,685,000		
Issuance of preferred stock	2,000,000	1,000,000	11,754,949 6,550,000		
Proceeds from preferred stock subscribed	2,000,000	300,000	0,550,000		
Issuance of convertible promissory notes	-	300,000	2,099,552		
Payment of promissory notes	-	-	(2,202,856)		
Payment of offering costs	-	-	(1,760,308)		
Proceeds from convertible debt, advances and loan payable		_	1,360,000		
Payment of loan payable	(100,000)	_	(725,000)		
Net cash provided by financing activities	1,900,000	1,300,000	19,761,337		
recreasi provided by infancing activities	1,200,000	1,500,000	17,701,337		
Net (decrease) increase in cash and cash equivalents	573,207	(165,344)	955,029		
Cash and cash equivalents, beginning of period	381,822	165,344	755,027		
Cash and cash equivalents, end of period	\$ 955,029	100,511	\$ 955,029		
Cash paid for interest	\$ 6,704	\$ -	\$ 348,058		
Cash paid for income taxes	\$ -	\$ -	\$ 7,400		
Supplemental disclosures of cash flow information:					
Non-cash financing activities:					
Conversation of debt to common stock	\$ 400,000	\$ -	\$ 400,000		
Accrued dividend	\$ 47,945	\$ -	\$ 47,945		
Discounts on convertible debt from beneficial conversion feature	\$ -	\$ -	\$ 641,331		
Discounts on convertible debt from warrants	\$ -		\$ 269,632		
Deemed dividend on preferred stock	\$ 1,480,000	\$ -	\$ 3,061,627		
-		Ψ -			
Warrants issued with promissory notes	\$ -		\$ 637,828		

 $See\ accompanying\ notes\ to\ the\ unaudited\ condensed\ consolidated\ financial\ statements.$ 

Warrants issued for placements agent services

1,230,649

# International Stem Cell Corporation and Subsidiary (A Development Stage Company)

# NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

# 1. Organization and Significant Accounting Policies

# Business Combination and Corporate Restructure

BTHC III, Inc. ("BTHC III" or the "Company") was organized in Delaware in June 2005 as a shell company to effect the reincorporation of BTHC III, I a Texas limited liability company. On December 28, 2006, we effected a Share Exchange pursuant to which we acquired all of the stock of International Sten Cell Corporation, a California corporation ("ISC California"). After giving effect to the Share Exchange, the stockholders of ISC California owned 93.7% of our issued and outstanding shares of common stock. As a result of the Share Exchange, ISC California is now our wholly-owned subsidiary, though for accounting purposes it was deemed to have been the acquirer in a "reverse merger." In the reverse merger, BTHC III is considered the legal acquirer and ISC Californ is considered the accounting acquirer. On January 29, 2007, we changed our name from BTHC III, Inc. to International Stem Cell Corporation.

Lifeline Cell Technology, LLC ("Lifeline") was formed in the State of California on August 17, 2001. Lifeline is in the business of developing and manufacturing human embryonic stem cells and reagents free from animal protein contamination. Lifeline's scientists have used a technology, called basal medium optimization to systematically eliminate animal proteins from cell culture systems. Lifeline is unique in the industry in that it has in place scientific and manufacturing staff with the experience and knowledge to set up systems and facilities to produce a source of consistent, standardized, animal protein free ES cell products suitable for FDA approval.

On July 1, 2006, Lifeline entered into an agreement among Lifeline, ISC California and the holders of membership units and warrants. Pursuant to the terms of the agreement, all the membership units in Lifeline were exchanged for 20,000,000 shares of ISC California Common Stock and for ISC California assumption of Lifeline's obligations under the warrants. Lifeline became a wholly owned subsidiary of ISC California.

## Going Concern

The Company continues in the development stage and as such has accumulated losses from inception and expects to incur additional losses in the near future. The Company needs to raise additional working capital. The timing and degree of any future capital requirements will depend on many factors. There can be not assurance that the Company will be successful in maintaining its normal operating cash flow and the timing of its capital expenditures will result in cash flow sufficient to sustain the Company's operations through 2009. Based on the above, there is substantial doubt about the Company's ability to continue as a going concern. The financial statements were prepared assuming that the Company is a going concern. The financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty. Management's plans in regard to these matters are focused on managing its cash flow, the proper timing of its capital expenditures, and raising additional capital or financing in the future.

# Basis of Presentation

International Stem Cell Corporation was formed in June 2006. BTHC III, Inc. was a shell company that had no operations and no net assets. For accounting purposes the acquisition has been treated as a recapitalization of BTHC III with ISC California as the accounting acquirer (reverse acquisition). The historic statements prior to June 2006 are those of Lifeline Cell Technology, the wholly owned subsidiary of ISC California.

The accompanying unaudited condensed consolidated financial statements included herein have been prepared in accordance with accounting principles generally accepted in the United States for interim financial information and with the instructions to Form 10-Q. They do not include all information and note required by generally accepted accounting principles for complete financial statements. However, except as disclosed herein, there has been no material change in the information disclosed in the notes to consolidated financial statements included in the annual report on Form 10-K of International Stem Cell Corporatio for the year ended December 31, 2008. When used in these notes, the terms "Company," "we," "us," or "our" mean International Stem Cell Corporation and a entities included in our unaudited condensed consolidated financial statements.

In the opinion of management, the unaudited condensed consolidated financial information for the interim periods presented reflects all adjustments, consisting of only normal and recurring adjustments, necessary for a fair presentation of the Company's consolidated results of operations, financial position and cash flows. The unaudited condensed consolidated financial statements and the related notes should be read in conjunction with the Company's audited consolidated financial statements for the year ended December 31, 2008 included in the Company's annual report on Form 10-K. Operating results for interim periods are not necessarily indicative of the operating results for any interim period or an entire year.

# Principles of Consolidation

The unaudited condensed consolidated financial statements of the Company include the accounts of International Stem Cell Corporation and its subsidiary afte intercompany balances and transactions have been eliminated.

# Cash Equivalents

The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

# Inventories

Inventories are stated at the lower of cost or market. Lab supplies used in the research and development process are expensed as consumed. Inventory is reviewed periodically for product expiration and obsolescence and adjusted accordingly.

# Property and Equipment

Property and equipment are stated at cost. The provision for depreciation and amortization is computed using the straight-line method over the estimated useful lives of the assets, which generally range from three to five years. The costs of major remodeling and leasehold improvements are capitalized and depreciated over the shorter of the remaining term of the lease or the life of the asset.

# Patent Licenses

Patent licenses consist of acquired research and development rights used in research and development, which have alternative future uses. Patent licenses are recorded at cost of \$849,313 and \$761,052 at March 31, 2009 and 2008, respectively, and are amortized on a straight-line basis over the shorter of the lives of the underlying patents or the useful life of the license. Amortization expense for the three months ended March 31, 2009 and 2008 amounted to \$13,755 and \$8,330, respectively, and is included in research and development expense. Additional information regarding patent licenses is included in Note 4.

# Long-Lived Asset Impairment

The Company reviews long-lived assets for impairment when events or changes in business conditions indicate that their carrying value may not be recovered. The Company considers assets to be impaired and writes them down to fair value if expected associated cash flows are less than the carrying amounts. Fair value is the present value of the associated cash flows. The Company has determined that no material long-lived assets are impaired at March 31, 2009. See Note 4 for a discussion on the Company's patent licenses.

# **Product Sales**

Revenue from product sales is recognized at the time of shipment to the customer provided all other revenue recognition criteria of the Security and Exchange Commission's Staff Accounting Bulletin No. 104, Revenue Recognition, have been met. If the customer has a right of return, in accordance with the provision set forth in the Financial Accounting Standards Board's (FASB) Statement No. 48, Revenue Recognition When Right of Return Exists (SFAS 48), t Company recognizes product revenues upon shipment, provided that future returns can be reasonably estimated. In the case where returns cannot be reasonably estimated, revenue will be deferred until such estimates can be made.

# Revenue Arrangements with Multiple Deliverables

The Company sometimes enters into revenue arrangements that contain multiple deliverables in accordance with EITF No. 00-21. This issue addresses th timing and method of revenue recognition for revenue arrangements that include the delivery of more than one product or service. In these cases, the Company recognizes revenue from each element of the arrangement as long as separate value for each element can be determined, the Company has completed its obligation to deliver or perform on that element, and collection of the resulting receivable is reasonably assured.

### Cost of Sales

Cost of sales consists primarily of costs and expenses for salaries and benefits associated with employee efforts expended directly on the production of the Company's products and include related direct materials, overhead and occupancy costs. Certain of the agreements under which the Company has licensed technology will require the payment of royalties based on the sale of its future products. Such royalties will be recorded as a component of cost of sales. Additionally, the amortization of license fees or milestone payments related to developed technologies used in the Company's products will be classified as a component of cost of sales to the extent such payments become due in the future.

# Research and Development Costs

Research and development costs, which are expensed as incurred, are primarily comprised of costs and expenses for salaries and benefits associated with research and development personnel; overhead and occupancy; contract services; and amortization of technology used in research and development with alternative future uses.

# Registration Payment Arrangements

The Company adopted FASB Staff Position No. EITF 00-19-2, Accounting for Registration Payment Arrangements ("FSP EITF 00-19-2"), on January 2007. FSP EITF 00-19-2 requires that companies separately recognize and measure registration payment arrangements, whether issued as a separate agreement or included as a provision of a financial instrument or other agreement. Such payments include penalties for failure to effect a registration of securities.

Prior to the adoption of FSP EITF 00-19-2, the Company accounted for registration rights as separate arrangements. Accordingly, the adoption of FSP EIT 00-19-2 had no impact on the consolidated financial position, operations, or cash flows of the Company for the period ended March 31, 2009.

## Fair Value Measurements.

On January 1, 2008, the Company adopted SFAS No. 157 (SFAS 157), Fair Value Measurements. SFAS 157 relates to financial assets and financial liabilitie In February 2008, the FASB issued FASB Staff Position (FSP) No. FAS 157-2. Effective Date of FASB Statement No. 157, which delayed the effective d of SFAS 157 for all non-financial assets and non-financial liabilities, except those that are recognized or disclosed at fair value in the financial statements on at least an annual basis until January 1, 2009 for calendar year-end entities.

SFAS 157 defines fair value, establishes a framework for measuring fair value in accounting principles generally accepted in the United States of America (GAAP), and expands disclosures about fair value measurements. The provisions of this standard apply to other accounting pronouncements that require o permit fair value measurements and are to be applied prospectively with limited exceptions. FSP FAS 157-1 amends SFAS 157 to exclude from the scope o SFAS 157 certain leasing transactions accounted for under Statement of Financial Accounting Standards No. 13, "Accounting for Leases." FSP FAS 157 amends SFAS 157 to defer the effective date of SFAS 157 for all non-financial assets and non-financial liabilities except those that are recognized or disclosed at fair value in the financial statements on a recurring basis to fiscal years beginning after November 15, 2008. In addition, effective for the third quarter of 2008, the Company adopted FASB Staff Position 157-3, "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active ("FSP FAS 157-3"). FSP FAS 157-3 clarifies the application of SFAS 157 to financial instruments in an inactive market. The adoption of SFAS 157 and FS FAS 157-3 did not have a material impact on the Company's financial statements since the Company generally does not record its financial assets and liabilities in its financial statements at fair value.

Effective January 2, 2008, the Company also adopted, on a prospective basis, Statement of Financial Accounting Standards No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities" ("SFAS 159"). SFAS 159 permits entities to choose to measure many financial instruments and certain other items a fair value. The adoption of SFAS 159 did not have a material impact on the Company's consolidated financial statements since the Company elected not to apply the fair value option for any of its eligible financial instruments or other items.

# Recent Accounting Pronouncements

In December 2007, the FASB issued Statement No. 141 (revised 2007), Business Combinations. (SFAS 141(r)"). The new standard requires the acquiring entity in a business combination to recognize all (and only) the assets acquired and liabilities assumed in the transaction; establishes the acquisition-date fair value as the measurement objective for all assets acquired and liabilities assumed; and requires the acquirer to disclose to investors and other users all of the information they need to evaluate and understand the nature and financial effect of the business combination. This is effective for the Company beginning January 1, 2009 and has assessed that it will have no impact on the consolidated financial statements.

In December, 2007, the FASB issued Statement No. 160, Noncontrolling Interests in Consolidated Financial Statements—an amendment of ARB N 51("SFAS 160"). This statement establishes accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of  $\varepsilon$  subsidiary. This statement is effective prospectively, except for certain retrospective disclosure requirements, for fiscal years beginning after December 15, 2008. The Company expects that this will have no impact on its consolidated financial statements.

In December 2007, FASB ratified the consensus reached by EITF on EITF Issue 07-1, Accounting for Collaborative Arrangements, or EITF 07-1. EITF (requires collaborators to present the results of activities for which they act as the principal on a gross basis and report any payments received from (made to) other collaborators based on other applicable GAAP or, in the absence of other applicable GAAP, based on analogy to authoritative accounting literature or a reasonable, rational, and consistently applied accounting policy election. Further, EITF 07-1 clarified that the determination of whether transactions within a collaborative arrangement are part of a vendor-customer (or analogous) relationship subject to EITF 01-9, "Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)." EITF 07-1 is effective beginning on January 1, 2008 and the Company has assessed that there is no material impact on its consolidated financial statements.

In April 2008, the FASB issued FSP FAS 142-3 Determination of the Useful Life of Intangible Assets. The FSP states that in developing assumptions abour renewal or extension options used to determine the useful life of an intangible asset, an entity needs to consider its own historical experience adjusted for entity-specific factors. In the absence of that experience, an entity shall consider the assumptions that market participants would use about renewal or extension options. This FSP is to be applied to intangible assets acquired after January 1, 2009. The adoption of this FSP did not have an impact on the Company' financial statements.

In May 2008, the FASB issued Statement No. 162, The Hierarchy of Generally Accepted Accounting Principles ("SFAS 162"). SFAS 162 identifies consistent framework, or hierarchy, for selecting accounting principles to be used in preparing financial statements that are presented in conformity with U.S. generally accepted accounting principles for nongovernmental entities (the "Hierarchy"). The Hierarchy within SFAS 162 is consistent with that previously defined in the AICPA Statement on Auditing Standards No. 69, The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principle ("SAS 69"). SFAS 162 is effective 60 days following the United States Securities and Exchange Commission's (the "SEC") approval of the Public Compa Accounting Oversight Board amendments to AU Section 411, The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principle The adoption of SFAS 162 will not have a material effect on the consolidated financial statements because the Company has utilized the guidance within SAS 600.

In May 2008, the FASB issued Statement No. 163, Accounting for Financial Guarantee Insurance Contracts—an interpretation of FASB Statement No. ("SFAS No. 163"). SFAS 163 requires recognition of an insurance claim liability prior to an event of default when there is evidence that credit deterioration has occurred in an insured financial obligation. SFAS 163 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and al interim periods within those fiscal years. Early application is not permitted. The Company expects that the adoption of SFAS 163 will not have a material effect on the consolidated financial statements.

In April 2009, the FASB issued FSP FAS 107-1 and Accounting Principles Board (APB) 28-*Unterim Disclosures about Fair Value of Financial Instruments*. The FSP amends SFAS No. 107 "Disclosures about Fair Value of Financial Instruments" to require an entity to provide disclosures about fa value of financial instruments in interim financial information. This FSP is to be applied prospectively and is effective for interim and annual periods ending after June 15, 2009 with early adoption permitted for periods ending after March 15, 2009. The Company will include the required disclosures in its quarter ending June 30, 2009.

In April 2009, the FASB issued FSP FAS 141(R)-1. Accounting for Assets Acquired and Liabilities Assumed in a Business Combination That Arise from Contingencies. This FSP requires that assets acquired and liabilities assumed in a business combination that arise from contingencies be recognized at fair value can be reasonably estimated. If fair value cannot be reasonably estimated, the asset or liability would generally be recognized in accordance with SFAS No. 5, "Accounting for Contingencies" and FASB Interpretation No. 14, "Reasonable Estimation of the Amount of a Loss". Further, the FAS removed the subsequent accounting guidance for assets and liabilities arising from contingencies from SFAS No. 141(R). The requirements of this FSP carr forward without significant revision the guidance on contingencies of SFAS No. 141, "Business Combinations", which was superseded by SFAS No. 141(R) (see previous paragraph). The FSP also eliminates the requirement to disclose an estimate of the range of possible outcomes of recognized contingencies at the acquisition date. For unrecognized contingencies, the FASB requires that entities include only the disclosures required by SFAS No. 5. Thi FSP was adopted effective January 1, 2009. There was no impact upon adoption, and its effects on future periods will depend on the nature and significance or business combinations subject to this statement.

## Income Taxes

The Company accounts for income taxes in accordance with Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes". FA No. 109 requires the Company to provide a net deferred tax asset/liability equal to the expected future tax benefit/expense of temporary reporting differences between book and tax accounting methods and any available operating loss or tax credit carryforwards. The Company has available at March 31, 2009 operating loss carryforwards of approximately \$18,317,862, which may be applied against future taxable income and will expire in various years through 2025. At December 31, 2008, the company had operating loss carryforwards of approximately \$15,274,419. The increase in carryforwards for the three months ended March 31, 2009 is approximately \$3,043,443.

# Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the unaudited condensed consolidated financial statements. Significant estimates include patent life (remaining legal life versus remaining useful life) and transactions using the Black-Scholes option pricing model, e.g., promissory notes, warrants, and stock options. Actual results could differ from those estimates.

# Concentration of Credit Risk

The Company maintains its cash and cash equivalents in banks located in the United States. Bank accounts are guaranteed by the Federal Deposit Insuranc Corporation (FDIC) up to \$250,000 per financial institution. At March 31, 2009 and December 31, 2008, the Company's cash balances on deposit with th financial institutions in excess of the FDIC insurance limit amounted to \$705,029 and \$131,822, respectively. Excess funds are invested in government securities only.

# Income (Loss) Per Common Share

Statement of Financial Accounting Standards No. 128, "Earnings Per Share", requires presentation of basic earnings per share ("Basic EPS") and dilute earnings per share ("Diluted EPS"). The computation of net loss per common share is based on the weighted average number of shares outstanding during each period based on the exchange ratio of shares issued in the merger. The computation of diluted earnings per common share is based on the weighted average number of shares outstanding during the period plus the common stock equivalents, which would arise from the exercise of stock options and warrants outstanding using the treasury stock method and the average market price per share during the period. At March 31, 2009, there were approximately 14,177,820 warrants, 3,300,200 vested stock options and 2,867,300 unvested options outstanding. These options and warrants were not included in the diluted loss per share calculation because the effect would have been anti-dilutive. The weighted average number of shares prior to 2006 was calculated based on the members' contribution, as if converted to shares in the ratio of the share exchange with BTHC III.

# Comprehensive Income

The Company displays comprehensive income or loss, its components and accumulated balances in its consolidated financial statements. Comprehensive income or loss includes all changes in equity except those resulting from investments by owners and distributions to owners. The Company did not have any items of comprehensive income or loss for the three months ended March 31, 2009 and 2008 or the period from inception through March 31, 2009.

# 2. Inventory

Inventories are stated at the lower of cost or market. Lab supplies used in the research and development process are expensed as consumed. Inventory is reviewed periodically for product expiration and obsolete inventory and adjusted accordingly. The components of inventories are as follows:

	March 31, 2009	December 31, 2008
Raw materials	\$ 27,836	\$ 50,529
Work in Process	119,647	170,714
Finished goods	162,838	196,100
	\$ 310,321	\$ 417,343

# 3. Property and Equipment

Property and equipment consists of the following:

	March 31, 2009		,	
Machinery and equipment	\$	351,580	\$	328,002
Computer equipment		167,406		173,641
Office equipment		63,287		61,956
Leasehold improvements		378,773		329,970
		961,046		893,569
Accumulated depreciation and amortization		(291,755)		(267,699
	\$	669,291	\$	625,870

Depreciation charged to operations during the first quarter was \$24,056 in 2009 and \$26,794 in 2008.

## 4. Patent Licenses

On December 31, 2003, Lifeline entered into an *Option to License Intellectual Property* agreement with Advanced Cell Technology, Inc. ("ACT") for pater rights and paid ACT \$340,000 in option and license fees. On February 13, 2004, Lifeline and ACT amended the Option agreement and Lifeline paid AC additional option fees of \$22,500 for fees related to registering ACT's patents in selected international countries.

On May 14, 2004, Lifeline amended the licensing agreement with ACT for the exclusive worldwide patent rights for the following ACT technologies: Infige IP, UMass IP and ACT IP, which terms are summarized below. The license fees aggregate a total of \$400,000 and were secured by separate convertible promissory notes. The notes bear no interest unless they are not repaid at maturity, in which event they shall thereafter bear interest at an annual rate equal the lesser of 10% or the maximum non-usurious rate legally allowed.

The note could be converted at the option of ACT into the first equity financing of Lifeline with cash proceeds in excess of \$5,000,000 under the following conditions: i) Upon the consummation of the First Equity Financing; or ii) Immediately prior to the closing of any merger, sale or other consolidation of the Company or of any sale of all or substantially all assets of the Company which occurs prior to the First Equity Financing (an "Acquisition Event") Notwithstanding the above, and only in the event that a conversion resulting from such Acquisition Event would result in a security not traded on a national stock exchange (including NASDAQ and NASDAQ Capital market), upon written notice to the Company not later than five days after the consummation the Acquisition Event and notice of the Acquisition Event to the holder of the note, the holder may elect to receive payment in cash of the entire outstanding principal of this Note. On December 21, 2007, ACT elected to receive payment in cash in lieu of conversion of the notes, which was paid in full.

The Company still maintains an obligation to pay royalties and other fees in accordance with the following schedule:

	UMass IP	ACT IP
License fee	\$ 150,000	\$ 250,000
Royalty rates	3% to 12%	3% to 10%
Minimum royalties		
At 12 months	\$ 15,000	\$ 22,500
At 24 months	\$ 30,000	\$ 45,000
At 36 months	\$ 45,000	\$ 67,500
Annually thereafter	\$ 60,000	\$ 90,000
Milestone payments		
First commercial product	\$ 250,000	\$ 500,000
Sales reaching \$5,000,000	\$ 500,000	\$ 1,000,000
Sales reaching \$10,000,000	\$ 1,000,000	\$ 2,000,000

# 5. Related Party Payables

The Company has incurred obligations to the following related parties:

	M	March 31,		ember 31,
		2009		2008
Management fee	\$	271,242	\$	264,648
Loan payable, net of debt discount of \$8,221 in 2008		164,505		156,283
Related party payables	\$	435,747	\$	420,931

SeaCrest Capital and SeaCrest Partners are controlled by Mr. Adams and Mr. Aldrich, YKA Partners is controlled by Mr. Aldrich and the amounts represent advances to the Company for operating expenses. The management fee was paid to Mr. Adams and Mr. Aldrich, who acted as managing members of the Company (and prior to the Share Exchange of ISC California and Lifeline) for management of the Company since inception of Lifeline for an aggregate (\$10,000 per month plus accrued interest at 10% per annum on the unpaid balance. Effective June 1, 2006 the management fee was increased to \$20,000 per month. The management fee ceased on November 1, 2006, at which time Mr. Adams and Mr. Aldrich became employees of ISC.

# 6. Convertible Debt and Advances

# Convertible debt

On May 14, 2008, to obtain funding for working capital, the Company entered into a Securities Purchase Agreement with an accredited investor (Gemir Capital) for the issuance (for total consideration of \$850,000 minus certain expenses of the purchaser) of an OID Senior Secured Convertible Note an warrants. The note was for \$1,000,000 (and was issued with a 15% original issue discount) and is due and payable on or before January 31, 2009. The note is convertible into shares of common stock of the company at the rate of \$0.50 per share. The note is guaranteed by the subsidiaries of the Company and secured by certain patents and patent applications. Warrants were issued which permit the holder to purchase up to 2,000,000 shares of common stock from the Company at \$0.25 per share until five years from the issuance of the warrants. The note and the warrants contain 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 note or exercise price of the warrant, such conversion and exercise prices shall be adjusted downward to equal the price of the new securities.

In accordance with EITF 98-05, "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustment Conversion Rati Abstract", the Company allocated the \$850,000 proceeds according to the value of the convertible note and the warrants based on their relative fair values. Fair value of the warrants was determined using the Black-Scholes valuation model using risk-free interest rate of 3.22%, volatility rate of 59.5%, term of five years, and exercise price of \$0.25.

In accordance with EITF 00-27, "Application of Issue No. 98-5 to Certain Convertible Instruments", the reduction in proceeds, value of the benefici conversion feature, and value of the warrants amounting to \$170,000, \$216,117 and \$266,117, respectively, have been recorded as a discount to convertible notes and were amortized over the term of the notes using the straight-line method. In August 2008, in accordance with the anti-dilution provisions of the debt, the conversion rate and exercise price were reduced to \$0.25. Estimated adjusted fair value of the warrants was determined using the Black-Scholes valuation model using risk-free interest rate of 3%, volatility rate of 57.9%, term of five years, and exercise price of \$0.25.

### Advance

On June 18, 2008, the Company entered into an agreement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into an agreement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into an agreement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into an agreement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into an agreement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into an agreement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into an agreement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into an agreement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into an agreement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into an agreement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into a greement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into a greement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into a greement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to LifeLine Company entered into a greement with BioTime and BioTime will pay an advance of \$250,000 to LifeLine Company entered into a greement with BioTime and BioTime will pay an advance of \$250,000 to LifeLine Company entered into a greement with BioTime and BioTime will pay an advance of \$250,000 to LifeLine Company entered into a greement with BioTime and BioTime will pay an advance of \$250,000

	March 31, 2009		December 31, 2008
Gemini Capital, net of debt discount of \$59,006 in 2008	\$	-	\$ 440,994
Bio Time, Inc	250,0	00	250,000
	\$ 250,0	00	\$ 690,994

# 7. Capital Stock

As of December 31, 2006, the Company was authorized to issue 200,000,000 shares of common stock, \$0.001 par value per share, and 20,000,000 shares of preferred stock, \$0.001 par value per share. As of December 31, 2006, the Company has issued and outstanding 33,996,495 shares of common stock and no shares of preferred stock.

In October 2006, the board of directors of BTHC III approved a stock split of 4.42 shares to 1. As a result of the split, the outstanding common stock of BTH III increased from 500,000 to 2,209,993 shares. Pursuant to the Share Exchange Agreement, each share of International Stem Cell Corporation common stoc was exchanged for one share of BTHC III common stock. All numbers in the financial statements and notes to the financial statements have been adjusted t reflect the stock split for all periods presented.

On December 27, 2006, the Company's Board of Directors and holders of a majority of the outstanding shares approved a change in the Company's name to International Stem Cell Corporation, which change became effective in January 2007. The accompanying financial statements have been changed to reflect the change as if it had happened at the beginning of the periods presented.

On December 27, 2006, the Company's Board of Directors and holders of a majority of the outstanding shares approved an increase in the authorized capita stock of the Company to 200,000,000 shares of Common Stock, \$0.001 par value per share, and 20,000,000 shares of preferred stock, \$0.001 par value per share. The increase did not become effective until January 2007.

In November and December of 2006, ISC California issued 9,880,950 shares of common stock for cash at \$1.00 per share for net proceeds of \$8,334,515 afte commissions and expenses totaling \$1,547,433. In addition, ISC California issued 555,552 shares of common stock for \$500,000. The holders of the shares are entitled to the following registration rights with respect to the shares: (1) the Company must file a registration statement for the resale of the shares within 60 days from final closing date of February 13, 2007; (2) the registration statement must be declared effective by the SEC no later than 150 days from the final closing date of February 13, 2007; (3) the Company must reply to SEC staff comments within 30 days of receipt; and (4) the Company must maintain the effectiveness of the registration statement for 12 months from the final closing date of February 13, 2007. The first day after failing to perform any of the above is known as the first determination date. The Company is required to deliver penalty shares equal to 1% of the original number of shares entitled to such registration rights, 30 days after the first determination date, and additional shares equal to 1% of the original number of shares entitled to such registration rights each week thereafter, not to exceed 10% except with respect to replying to SEC staff comments within 30 days, which shall not exceed 20%. The Company filed its registration statement on Form SB-2 within 60 days from the final closing and believes the effects of the above penalties are remote. The Company periodically reviews its obligations and corresponding penalties under FAS 5, Accounting for Contingencies, and FSP EITF 00-19-2. Paragraph B9 FSP EITF 00-19-2, states that entities should recognize and measure the contingent obligation to transfer consideration under a registration payment arrangement using the guidance in Statement 5, instead of requiring that a liability be recognized and measured at fair value at inception.

In December 2006, the Company issued 1,350,000 shares of common stock, 350,000 of such shares in consideration for legal consulting services relating to the reverse merger and 1,000,000 shares in consideration for a contract to provide investor relations services which commenced September 1, 2006 for a period of one year.

In January and February 2007, ISC California completed the Brookstreet financing and issued 1,370,000 shares of common stock that was part of a privat placement of securities by ISC California during the second half of 2006. The net proceeds from the shares whose sale was finalized in 2007 was \$1,157,12: net of cash fees and expenses. In connection with the final settlement in 2007, the selling agent for the private placement received 274,000 additional warrants, which entitle the holder thereof to purchase the number of shares of common stock for \$1.00 each.

On January 15, 2008, to raise funds, the Company entered into a subscription agreement with accredited investors for the sale between one million and five million of Series A Preferred Stock ("Series A Preferred"). Series A Units consists of one share of Series A Preferred and two Warrants ("Series A Warrants") to purchase Common Stock for each \$1.00 invested. The Series A Preferred was convertible into shares of common stock at market price on the date of the first finance closing, but not to exceed \$1 per share and the Series A Warrants are exercisable at \$0.50 per share. The Series A Preferred has an anti-dilution clause whereby, if the Company issues \$1 million or more of equity securities or securities convertible into equity at a price below the respective exercise prices of the Series A Preferred or the Series A Warrant shall be adjusted downward to equal the price of the new securities. The Series A Preferred has priority on any sale or liquidation of the Company equal to the purchase price of the Series A 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 A Preferred a dividend of the amount of the dividend the Series A Preferred holder would receive if the shares were converted just prior to the dividend declaration. Each share of Series A Preferred has the same voting rights as the number of shares of Common Stock into which it would be convertible on the record date.

On May 12, 2008, to obtain funding for working capital, the Company entered into a series of subscription agreements with a total of 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 Seri 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 E Preferred converted (which was established based on an initial conversion price of \$0.50 per share), and the Series B Warrants are 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 contain 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. 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% pe 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 divident 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 Preferre has the same voting rights as the number of shares of Common Stock into which it would be convertible on the record date.

On July 30, 2008, to obtain funding for working capital, the Company entered into a series of subscription agreements with a total of two accredited investors for the sale of a total of 150,000 Series B Units. The total purchase price received by the Company was \$150,000. 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 will 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 contain 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. 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 o 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 a dividend equal to the amount of the dividend the Series B Preferred holder would receive in 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.

In accordance with EITF 98-05, "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustment Conversion Rati Abstract", the Company allocated the proceeds of the Series A and B preferred stock according to the value of the convertible preferred stock and the warrants based on their relative fair values. Fair value of the warrants for Series A and Series B were determined using the Black-Scholes valuation mode using risk-free interest rates of 3% and 3.37%, volatility rate of 65.0% and 57.9%, term of five years, and exercise price of \$0.50.

In August 2008, in accordance with the anti-dilution provisions of the securities, the conversion rates and exercise price were reduced to \$0.25. Estimated adjusted fair value of the warrants was determined using the Black-Scholes valuation model using risk-free interest rate of 3%, volatility rate of 57.9%, term of five years, and exercise price of \$0.25. For Series A and Series B, the beneficial conversion feature and warrants were adjusted to \$553,320 and \$193,321, and \$308,307 and \$110,307, respectively.

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 three million dollars (\$3,000,000) up to three million (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 has a 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 have priority over the Common Stock on any sale or liquidation of the Company equal to the purchase price of the Units, plus liquidation premium of 6% per year. If the Company elects to declare a dividend in any year, it must first pay to the Series C Preferred a dividend in the amoun 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 th same voting rights as the number of shares of Common Stock into which it would be convertible on the record date. Subject to determination by the Investo that there has been no material adverse event, the sale of the Series C Preferred is scheduled to close on the following schedule: (I) 700,000 shares were sold August 20, 2008, and (2) 1,300,000 shares were sold September 23, 2008. The beneficial conversion feature for the Series C preferred stock is \$720,000. The beneficial conversion feature from the Series A, Series B and Series C preferred stock are recognized as deemed dividend totaling \$1,581, 627.

On December 30, 2008, to obtain funding for both working capital and the eventual repayment of the outstanding obligation under the OID Senior Secure Convertible Note with a principal amount of \$1,000,000 issued in May 2008, International Stem Cell Corporation (the "Company") entered into a Series I Preferred Stock Purchase Agreement (the "Series D Agreement") with accredited investors (the "Investors") to sell for up to five million dollars (\$5,000,000 up to fifty (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 Preferred scheduled to close on the following schedule: (1) 10 shares were sold December 30, 2008; (2) subject to determination by the Investors that there has been no material adverse event with respect to the Company, 10 shares will be sold February 5, 2009; and (3) at the Investors' sole discretion 10 shares will be sold on each of March 20, 2009, June 30, 2009 and September 20, 2009. If the Investors decide not to purchase shares in any of the later three discretionary tranches then their rights to purchase shares in future tranches shall terminate. As of December 31, 2008, the Company received \$1 million from the Series D financing and issued 10 shares of Series D Preferred Stock.

On December 29, 2008 the Company issued a total of 2,121,180 restricted shares of common stock to six executive officers and directors and one employee a \$0.25 per share. The shares are subject to stock restriction provisions and vest upon the third anniversary of the date of grant, subject to accelerated vesting upon certain changes of control or terminations of service. The Company will reacquire any unvested shares for no cost upon the termination of the recipient's service to the Company. These shares were issued to the individuals in recognition of the fact that they had previously agreed to reduce (and in some cases completely eliminate) the cash compensation that would have otherwise been payable to them in 2008.

During the quarter ended March 31, 2009, we raised a total of \$2,000,000 in the Series D Preferred Stock round and is recorded as a Preferred Stock.

In accordance with EITF 98-05, "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustment Conversion Rati Abstract", the Company recorded a deemed dividend of \$1,480,000 related to the Preferred Shares Series D issued during the quarter ended March 31, 2009.

# 8. Income Taxes

The Company accounts for income taxes in accordance with Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes". FA No. 109 requires the Company to provide a net deferred tax asset/liability equal to the expected future tax benefit/expense of temporary reporting differences between book and tax accounting methods and any available operating loss or tax credit carryforwards. The Company has available at March 31, 2009 operating loss carryforwards of approximately \$18,317,862, which may be applied against future taxable income and will expire in various years through 2025. At December 31, 2008, the company had operating loss carryforwards of approximately \$15,274,419. The increase in carryforwards for the quarter ended March 31, 2009 is approximately \$3,043,443.

The amount of and ultimate realization of the benefits from the operating loss carryforwards for income tax purposes is dependent, in part, upon the tax laws in effect, the future earnings of the Company, and other future events, the effects of which cannot be determined at this time. Because of the uncertainty surrounding the realization of the loss carryforwards, the Company has established a valuation allowance equal to the tax effect of the loss carryforwards, R&D credits, and accruals; therefore, no net deferred tax asset has been recognized. A reconciliation of the statutory Federal income tax rate and the effective income tax rate for the three months ended March 31, 2009 and year ended December 31, 2008 as follows:

	March 31,	December 31,
	2009	2008
Statutory federal income tax rate	(35)%	(35)%
State income taxes, net of federal taxes	(6)%	(6)%
Valuation allowance	41%	41%
Effective income tax rate	0%	0%

The Company files income tax returns in the U.S. federal jurisdiction, and various states. With few exceptions, the Company is no longer subject to U.S federal, state and local income tax examinations by tax authorities for years before 2005.

The Company adopted the provisions of FASB Interpretation No. 48,Accounting for Uncertainty in Income Taxes ("FIN 48"), on January 1, 2007, with no material impact to the financial statements.

The company may be subject to IRC code section 382 which could limit the amount of the net operating loss and tax credit carryovers that can be used it future years.

Significant components of deferred tax assets and liabilities are as follows:

	N	1arch 31, 2009	De	cember 31, 2008
Deferred tax assets (liabilities)				
Net operating loss carryforwards	\$	3,043,443	\$	4,531,000
Accrued expenses		201,630		231,490
Research and Development tax credit (Fed and St.)		45,342		286,469
Deferred tax assets		3,290,415		5,048,959
Valuation allowance		(3,290,415)		(5,048,959)
Net deferred tax assets	\$		\$	

The components of the provisions for income taxes were as follows:

	March 31, 2009	December 31, 2008
Current	\$ 0	\$ 0
Deferred Total	<u>0</u> \$ 0	\$ 0

# 9. Stock Options and Warrants

The Company has adopted the 2006 Equity Participation Plan (the "Plan"). The options granted under the Plan may be either qualified or non-qualified options. Up to 15,000,000 options may be granted to employees, directors and consultants under the Plan. Options may be granted with different vesting terms and expire no later than 10 years from the date of grant.

The Company implemented Statement of Financial Accounting Standard No. 123R ("SFAS No. 123R")," Accounting For Stock-Based Payment, "which is a revision of Statement of Financial Accounting Standard No. 123 ("SFAS No. 123")," Accounting For Stock-Based Compensation. "SFAS No. 123R requires the Company to establish assumptions and estimates of the weighted-average fair value of stock options granted, as well as using a valuation model to calculate the fair value of stock-based awards. The Company uses the Black-Scholes option-pricing model to determine the fair-value of stock-based awards. All options are amortized over the requisite service periods of the awards, which are generally the vesting periods.

Expected Life - The expected life of options granted represents the period of time for which the options are expected to be outstanding. The Company estimates the expected life of options granted to be 3.75 years.

Expected Volatility - The expected volatility is based on the historical volatility of the Company's common stock over the estimated expected life of the options. The Company does not have enough trading history of its common stock to develop a volatility rate to use in the SFAS No. 123R analysis. Therefore the Company analyzed two competitor's volatility rates over a five year period and averaged them into one rate, which was 68% for the quarter ended March 31, 2009, and for the year ended December 31, 2008.

Risk-Free Interest Rate - The risk-free interest rate is derived from the U.S. Treasury yield curve in effect at the date of grant.

Dividends - The Company does not currently anticipate paying any cash dividends on its common stock. Consequently, the Company uses an expected dividend yield of zero in the Black-Scholes option valuation model.

Forfeitures - SFAS No. 123R requires the Company to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actua forfeitures differ from those estimates. To determine an expected forfeiture rate, the Company examined the historical employee turnover rate over the prior years as a proxy for forfeitures. Based on the internal analysis, the expected forfeiture rate was determined to be 10.0%.

The fair value of options granted is estimated at the date of grant using a Black-Scholes option-pricing model with the following weighted-average assumptions for the quarter ended March 31, 2009:

# Risk free interest rate1.27%Dividend yield0.0%Volatility factor of the expected market price of the Company's common stock68.45%Weighted-average expected life of options3.75 Years

Three Months Ended

Compensation expense is recognized only for those options expected to vest, with forfeitures estimated at the date of grant based on the Company's historical experience and future expectations. For the three months ended March 31, 2009 and 2008, \$99,262 and \$84,202 was recognized as stock-based compensation expense under SFAS No. 123R, respectively. Unrecognized compensation cost related to stock options as of March 31, 2009 was \$758,480 and the weighted average life of these outstanding stock options is approximately 8.82 years.

# Stock Options

Transactions involving stock options issued to employees, directors and consultants under the Plan are summarized below. Options issued under the plan have a maximum life of 10 years. The following table summarizes the changes in options outstanding and the related exercise prices for the shares of the Company's common stock issued under the Plan and as of March 31, 2009:

Options Outstanding Options Exercisable

	- P		- F		
		Weighted Average			
		Remaining	Weighted		Weighted
Exercise	Number	Contractual	Average	Number	Average
Prices	Outstanding	Life (Years)	Exercise Price	Exercisable	Exercise Price
\$1.00	3,087,500	8.00	\$1.00	2,569,400	\$1.00
\$3.20	170,000	8.25	\$3.20	64,600	\$3.20
\$1.45	300,000	8.33	\$1.45	126,000	\$1.45
\$1.00	170,000	8.75	\$1.00	64,600	\$1.00
\$0.45	1,805,000	9.16	\$0.45	361,000	\$0.45
\$0.39	490,000	9.42	\$0.39	68,600	\$0.39
\$0.22	145,000	9.58	\$0.22	14,500	\$0.22

			Weighted Average
	Number of Shares		Price Per Share
Outstanding at December 31, 2008	6,167,500	\$	0.61
Granted			
Exercised			
Canceled/forfeited	<del></del>	_	
Outstanding at March 31, 2009	6,167,500	\$	0.61

#### Warrants

During 2008, the Company raised additional capital by issuing Preferred Series A, B, C and D stock. This issuance of the Preferred Series C triggered an an dilutive clause in the Brookstreet warrant agreement, where Brookstreet would receive an adjustment downward in the price they pay for converting their warrants. In 2007, Brookstreet Securities Corporation earned 274,000 warrants as compensation for its services as placement agent for the raising of equity capital for the quarter. Brookstreet earned 1,976,190 warrants in 2006. Brookstreet earned a total of 2,250,190 warrants in 2006 and 2007 in connection with the Company's private placement. Each Warrant entitles the holder thereof to purchase one share of common stock for \$1.00 revalued to \$0.56 per warrant. The Company recognized the value attributable to the warrants in the amount of \$1,230,649 in 2006 and \$169,249 in 2007 as a component of additional paid-in capital with a corresponding reduction in additional paid-in capital to reflect the issuance as a non-cash cost of the offering. The Company valued the Brookstreet warrants in accordance with EITF 00-27 using the Black-Scholes pricing model and the following assumptions: contractual terms of 5 years, a average risk free interest rate of 4.58%, a dividend yield of 0% and 0%, and volatility of 70.57%. The warrants issued were modified on March 9, 2009 to extend the term for an additional 3 years. In addition, the exercised price of warrants exercised price to a specified date was reduced from \$0.80 to \$0.35. This modification resulted in additional non-cash compensation of \$281,416 for the quarter ended March 31, 2009.

As part of the capital raising efforts, the Company issued during the quarter ended March 31, 2008 two warrants to purchase shares of common stock with the purchase of one Series A Preferred Stock issued, there were an additional 2,000,000 common stock warrants outstanding relating to the Series A Preferred Stock.

As part of the capital raising efforts, the Company issued two warrants to purchase shares of common stock with the purchase of one Series B Preferred Stock. As of September 30, 2008, there were an additional 1,100,000 common stock warrants outstanding relating to the Series B Preferred Stock.

During the second quarter, the Company entered into an agreement to borrow \$1.0 million and as part of this agreement, the Company issued warrants were the holder can purchase up to 2,000,000 shares of common stock from the Company at \$0.25 per share until five years from the issuance of the warrants. The note and the warrants contain 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 note or exercise price of the warrant, such conversion and exercise prices shall be adjusted downward to equal the price of the new securities.

During June 2008, the Company entered into an agreement with BioTime, Inc. ("Bio Time"), were Bio Time will pay an advance of \$250,000 to LifeLine Company ("Lifeline"), a wholly owned subsidiary of International Stem Cell Corporation, to produce, make, and distribute Joint Products. As part of the agreement, the Company will issue warrants for Bio Time to purchase 30,000 shares of the Company's common stock at \$0.25 per share. These warrants expire 4 years from date of grant.

## 10. Commitments and Contingencies

#### Leases

The Company leases office space under a non-cancelable operating lease. Future minimum lease payments required under operating leases that have initial or remaining non-cancelable lease terms in excess of one year as of March 31, 2009, are as follows:

	A	mount
2009	\$	125,758
2010		163,133
2011		86,478
2012		
2013		
Total	\$	375,369

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of International Stem Cell Corporation (A Development Stage Company) Oceanside, California

We have audited the accompanying consolidated balance sheets of International Stem Cell Corporation and subsidiary (a development stage company) (the "Company") as of December 31, 2008 and 2007, and the related consolidated statements of operations, members' deficit and stockholders' equity and cash flows for the years then ended and for the period from inception (August 17, 2001) through December 31, 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of International Stem Cel Corporation and subsidiary as of December 31, 2008 and 2007, and the results of their operations and their cash flows for the years then ended and for the period from inception (August 17, 2001) through December 31, 2008, in conformity with accounting principles generally accepted in the United States o America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company expects to incur losses and needs to raise capital, which raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of the uncertainty.

/s/ Vasquez & Company LLP Los Angeles, California

March 30, 2009

## INTERNATIONAL STEM CELL CORPORATION AND SUBSIDIARY

		December		r 31,	
		2008		2007	
Assets					
Current assets					
Cash and cash equivalents	\$	381,822	\$	165,344	
Accounts Receivable		81,898		10,189	
Inventory		417,343		175,636	
Prepaid assets		75,428		119,035	
Total current assets		956,491		470,204	
Property and equipment, net		625,870		482,786	
Patent licenses, net		637,205		625,148	
Deposits and other assets	_	22,186		19,643	
Total assets	\$	2,241,752	\$	1,597,781	
Liabilities, Members' Deficit and Stockholders' Equity					
Current liabilities					
Accounts payable	\$	465,034	\$	493,426	
Accrued expenses		231,488		142,177	
Convertible debt and advances		690,994			
Related party payable	_	420,931		749,778	
Total liabilities		1,808,447		1,385,381	
Members' Deficit and Stockholders' Equity					
Capital stock, \$0.001 par value 200,000,000 shares authorized, 38,410,675 issued.		38,410		35,369	
Preferred stock, \$0.001 par value 20,000,000 shares authorized, 3,550,010 and 0 issued.		3,550			
Additional paid-in capital		24,491,311		16,124,046	
Deficit accumulated during the development stage		(24,099,966)		(15,947,015)	
Total members' deficit and stockholders' equity		433,305		212,400	
Total liabilities, members' deficit and stockholders' equity	\$	2,241,752	\$	1,597,781	

See accompanying notes to consolidated financial statements

# INTERNATIONAL STEM CELL CORPORATION AND SUBSIDIARY Consolidated Statements of Operations

	Year Ended	<u> </u>			Inception (August 2001) through	
	2008		2007	De	ecember 31, 2008	
Product Sales	\$ 367,771	\$	38,764	\$	409,521	
Royalties and license	135,000				135,000	
Total revenue	502,771		38,764		544,521	
Development expenses						
Cost of sales	129,257		40,997		201,126	
Research and development	1,946,704		2,486,417		8,321,816	
Marketing	380,895		495,009		1,012,351	
General and administrative	3,579,044		3,089,963	_	11,412,811	
Total development expenses	6,035,900		6,112,386		20,948,104	
Loss from development activities	(5,533,129)		(6,073,622)		(20,403,583)	
Other income (expense)						
Settlement with related company					(93,333)	
Miscellaneous			3,164		8,643	
Dividend & interest income	1,682		31,741		56,013	
Interest expense	(1,048,277)		(41,808)		(2,116,408)	
Sublease income	8,400		9,642	_	37,129	
Total other income (loss)	(1,038,195)		2,739	_	(2,107,956)	
Loss before tax	(6,571,324)		(6,070,883)		(22,511,539)	
Provision for income taxes			1,100		6,800	
Net loss	\$ (6,571,324)	\$	(6,071,983)	\$	(22,518,339)	
Deemed Dividend	(1,581,627)				(1,581,627)	
Net loss applicable to common Shareholders	\$ (8,152,951)		(6,071,983)	\$	(24,099,966)	
Net loss per common share – basic and diluted	\$ (0.22)	\$	(0.17)		n/a	
Weighted average shares – basic and diluted	36,358,890		35,362,206		n/a	
			, ,			

See accompanying notes to consolidated financial statements

## INTERNATIONAL STEM CELL CORPORATION AND SUBSIDIARY

## From Inception to December 31, 2008

	Commo	n St	ock	Pre fe rre	ed Sto	ck	Additional Paid-in	Accumulated	Total	Me	ember's
	Shares		Par	Shares		Par	Capital	<b>Deficit</b>	Equity	_I	De ficit
Balance at August 17, 2001 Members contribution										\$	100,000
Net loss for the period from inception											(140,996)
Balance at December 31, 2001											(40,996)
Members contribution Net loss for the year ended											250,000 (390,751)
Balance at December 31,											(181,747)
Members contribution Net loss for the year ended											195,000 (518,895)
Balance at December 31,											(505,642)
Members contribution											1,110,000
Net loss for the year ended										_	(854,718)
Balance at December 31, 2004 Members contribution											(250,360) 780,000
Net loss for the year ended										(	1,385,745)
Balance at December 31, 2005											(856,105)
Members contribution Effect of the reorganization											250,000
transaction BTHC transactions	20,000,000 2,209,993	\$	20,000 2,210				\$ 2,665,000 (2,210)	\$ (3,291,105)	\$ (606,105)	\$	(606,105)
Offering costs	_,,		_,				(2,778,082)		(2,778,082)		
Warrants issued for equity placement services							1,230,649		1,230,649		
Warrants issued for services Warrants issued with							222,077		222,077		
promissory note Common stock issued for							637,828		637,828		
services Issuance of common stock	1,350,000 10,436,502		1,350 10,436				1,348,650 10,371,512		1,350,000 10,381,948		
Stock-based compensation	.,, .		-,				842,374		842,374		
Net loss for the year ended December 31, 2006		_						(6,583,927)	(6,583,927)		
Balance at December 31, 2006	33,996,495		33,996				14,537,798	(9,875,032)	4,696,762		
Offering costs Warrants issued for equity							(382,124)		(382,124)		
placement services Issuance of common stock	1,370,000		1,370				169,249 1,368,630		169,249 1,370,000		
Warrants exercised	3,000		3				2,997		3,000		
Stock-based compensation Net loss for the year ended							427,496		427,496		
December 31, 2007		_						(6,071,983)	(6,071,983)		
Balance at December 31, 2007	35,369,495	\$	35,369	2.550.010	\$	2.550	\$ 16,124,046	\$ (15,947,015)			
Issuance of Preferred stock Preferred Stock Subscribed				3,550,010		3,550	4,546,450		4,550,000		
Warrants issued and beneficial conversion feature							910,963		910,963		
Issuance of Common Stock for services	3,041,180		3,041				593,358		596,399		
Stock-based compensation Deemed dividend on preferred							734,867		734,867		
stock Net loss for the year ended							1,581,627	(1,581,627)	-		
December 31, 2008  Balance at December 31,		_			_			(6,571,324)	(6,571,324)	_	
2008	38,410,675	\$	38,410	3,550,010	\$	3,550	\$ 24,491,311	\$ (24,099,966)	\$ 433,305	=	

## INTERNATIONAL STEM CELL CORPORATION AND SUBSIDIARY

	Voor Endod	Year Ended December 31,		
	2008	2007	December 31, 2008	
Cash flows from operating activities	2000	2007	2000	
Net loss	\$ (6,571,324)	\$ (6,071,983)	\$ (22,518,339)	
Adjustments to reconcile net loss to net cash used in operating activities:	, ()	. (, , ,	, ( , , , ,	
Depreciation and amortization	163,055	135,729	452,472	
Accretion of discount on notes payable	· -	-	103,304	
Accretion of discount on bridge loans	-	-	637,828	
Non-cash warrants for services	-	-	222,077	
Non-cash compensation expense	734,867	427,496	2,004,737	
Common stock issued for services	596,399	-	1,946,399	
Stock-based compensation	_	-	-	
Amortization of debt discount on convertible debt	1,013,735	-	1,013,735	
Changes in operating assets and liabilities				
Increase in inventory	(241,707)	(155,491)	(417,343)	
(Increase) decrease in prepaid assets	43,607	(119,035)	(75,428)	
Increase in other current assets	-	-	-	
(Increase) decrease in deposits	(2,543)	2,320	(22,186)	
(Increase) decrease in accounts receivable	(71,709)		(81,898)	
Increase (decrease) in accounts payable	(28,392)		465,034	
Increase (decrease) in accrued expenses	98,816	120,747	240,991	
Increase (decrease) in related party payables	(485,130)		264,648	
Net cash used in operating activities	(4,750,326)		(15,763,969)	
The cush used in operating activities	(1,700,020)	(0,220,022)	(10,700,505)	
Investing activities	(25.4.252)	(420, (04)	(002.5(0)	
Purchases of property and equipment	(254,353)		(893,568)	
Payments for patent licenses	(63,843)		(821,978)	
Net cash used in investing activities	(318,196)	(437,853)	(1,715,546)	
Financing activities				
Proceeds from members' contribution	-	-	2,685,000	
Issuance of common stock	-	1,373,000	11,754,949	
Issuance of preferred stock	4,550,000	-	4,550,000	
Issuance of convertible promissory notes	-	-	2,099,552	
Payment of promissory notes	-	-	(2,202,856	
Payment of offering costs	-	(212,875)	(1,760,308)	
Proceeds from convertible debt, advances and loan payable	1,360,000	-	1,360,000	
Payment of loan payable	(625,000)	(25,000)	(625,000)	
Net cash provided by financing activities	5,285,000	1,135,125	17,861,337	
Net increase in cash and cash equivalents	216,478	(4,531,350)	381,822	
Cash and cash equivalent at beginning of period	165,344	4,696,694	-	
Code and code and charged and of code d	Ф 201.022	¢ 165.244	Ф 201.022	
Cash and cash equivalent at end of period  Supplemental disclosures of cash flow information:	\$ 381,822	\$ 165,344	\$ 381,822	
Cash paid for interest	\$ 117,140	\$ 30,290	\$ 341,354	
Cash paid for income taxes	\$ 7,083	\$ 1,100	\$ 7,400	
Non-cash financing activities:  Discount on convertible debt from beneficial conversion feature	\$ 641,331		\$ 641,331	
Discount on convertible debt from warrants	\$ 269,632	\$ -	\$ 269,632	
Deemed Dividend	\$ 1,581,627	<u>\$ -</u>	\$ 1,581,627	
Warrants issued for placement agent services	\$ -		\$ 1,230,649	
Warrants issued with promissory notes	\$ -	\$ -	\$ 637,828	
	<u>*</u>	<del>-</del>	- 057,020	

See accompanying notes to consolidated financial statements

## International Stem Cell Corporation and Subsidiary (A Development Stage Company)

## 1. Organization and Significant Accounting Policies

## **Business Combination and Corporate Restructure**

BTHC III, Inc. ("BTHC III" or the "Company") was organized in Delaware in June 2005 as a shell company to effect the reincorporation of BTHC III, I a Texas limited liability company. On December 28, 2006, we affected a Share Exchange pursuant to which we acquired all of the stock of International Sten Cell Corporation, a California corporation ("ISC California"). After giving effect to the Share Exchange, the stockholders of ISC California owned 93.7% of our issued and outstanding shares of common stock. As a result of the Share Exchange, ISC California is now our wholly owned subsidiary, though for accounting purposes it was deemed to have been the acquirer in a "reverse merger." In the reverse merger, BTHC III is considered the legal acquirer and ISC Californ is considered the accounting acquirer. On January 29, 2007, we changed our name from BTHC III, Inc. to International Stem Cell Corporation.

Lifeline Cell Technology, LLC ("Lifeline") was formed in the State of California on August 17, 2001. Lifeline is in the business of developing and manufacturing human embryonic stem cells and reagents free from animal protein contamination. Lifeline's scientists have used a technology, called basal medium optimization to systematically eliminate animal proteins from cell culture systems. Lifeline is unique in the industry in that it has in place scientific and manufacturing staff with the experience and knowledge to set up systems and facilities to produce a source of consistent, standardized, animal protein free ES cell products suitable for FDA approval.

On July 1, 2006, Lifeline entered into an agreement among Lifeline, ISC California and the holders of membership units and warrants for the purchase c membership interests of Lifeline. Pursuant to the terms of the agreement, all the membership units in Lifeline were exchanged for 20,000,000 shares of ISC California Common Stock and for ISC California's assumption of Lifeline's obligations under the warrants. Lifeline became a wholly owned subsidiary of ISC California.

#### Going Concern

The Company continues in the development stage and as such has accumulated losses from inception and expects to incur additional losses in the near future. Thereafter, the Company will need to raise additional working capital. The timing and degree of any future capital requirements will depend on many factors. There can be no assurance that the Company will be successful in maintaining its burn rate of approximately \$450,000 per month and the timing of its capital expenditures will result in cash flow sufficient to sustain the Company's operations through 2009. Based on the above, there is substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty. 'Management's plans in regard to these matters are focused on maintaining its burn rate, the proper timing of its capital expenditures, and raising additional capital or financing in the future.

#### **Basis of Presentation**

International Stem Cell Corporation was formed in June 2006. BTHC III, Inc. was a shell company that had no operations and no net assets. For accounting purposes the acquisition has been treated as a recapitalization of BTHC III with ISC California as the accounting acquirer (reverse acquisition). The historical statements prior to June 2006 are those of Lifeline Cell Technology, the wholly owned subsidiary of ISC California.

#### **Principles of Consolidation**

The consolidated financial statements of the Company include the accounts of International Stem Cell Corporation and its subsidiary after intercompan balances and transactions have been eliminated.

#### Cash Equivalents

The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

#### **Property and Equipment**

Property and equipment are stated at cost. The provision for depreciation and amortization is computed using the straight-line method over the estimated useful lives of the assets, which generally range from three to five years. The costs of major remodeling and leasehold improvements are capitalized and depreciated over the shorter of the remaining term of the lease or the life of the asset.

## **Patent Licenses**

Patent licenses, net, consists of acquired research and development rights used in research and development, which have alternative future uses. Patent licenses are recorded at cost of \$821,978 and \$758,135 at December 31, 2008 and 2007, respectively, and are amortized on a straight-line basis over the shorter of the lives of the underlying patents or the useful life of the license. Amortization expense amounted to \$51,786 and \$50,027 for the years ended December 31, 2008 and 2007, respectively, and is included in research and development expense. Accumulated amortization as of December 31, 2008 and 2007 are \$184,772 and \$132,987. Additional information regarding patent licenses is included in Note 4.

## **Long-Lived Asset Impairment**

The Company reviews long-lived assets for impairment when events or changes in business conditions indicate that their carrying value may not be recovered. The Company considers assets to be impaired and writes them down to fair value if expected associated cash flows are less than the carrying amounts. Fair value is the present value of the associated cash flows. The Company has determined that no material long-lived assets are impaired at December 31, 2008.

#### **Product Sales**

Revenue from product sales is recognized at the time of shipment to the customer provided all other revenue recognition criteria of the Security and Exchange Commission's Staff Accounting Bulletin No. 104, Revenue Recognition, have been met. If the customer has a right of return, in accordance with the provision set forth in the Financial Accounting Standards Board's (FASB) Statement No. 48, Revenue Recognition When Right of Return Exists (SFAS 48), t Company recognizes product revenues upon shipment, provided that future returns can be reasonably estimated. In the case where returns cannot be reasonably estimated, revenue will be deferred until such estimates can be made.

#### Revenue Arrangements with Multiple Deliverables

The Company sometimes enters into revenue arrangements that contain multiple deliverables in accordance with EITF No. 00-21. This issue addresses th timing and method of revenue recognition for revenue arrangements that include the delivery of more than one product or service. In these cases, the Company recognizes revenue from each element of the arrangement as long as separate value for each element can be determined, the Company has completed its obligation to deliver or perform on that element, and collection of the resulting receivable is reasonably assured.

#### Cost of Salas

Cost of sales consists primarily of costs and expenses for salaries and benefits associated with employee efforts expended directly on the production of the Company's products and include related direct materials, overhead and occupancy costs. Certain of the agreements under which the Company has licensed technology will require the payment of royalties based on the sale of its future products. Such royalties will be recorded a component of cost of sales. Additionally, the amortization of license fees or milestone payments related to developed technologies used in the Company's products will be classified as a component of cost of sales to the extent such payments become due in the future.

#### **Research and Development Costs**

Research and development costs, which are expensed as incurred, are primarily comprised of costs and expenses for salaries and benefits associated with research and development personnel; overhead and occupancy; contract services; and amortization of technology used in research and development with alternative future uses.

## **Registration Payment Arrangements**

The Company adopted FASB Staff Position No. EITF 00-19-2, Accounting for Registration Payment Arrangements ("FSP EITF 00-19-2"), on January 2007. FSP EITF 00-19-2 requires that companies separately recognize and measure registration payment arrangements, whether issued as a separate agreement or included as a provision of a financial instrument or other agreement. Such payments include penalties for failure to affect a registration of securities

Prior to the adoption of FSP EITF 00-19-2, the Company accounted for registration rights as separate arrangements. Accordingly, the adoption of FSP EIT 00-19-2 had no impact on the consolidated financial position, operations, or cash flows of the Company.

#### **Recent Accounting Pronouncements**

In September 2006, the FASB issued Statement No. 157, Fair Value Measurements, ("SFAS 157"), which defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. SFAS 157 does not require any new fair value measurements, but provides guidance on how to measure fair value by providing a fair value hierarchy used to classify the source of the information. This statement is effective for the Company beginning January 1, 2008 and did not have an impact on the financial statements as the Company does not have financial instruments subject to the expanded disclosure requirements. In February 2008, the FASB issued FASB Staff Position FAS 157-Effective Date of FASB Statement No. 157, which provides a one year delay of the effective date of FAS 157 as it relates to nonfinancial assets and liabilities except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). The provisions of SFAS 157 relating to nonfinancial assets and liabilities will be effective for the Company on January 1, 2009. The Company assessed the potential impact that adoption or FASB 157 as it relates to nonfinancial assets and liabilities would have on its consolidated financial statements and have concluded that there will be no material impact in 2009.

In February 2007, the FASB issued Statement No. 159, The Fair Value Option for Financial Assets and Financial Liabilities ("SFAS 159"). Under t provisions of SFAS 159, companies may choose to account for eligible financial instruments, warranties and insurance contracts at fair value on a contract-by-contract basis. Changes in fair value will be recognized in earnings each reporting period. FASB 159 is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. The adoption of SFAS 159 had no impact on our consolidated financia statements as the Company did not elect the fair value option.

In December 2007, the FASB issued Statement No. 141 (revised 2007), Business Combinations. (SFAS 141(r)"). The new standard requires the acquirit entity in a business combination to recognize all (and only) the assets acquired and liabilities assumed in the transaction; establishes the acquisition-date fair value as the measurement objective for all assets acquired and liabilities assumed; and requires the acquirer to disclose to investors and other users all of the information they need to evaluate and understand the nature and financial effect of the business combination. This is effective for the Company beginning January 1, 2009 and has assessed that it will have no impact on the consolidated financial statements.

In December, 2007, the FASB issued Statement No. 160, Noncontrolling Interests in Consolidated Financial Statements—an amendment of ARB N 51("SFAS 160"). This statement establishes accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of  $\varepsilon$  subsidiary. This statement is effective prospectively, except for certain retrospective disclosure requirements, for fiscal years beginning after December 15, 2008. The Company expects that this will have no impact on its consolidated financial statements.

In December 2007, FASB ratified the consensus reached by EITF on EITF Issue 07-1, Accounting for Collaborative Arrangements, or EITF 07-1. EITF (requires collaborators to present the results of activities for which they act as the principal on a gross basis and report any payments received from (made to) other collaborators based on other applicable GAAP or, in the absence of other applicable GAAP, based on analogy to authoritative accounting literature or a reasonable, rational, and consistently applied accounting policy election. Further, EITF 07-1 clarified that the determination of whether transactions within a collaborative arrangement are part of a vendor-customer (or analogous) relationship subject to EITF 01-9, "Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)." EITF 07-1 will be effective beginning on January 1, 2008. The Company assessed the potentia impact adopting this pronouncement would have on the consolidated financial statements and have concluded that there is no material impact as of December 31, 2008.

In March 2008, the FASB issued Statement No. 161, Disclosures about Derivative Instruments and Hedging Activities ("SFAS 161"). This statement requir companies with derivative instruments to disclose information that should enable financial statement users to understand how and why a company uses derivative instruments, how derivative instruments and related hedged items are accounted for under FASB Statement No. 133, Accounting for Derivative Instruments and Hedging Activities, and how derivative instruments and related hedged items affect a company's financial position, financial performance and cash flows. SFAS 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008. The adoption of this statement is not expected to have a material effect on our financial position or results of operations.

In May 2008, the FASB issued Statement No. 162, The Hierarchy of Generally Accepted Accounting Principles ("SFAS 162"). SFAS 162 identifies consistent framework, or hierarchy, for selecting accounting principles to be used in preparing financial statements that are presented in conformity with U.S. generally accepted accounting principles for nongovernmental entities (the "Hierarchy"). The Hierarchy within SFAS 162 is consistent with that previously defined in the AICPA Statement on Auditing Standards No. 69, The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principle ("SAS 69"). SFAS 162 is effective 60 days following the United States Securities and Exchange Commission's (the "SEC") approval of the Public Compa Accounting Oversight Board amendments to AU Section 411, The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principle The adoption of SFAS 162 will not have a material effect on the consolidated financial statements because the Company has utilized the guidance within SA' 69.

In May 2008, the FASB issued Statement No. 163, Accounting for Financial Guarantee Insurance Contracts—an interpretation of FASB Statement No. ("SFAS No. 163"). SFAS 163 requires recognition of an insurance claim liability prior to an event of default when there is evidence that credit deterioration has occurred in an insured financial obligation. SFAS 163 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and al interim periods within those fiscal years. Early application is not permitted. The Company expects that the adoption of SFAS 163 will not have a material effect on the consolidated financial statements.

#### **Income Taxes**

The Company accounts for income taxes in accordance with Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes". FA No. 109 requires the Company to provide a net deferred tax asset/liability equal to the expected future tax benefit/expense of temporary reporting differences between book and tax accounting methods and any available operating loss or tax credit carryforwards. The Company has available at December 31, 2008 operating loss carryforwards of approximately \$10,500,000, which may be applied against future taxable income and will expire in various years through 2025. At December 31, 2007, the company had operating loss carryforwards of approximately \$10,500,000. The increase in carryforwards for the year ended December 31, 2008 is approximately \$6,700,000.

#### Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements. Significant estimates include patent life (remaining legal life versus remaining useful life) and transactions using the Black-Scholes option pricing model, e.g., promissory notes, warrants, and stock options. Actual results could differ from those estimates.

#### Concentration of Credit Risk

The Company maintains its cash and cash equivalents in banks located primarily in the United States. Bank accounts are guaranteed by the Federal Depos Insurance Corporation (FDIC) up to \$250,000 for the year end December 31, 2008 and \$100,000 for the year end December 31, 2007 per financial institution At December 31, 2008 and 2007, the Company's cash balances on deposit with the financial institutions in excess of the FDIC insurance limit amounted t \$131,822 and \$65,344, respectively.

## Fair Value of Financial Instruments

The Company believes that the carrying value of its cash and cash equivalents, accounts payable and accrued liabilities as of December 31, 2008 and 2007 approximate their fair values because of the short-term nature of those instruments.

#### Income (Loss) Per Common Share

The computation of net loss per common share is based on the weighted average number of shares outstanding during each period based on the exchange ratio of shares issued in the merger. The computation of diluted earnings per common share is based on the weighted average number of shares outstanding during the period plus the common stock equivalents, which would arise from the exercise of stock options and warrants outstanding using the treasury stock method and the average market price per share during the period. At year end, December 31, 2008, there were 14,147,820 warrants, 3,092,500 vested stock options and 3,075,000 unvested options outstanding. These options and warrants were not included in the diluted loss per share calculation because the effect would have been anti dilutive.

## 2. Inventory

Inventories are stated at the lower of cost or market. Lab supplies used in the research and development process are expensed as consumed. Inventory is reviewed periodically for product expiration and obsolete inventory and adjusted accordingly. The components of inventories are as follows:

	Decem	ber 31,
	2008	2007
Raw materials	\$ 50,529	\$ 33,646
Work in Process	170,714	3,270
Finished Goods	196,100	138,720
	\$ 417,343	\$ 175,636

#### 3. Property and Equipment

Property and equipment consists of the following:

	Decem	ber 31,
	2008	2007
Machinery and equipment	\$ 328,002	\$ 301,246
Computer equipment	173,641	100,375
Office equipment	61,956	59,809
Leasehold improvements	329,970	177,786
	893,569	639,216
Accumulated depreciation and amortization	(267,699)	(156,430)
	\$ 625,870	\$ 482,786

#### 4. Patent Licenses

On December 31, 2003, Lifeline entered into an *Option to License Intellectual Property* agreement with Advanced Cell Technology, Inc. ("ACT") for pater rights and paid ACT \$340,000 in option and license fees.

On February 13, 2004, Lifeline and ACT amended the Option agreement and Lifeline paid ACT additional option fees of \$22,500 for fees related to registerin ACT's patents in selected international countries.

On May 14, 2004, Lifeline amended the licensing agreement with ACT for the exclusive worldwide patent rights for the following ACT technologies: UMass IP and ACT IP, which terms are summarized below. The license fees aggregate a total of \$400,000 and are secured by separate convertible promissory notes. The notes bear no interest unless they are not repaid at maturity, in which event they shall thereafter bear interest at an annual rate equal the lesser of 10% or the maximum non-usurious rate legally allowed.

The notes could be converted at the option of ACT into the first equity financing of Lifeline with cash proceeds in excess of \$5,000,000 under the following conditions: i) Upon the consummation of the First Equity Financing; or ii) Immediately prior to the closing of any merger, sale or other consolidation of the Company or of any sale of all or substantially all assets of the Company which occurs prior to the First Equity Financing (an "Acquisition Event") Notwithstanding the above, and only in the event that a conversion resulting from such Acquisition Event would result in a security not traded on a national stock exchange (including NASDAQ and NASDAQ small cap), upon written notice to the Company not later than five days after the consummation of the Acquisition Event and notice of the Acquisition Event to the holder of the note, the holder may elect to receive payment in cash of the entire outstanding principal of this Note. On December 21, 2007 ACT elected to receive payment and was paid in cash in lieu of conversion of the notes.

	UMASS IP		 ACT IP
License fee	\$	150,000	\$ 250,000
Royalty rates		3% to 12%	3% to 10%
Minimum royalties			
At 12 months	\$	15,000	\$ 22,500
At 24 months	\$	30,000	\$ 45,000
At 36 months	\$	45,000	\$ 67,500
Annually thereafter	\$	60,000	\$ 90,000
Milestone payments			
First commercial product	\$	250,000	\$ 500,000
Sales reaching \$5,000,000	\$	500,000	\$ 1,000,000
Sales reaching \$10,000,000	\$	1,000,000	\$ 2,000,000

## 5. Related Party Payables

The Company has incurred obligations to the following related parties:

	 December 31,		
	2008		2007
Management fee	\$ 264,648	\$	749,778
Loan payable, net of debt discount of \$8,221	156,283		
Related Party Payables	\$ 420,931	\$	749,778

SeaCrest Capital and SeaCrest Partners are controlled by Mr. Adams and Mr. Aldrich, YKA Partners is controlled by Mr. Aldrich and the amounts represent advances to the Company for operating expenses. The management fee was paid to Mr. Adams and Mr. Aldrich, who acted as managing members of the Company (and prior to the Share Exchange of ISC California and Lifeline) for management of the Company since inception of Lifeline for an aggregate (\$10,000 per month plus accrued interest at 10% per annum on the unpaid balance. Effective June 1, 2006 the management fee was increased to \$20,000 per month. The management fee ceased on November 1, 2006, at which time Mr. Adams and Mr. Aldrich became employees of ISC.

During 2007, in an effort to raise additional working capital, the Company and Mr. Aldrich signed a convertible note where Mr. Aldrich would loan the company \$500,000 for working capital purposes. Subsequently, the Company decided to raise additional working capital by offering a Private Placement of preferred stock and converted this note payable into shares of preferred stock.

SeaCrest Capital and SeaCrest Partners are controlled by Mr. Adams and Mr. Aldrich, YKA Partners is controlled by Mr. Aldrich and the amounts represent advances to the Company for operating expenses.

On August 15, 2008, to provide funding for working capital and to convert short term advances to a term Note, the Company issued a Multiple Advance Convertible Note to YKA Partners in the amount of \$350,000, with warrants to purchase shares of Common Stock. The Note provides for multiple advance permits whole or partial repayments without penalty, and is intended to allow the Company to borrow and repay indebtedness as needed to meet operating costs. It is unsecured and subordinate to the Company's outstanding secured debt of \$1,000,000, carries an interest rate of 8% per annum and is due and payable on or before January 31, 2009. For the year ended December 31, 2008, YKA Partners, Ltd. advanced \$280,000 to the Company of which \$125,00 was paid during 2008.

The warrants permit the holder to purchase up to 700,000 shares of common stock from the Company at \$0.50 per share until five years from the issuance of the warrants. The warrants contain 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 exercise price of the warrant, such exercise price shall be adjusted downward to equal the price of the new securities.

In August 2008, due to the issuance of equity securities with a conversion rate that is lower than the exercise price of the warrants, the exercise price of the warrants was reduced to \$0.25. The estimated adjusted fair value of the warrants was determined using the Black-Scholes valuation model using risk-free interest rate of 3%, volatility rate of 57.9%, term of five years, and exercise price of \$0.25. Allocated fair value of the warrants of \$80,963 has been recorded as a discount to the related party loan payable and is being amortized over the term of the note using the straight-line method. For the year ended December 31, 2008, amortization of the discount was \$72,742. Unamortized discount as of December 31, 2008 was \$8,221.

## 6. Convertible Debt and Advances

#### Convertible debt

On May 14, 2008, to obtain funding for working capital, the Company entered into a Securities Purchase Agreement with an accredited investor (Gemir Capital) for the issuance (for total consideration of \$830,000 minus certain expenses of the purchaser) of an OID Senior Secured Convertible Note an warrants. The note was for \$1,000,000 (and was issued with a 15% original issue discount) and is due and payable on or before January 31, 2009. The note is convertible into shares of common stock of the company at the rate of \$0.50 per share. The note is guaranteed by the subsidiaries of the Company and secured by certain patents and patent applications. Warrants were issued which permit the holder to purchase up to 2,000,000 shares of common stock from the Company at \$0.50 per share until five years from the issuance of the warrants. The note and the warrants contain 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 note or exercise price of the warrant, such conversion and exercise prices shall be adjusted downward to equal the price of the new securities. As of December 31, 2008, \$500,000 has been paid to Gemini Capital.

In accordance with EITF 98-05, "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustment Conversion Rati Abstract", the Company allocated the \$830,000 proceeds according to the value of the convertible note and the warrants based on their relative fair values. Fair value of the warrants was determined using the Black-Scholes valuation model using risk-free interest rate of 3.22%, volatility rate of 59.5%, term of five years, and exercise price of \$0.50.

In accordance with EITF 00-27, "Application of Issue No. 98-5 to Certain Convertible Instruments", the reduction in proceeds, value of the benefici conversion feature, and value of the warrants amounting to \$170,000, \$216,117 and \$266,117, respectively, have been recorded as a discount to convertible notes and are being amortized over the term of the notes using the straight-line method. In August 2008, in accordance with the anti-dilution provisions of the debt, the conversion rate and exercise price were reduced to \$0.25. Estimated adjusted fair value of the warrants was determined using the Black-Scholes valuation model using risk-free interest rate of 3%, volatility rate of 57.9%, term of five years, and exercise price of \$0.25. The beneficial conversion feature and warrants were adjusted to \$641,331 and \$188,669, respectively. For the year ended December 31, 2008, amortization of the debt discount from reduction in proceeds, value of the beneficial conversion feature, and value of the warrants were \$160,096, \$603,389, and \$177,508, respectively. Unamortized debt discount as of December 31, 2008 are \$9,904, \$37,942 and \$11,161, respectively.

#### Advance

On June 18, 2008, the Company entered into an agreement with BioTime, Inc. ("Bio Time"), were Bio Time will pay an advance of \$250,000 to LifeLine Company ("Lifeline"), a wholly owned subsidiary of International Stem Cell Corporation, to produce, make, and distribute Joint Products. The \$250,000 advance will be paid down with the first \$250,000 of net revenues that otherwise would be allocated to Lifeline under the agreement. As of September 30, 2008 no revenues were realized from this agreement.

	December 31, 2008	December 31, 2007
Gemini Capital, net of debt discount of \$56,006	\$ 440,994	\$
Bio Time, Inc.	250,000	
	\$ 690,994	\$

## 7. Capital Stock

As of December 31, 2006, the Company was authorized to issue 200,000,000 shares of common stock, \$0.001 par value per share, and 20,000,000 shares of preferred stock, \$0.001 par value per share. As of December 31, 2006, the Company has issued and outstanding 33,996,495 shares of common stock and no shares of preferred stock.

In October 2006, the board of directors of BTHC III approved a stock split of 4.42 shares to 1. As a result of the split, the outstanding common stock of BTH III increased from 500,000 to 2,209,993 shares. Pursuant to the Share Exchange Agreement, each share of International Stem Cell Corporation common stock was exchanged for one share of BTHC III common stock. All numbers in the financial statements and notes to the financial statements have been adjusted t reflect the stock split for all periods presented.

On December 27, 2006, the Company's Board of Directors and holders of a majority of the outstanding shares approved a change in the Company's name to International Stem Cell Corporation, which change became effective in January 2007. The accompanying financial statements have been changed to reflect the change as if it had happened at the beginning of the periods presented.

On December 27, 2006, the Company's Board of Directors and holders of a majority of the outstanding shares approved an increase in the authorized capita stock of the Company to 200,000,000 shares of Common Stock, \$0.001 par value per share, and 20,000,000 shares of preferred stock, \$0.001 par value per share. The increase did not become effective until January 2007.

In November and December of 2006, ISC California issued 9,880,950 shares of common stock for cash at \$1.00 per share for net proceeds after commission and expenses of \$8,334,515, net of cash expenses totaling \$1,547,433. In addition, ISC California issued 555,552 shares of common stock for \$500,000. The holders of the shares are entitled to the following registration rights with respect to the shares: (1) the Company must file a registration statement for the resale of the shares within 60 days from final closing date of February 13, 2007; (2) the registration statement must be declared effective by the SEC no later than 150 days from the final closing date of February 13, 2007; (3) the Company must reply to SEC staff comments within 30 days of receipt; and (4) the Company must maintain the effectiveness of the registration statement for 12 months from the final closing date of February 13, 2007. The first day after failing to perform any of the above is known as the first determination date. The Company is required to deliver penalty shares equal to 1% of the original number of shares entitled to such registration rights, 30 days after the first determination date, and additional shares equal to 1% of the original number of shares entitled to such registration rights each week thereafter, not to exceed 10% except with respect to replying to SEC staff comments within 30 days, which shall not exceed 20%. The Company filed its registration statement on Form SB-2 within 60 days from the final closing and believes the effects of the above penalties are remote. The Company periodically reviews its obligations and corresponding penalties under FAS 5, Accounting for Contingencies, and FSP EITF 00-19-Paragraph B9 of FSP EITF 00-19-2, states that entities should recognize and measure the contingent obligation to transfer consideration under a registration payment arrangement using the guidance in Statement 5, instead of requiring that a liability be recognized and measured at fair value at inception.

In December 2006, the Company issued 1,350,000 shares of common stock, 350,000 of such shares in consideration for legal consulting services relating to the reverse merger and 1,000,000 shares in consideration for a contract to provide investor relations services which commenced September 1, 2006 for a period of one year.

In January and February 2007, ISC California completed the Brookstreet financing and issued 1,370,000 shares of common stock that was part of a privat placement of securities by ISC California during the second half of 2006. The net proceeds from the shares whose sale was finalized in 2007 was \$1,157,12: net of cash fees and expenses. In connection with the final settlement in 2007, the selling agent for the private placement received 274,000 additional warrants, which entitle the holder thereof to purchase the number of shares of common stock for \$1.00 each.

On January 15, 2008, to raise funds, the Company entered into a subscription agreement with accredited investors for the sale between one million and five million of Series A Preferred Stock ("Series A Preferred"). Series A Units consists of one share of Series A Preferred and two Warrants ("Series A Warrants") to purchase Common Stock for each \$1.00 invested. The Series A Preferred was convertible into shares of common stock at market price on the date of the first finance closing, but not to exceed \$1 per share and the Series A Warrants are exercisable at \$0.50 per share. The Series A Preferred has an anti-dilution clause whereby, if the Company issues \$1 million or more of equity securities or securities convertible into equity at a price below the respective exercise prices of the Series A Preferred or the Series A Warrant shall be adjusted downward to equal the price of the new securities. The Series A Preferred has priority on any sale or liquidation of the Company equal to the purchase price of the Series A 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 A Preferred a dividend of the amount of the dividend the Series A Preferred holder would receive if the shares were converted just prior to the dividend declaration. Each share of Series A Preferred has the same voting rights as the number of shares of Common Stock into which it would be convertible on the record date.

On May 12, 2008, to obtain funding for working capital, the Company entered into a series of subscription agreements with a total of 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 Seri 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 E Preferred converted (which was established based on an initial conversion price of \$0.50 per share), and the Series B Warrants are 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 contain 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. 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% pe 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 dividence 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 Preferre has the same voting rights as the number of shares of Common Stock into which it would be convertible on the record date.

On July 30, 2008, to obtain funding for working capital, the Company entered into a series of subscription agreements with a total of two accredited investors for the sale of a total of 150,000 Series B Units. The total purchase price received by the Company was \$150,000. The Series B Preferred is convertible int 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 will 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 contain 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. 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 o 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 a dividend equal to the amount of the dividend the Series B Preferred holder would receive in 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.

In accordance with EITF 98-05, "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustment Conversion Rati Abstract", the Company allocated the proceeds of the Series A and B preferred stock according to the value of the convertible preferred stock and the warrants based on their relative fair values. Fair value of the warrants for Series A and Series B were determined using the Black-Scholes valuation mode using risk-free interest rates of 3% and 3.37%, volatility rate of 65.0% and 57.9%, term of five years, and exercise price of \$0.50.

In August 2008, in accordance with the anti-dilution provisions of the securities, the conversion rates and exercise price were reduced to \$0.25. Estimated adjusted fair value of the warrants was determined using the Black-Scholes valuation model using risk-free interest rate of 3%, volatility rate of 57.9%, term of five years, and exercise price of \$0.25. For Series A and Series B, the beneficial conversion feature and warrants were adjusted to \$553,320 and \$193,321, and \$308,307 and \$110,307, respectively.

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 three million dollars (\$3,000,000) up to three million (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 has a 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 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 Units, plus liquidation premium of 6% per year. If the Company elects to declare a dividend in any year, it must first pay to the Series C Preferred a dividend in the amoun 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 th same voting rights as the number of shares of Common Stock into which it would be convertible on the record date. Subject to determination by the Investor that there has been no material adverse event, the sale of the Series C Preferred is scheduled to close on the following schedule: (I) 700,000 shares were sold August 20, 2008, and (2) 1,300,000 shares were sold September 23, 2008. The beneficial conversion feature for the Series C preferred stock is \$720,000. The beneficial conversion feature from the Series A, Series B and Series C preferred stock are recognized as deemed dividend totaling \$1,581,627.

On December 30, 2008, to obtain funding for both working capital and the eventual repayment of the outstanding obligation under the OID Senior Secure Convertible Note with a principal amount of \$1,000,000 issued in May 2008, International Stem Cell Corporation (the "Company") entered into a Series I Preferred Stock Purchase Agreement (the "Series D Agreement") with accredited investors (the "Investors") to sell for up to five million dollars (\$5,000,000 up to fifty (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 Preferred scheduled to close on the following schedule: (1) 10 shares were sold December 30, 2008; (2) subject to determination by the Investors that there has been no material adverse event with respect to the Company, 10 shares will be sold February 5, 2009; and (3) at the Investors' sole discretion 10 shares will be sold on each of March 20, 2009, June 30, 2009 and September 20, 2009. If the Investors decide not to purchase shares in any of the later three discretionary tranches then their rights to purchase shares in future tranches shall terminate. As of December 31, 2008, the Company received \$1 million from the Series D financing and issued 10 shares of Series D Preferred Stock.

On December 29, 2008 the Company issued a total of 2,121,180 restricted shares of common stock to six executive officers and directors and one employee a \$0.25 per share. The shares are subject to stock restriction provisions and vest upon the third anniversary of the date of grant, subject to accelerated vesting upon certain changes of control or terminations of service. The Company will reacquire any unvested shares for no cost upon the termination of the recipient's service to the Company. These shares were issued to the individuals in recognition of the fact that they had previously agreed to reduce (and in some cases completely eliminate) the cash compensation that would have otherwise been payable to them in 2008.

#### 8. Income Taxes

The amount of and ultimate realization of the benefits from the operating loss carryforwards for income tax purposes is dependent, in part, upon the tax laws in effect, the future earnings of the Company, and other future events, the effects of which cannot be determined at this time. Because of the uncertainty surrounding the realization of the loss carryforwards, the Company has established a valuation allowance equal to the tax effect of the loss carryforwards, R&D credits, and accruals; therefore, no net deferred tax asset has been recognized. A reconciliation of the statutory Federal income tax rate and the effective income tax rate for the years ended December 31, 2008 and 2007 follows:

	<b>December 31, 2008</b>	December 31, 2007
Statutory federal income tax rate	(35)%	(35)%
State income taxes, net of federal taxes	(6)%	(6)%
Valuation allowance	41%	41%
Effective income tax rate	0%	0%

The Company files income tax returns in the U.S. federal jurisdiction, and various states. With few exceptions, the Company is no longer subject to U.S. federal, state and local income tax examinations by tax authorities for years before 2005.

The Company adopted the provisions of FASB Interpretation No. 48,Accounting for Uncertainty in Income Taxes ("FIN 48"), on January 1, 2007, with no material impact to the financial statements.

The company may be subject to IRC code section 382 which could limit the amount of the net operating loss and tax credit carryovers that can be used it future years.

Significant components of deferred tax assets and liabilities are as follows:

	Dec	December 31, 2008		December 31, 2007	
Deferred tax assets (liabilities)					
Net operating loss carryforwards	\$	4,531,000	\$	142,147	
Accrued expenses		231,490		102,400	
Research and Development tax credit (Fed and St.)		286,469		169,500	
Deferred tax assets		5,048,959		4,616,647	
Valuation allowance		(5,048,959)		(4,616,647)	
Net deferred tax assets	\$		\$		

The components of the provisions for income taxes were as follows:

	December 2008	31,	De	December 31, 2007		
Current	\$	0	\$	0		
Deferred		0		0		
Total	\$	0	\$	0		

#### 9. Stock Options and Warrants

The Company has adopted the 2006 Equity Participation Plan (the "Plan"). The options granted under the Plan may be either qualified or non-qualified options Up to 15,000,000 options may be granted to employees, directors and consultants under the Plan. Options may be granted with different vesting terms and expire no later than 10 years from the date of grant. For the year ended December 31, 2008, the Company had 6,167,500 options outstanding with a weighted average exercise price of \$ .61 were granted under the Plan. Stockholders approved the Plan effective December 1, 2006.

## **Stock Options**

Transactions involving stock options issued to employees, directors and consultants under the Plan are summarized below. Options issued under the plan have a maximum life of 10 years. The following table summarizes the changes in options outstanding and the related exercise prices for the shares of the Company's common stock issued under the Plan as of December 31, 2008:

	Options	s Outstanding		Options Exercisable		
		Weighted Average				
		Remaining	Weighted		Weighted	
Exercise	Number	Contractual	Average	Number	Average	
Prices	Outstanding	Life (Years)	Exercise Price	Exercisable	Exercise Price	
\$1.00	3,087,500	10	\$1.00	1,596,600	\$1.00	
\$3.20	230,000	10	\$3.20	32,200	\$3.20	
\$1.45	300,000	10	\$1.45	27,000	\$1.45	
\$1.00	190,000	10	\$1.00	190,000	\$1.00	
\$0.45	1,865,000	10	\$0.45	1,865,000	\$0.45	
\$0.30	490,000	10	\$0.30	490,000	\$0.30	
\$0.22	145,000	10	\$0.22	145,000	\$0.22	

	Number of	Weighted Average
	Shares	Price Per Share
Outstanding at December 31, 2006	3,087,500	
Granted	720,000	\$ 1.89
Exercised	None	
Canceled or expired	None	
Outstanding at December 31, 2007	3,807,500	\$ 1.17
Granted	2,500,000	\$ 0.42
Exercised	None	
Canceled or expired	140,000	
Outstanding at December 31, 2008	6,167,500	\$ 0.61

The weighted-average fair value of stock options vested during the year ended December 31, 2008 and 2007 and the weighted-average significant assumptions used to determine those fair values, using a Black-Scholes option pricing model are as follows:

	2008	2007
Significant assumptions (weighted-average):		
Risk-free interest rate at grant date	2.26%	4.20%
Expected stock price volatility	63%	68%
Expected dividend payout	0%	0%
Expected option life years based on management's estimate	3.75 yrs	3.75 yrs

In December 2004, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 123 (revised 2004), Share-Base Payment (SFAS123R). This Statement requires public entities to measure the cost of equity awards to employees based on the grant-date value of the award For the year ended December 31, 2008, the company recognized \$734,867 of Stock-based compensation, of which approximately \$393,078 related to R&E expense, \$12,729 related to Sales and Marketing expense and \$329,060 related to General and administrative expense. During 2007, the Company recognized \$427,496 as stock-based compensation expenses, of which \$223,000 related to R&D expense and the remainder is included in General and Administrative expense. Unrecognized compensation cost related to stock options as of December 31, 2008 was \$1,288,685 and the weighted average life of these outstanding stock options is approximately 9.03 years.

#### Warrants

As of December 31, 2006 Brookstreet Securities Corporation ("Brookstreet") had earned 1,976,190 warrants as partial compensation for its services a placement agent for the raising of equity capital. An additional 274,000 warrants were earned by Brookstreet in the first quarter of 2007, for a total of 2,250,190 warrants related to the Company's private placement. In addition, 426,767 warrants were granted to a number of individuals as compensation for services rendered to the Company. Each Warrant entitles the holder thereof to purchase the number of shares of common stock that could be purchased by the dollar amount of the Warrant being exercised at \$1.00 in the case of the Brookstreet warrants and \$0.80 in the case of the individuals' warrants. The Company recognized the value attributable to the individuals' warrants in the amount of \$222,077 and applied it to general and administrative expense. The Company recognized the value attributable to the Brookstreet warrants in the amount of \$1,230,649. The Company recognized the Brookstreet warrants as a componen of additional paid-in capital with a corresponding reduction in additional paid-in capital to reflect this as a non-cash cost of the offering. Proceeds from the private equity placement totaled \$9,881,950 and are offset by cash offering costs of \$1,547,433 as well as the non-cash offering cost of \$1,230,649 related to the fair value of the Brookstreet warrants. The Company valued the Brookstreet warrants and the warrants issued to the individuals in accordance with EITF 00 27 using the Black-Scholes pricing model and the following assumptions: contractual terms of 5 years and 3 years, an average risk free interest rate of 4.70% and 5.13%, a dividend yield of 0% and 0%, and volatility of 71% and 63%, respectively.

Additionally, in 2006, the Company issued warrants to purchase 1,202,856 shares of common stock in connection with certain financing transactions. See note 6 for further details.

## 10. Commitments and Contingencies

## Leases

The Company leases office space under a noncancelable operating leases. Future minimum lease payments required under operating leases that have initial or remaining noncancelable lease terms in excess of one year as of January 1, 2008, are as follows:

	 Amount
2008	\$ 168,558
2009	129,359
2010	96,100
2011	64,134
2012	
Total	\$ 458,151

## 11. Subsequent Events

On February 3, 2009, the Company and Gemini Master Fund Ltd. extended the due date for the remaining \$400,000 balance of the Promissory Note previous issued to Gemini Master Fund Ltd. from its original due date of January 31, 2009 to a new due date of April 5, 2009. The company has deposited the remainin balance of the note in an interest bearing escrow account, which will be released to the lender on April 5, 2009 if the note balance is not converted to common stock of the company; and the principal amount of the note that is converted to common stock will be released to the company. The company re-paid \$500,000 of the original \$1,000,000 note prior to its due date and tendered the remaining balance prior to entering into this extension. Gemini Master Fund Ltd. converted \$400,000 of the note into common stock, leaving a balance of \$100,000. Gemini Master Fund Ltd. has released all liens against assets of the company.

On March 17, 2009, the Company received the third \$1 million tranche of an anticipated private equity financing of up to \$5 million to be funded over the next several months. To date, the Company has received a total of \$3 million. The total amount of the financing will allow the Company to move forward with the construction of its new cGMP cell culture facility and to continue its therapeutic research, including ongoing pre-clinical trials. The money will also be allocated to fund equipment, product development and marketing requirements to increase revenues in the Company's subsidiary, Lifeline Cell Technology, which makes and sells specialty cells and growth media.

## 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	\$ 414
Transfer agent's and trustee's fees and expenses	1,000
Printing and engraving expenses	5,000
Legal fees and expenses	60,000
Accounting fees and expenses	20,000
Miscellaneous expenses	3,586
Total	\$ 90,000

#### 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 fulles 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 its 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) Acquisition of International Stem Cell Corporation.

In December 2006, we issued 33,156,502 shares of our common stock to the stockholders of International Stem Cell Corporation, a California corporation ("ISC California"), in exchange for the all of the outstanding shares of ISC California. We believe that such issuance was exempt from registratio by reason of Section 4(2) of the Securities Act as a non-public sale of securities due to the absence of a general solicitation, the general nature and circumstances of the sale, including the qualifications and sophistication of the purchasers, the lack of any public solicitation, the investment intent of the purchasers, and the restrictions on resales of the securities acquired.

## (b) 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.

May 2008, we issued a \$1 million convertible note and a warrant to purchase 2,000,000 shares of common stock to an accredited investor. From February through May 2009, we issued a total of 5,025,531 shares of common stock upon conversion of a portion of the note and conversion of the warrant. The issuances upon conversion of these securities were exempt under Section 3(a)(9) of the Securities Act.

From April 2009 through June 2009, we issued a total of 1,170,329 shares of common stock to five accredited investors.

From January 1, 2008 to January 14, 2008, the Company issued to certain accredited investors 1,000,000 shares of Series A Preferred Stock, for an aggregat of \$1,000,000. In addition there were warrants issued for 2,000,000 shares of common stock at an exercise price of \$0.25.

From February 15, 2008 to March 24, 2008, the Company issued to certain accredited investors 550,000 shares of Series B Preferred Stock, for an aggregat of \$550,000. In addition there were warrants issued for 1,100,000 shares of common stock at an exercise price of \$0.25.

From August 25, 2008 to September 19, 2008, the Company issued to certain accredited investors 2,000,000 shares of Series C Preferred Stock, for a aggregate of \$2,000,000.

From December 29, 2008 to June 30, 2009, the Company issued to certain accredited investors 40 shares of Series D Preferred Stock, for an aggregate c \$4,000,000.

On April 17, 2007, as consideration for its services as consultant, the Company issued 1,000,000 shares of the Company's common stock to Capital Group Communications, Inc. for services rendered from September 1, 2006 to August 31, 2007.

On August 6, 2007, as consideration for its services as consultant, the Company issued 350,000 shares of the Company's common stock to Corporate Capita Advisors, Inc. 315,000 shares and to Richardson and Patel, LLP, 35,000 shares for services rendered in connection with the reverse merger.

On March 24, 2008, as consideration for its services as consultant, the Company issued 20,000 shares of the Company's common stock to Ibis Consulting Group LLC. for services rendered.

On May 13, 2008, as consideration for its services as consultant, the Company issued 250,000 shares of the Company's common stock to Media Capita Partners.

On July 2, 2008, as consideration for its services as consultant, the Company issued 100,000 shares of the Company's common stock to InCap Group, Inc.

In December 2008, we issued 2,121,800 shares to seven persons who were directors, executive officers or members of senior management in recognition of the fact that these individuals had previously agreed to waive some or all of the cash compensation otherwise payable to them.

On February 16, 2009, as consideration for its services as consultant, the Company issued 20,000 shares of the Company's common stock to PSEO - Pai Saunders.

On July 7, 2009, as part of the Series E Preferred Stock Purchase Agreement, the Company issued 290,689 shares of common stock and a warrant to Optimi Capital Partners.

## (c) Issuance of stock on conversion of preferred stock.

During 2009, the holders of a total of 350,000 shares of Series A Preferred Stock and Series B Preferred Stock converted their shares to a total of 1,400,00 shares of common stock. These issuances were exempt pursuant to Section 3(a)(9) of the Securities Act.

## (d) Issuance of stock for assets.

In July 2009, we issued a total of 400,000 shares of common stock to 3 accredited investors in return for patent and other intellectual property rights. This transaction was exempt from registration under Section 4(2) of the Securities Act as a transaction not involving a public offering.

## (e) Issuances upon conversion or exercise of warrants.

From April 2009 through July 2009, we issued a total of 733,577 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.

## 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 t	he prospectus	any facts or	r events	arising aft	er the effective	e date of	the re	gistration sta	atement	(or the	most recent
post-effective	amendment	thereof) which,	individually or	in the agg	regate,	represent a	fundamental	change	in the	information	set forth	n 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.

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 or under the
Securities Act shall	l be deemed to be part of this registration statement as of the time it was declared effective.

## **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 Oceanside, California on July 30, 2009.

## INTERNATIONAL STEM CELL CORPORATION

By: /s/ Kenneth C. Aldrich

Kenneth C. Aldrich Chief Executive Officer

## **POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Kennet Aldrich and Ray Wood, as his or her attorney-in-fact, each with full power of substitution, for him or her in any and all capacities, to sign any amendments to this Registration Statement on Form S-1 and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that the said attorney-in-fact, or her substitute or substitutes, may do or cause to be done by virtue hereof.

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:	
/s/ Kenneth C. Aldrich	Chairman of the Board and Chief Executive	July 30, 2009	
Kenneth C. Aldrich	Officer (principal executive officer)		
/s/ Jeffrey D. Janus	Senior Vice President, Operations and	July 24, 2009	
Jeffrey D. Janus	Director		
/s/ Ray Wood	Chief Financial Officer (Principal Financial	July 30, 2009	
Ray Wood	Officer and Principal Accounting Officer)		
/s/ Donald A. Wright	Director	July 30, 2009	
Donald A. Wright			
Paul V. Maier	Director		
/s/ Andrey Semechkin	Executive Vice President and Director	July 24, 2009	
Andrey Semechkin			
/s/ Ruslan Semechkine	Director	July 24, 2009	
Ruslan Semechkine			
	II-4		

## EXHIBIT INDEX

Exhibit	
Number	Description
	Certificate of Incorporation (incorporated by reference to Exhibit 3.4 of the issuer's Form 10-SB filed on April 4, 2006).
3.2	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Issuer's Preliminary Informatio Statement on Form 14C filed on December 29, 2006).
3.3	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 of the Issuer's Preliminary Information Statement on Form 14C filed on December 29, 2006).
4.1	Form of Specimen Common Stock Certificate.
4.2	Form of Lifeline Warrant (incorporated by reference to Exhibit 4.1 of the Registrant's Form 8-K filed on December 29, 2006).
4.3	Form of Lifeline Warrant held by ISC Bridge lenders (incorporated by reference to Exhibit 4.2 of the Registrant's Form 8-K filed o December 29, 2006).
4.4	Placement Agents Warrant (incorporated by reference to Exhibit 4.3 of the Registrant's Form 8-K filed on December 29, 2006).
4.5	Certification of Designation of Series A Preferred Stock (incorporated by reference to Exhibit 4.1 of the Issuer's Form 8-K filed on January 17, 2008).
4.6	Certification of Designation of Series B Preferred Stock (incorporated by reference to Exhibit 4.1 of the Issuer's Form 8-K filed on May 1 2008).
4.7	Certification of Designation of Series C Preferred Stock (incorporated by reference to Exhibit 10.2 of the Issuer's Form 8-K filed on Augu 21, 2008).
4.8	Certification of Designation of Series D Preferred Stock (incorporated by reference to Exhibit 10.2 of the Issuer's Form 8-K filed on January 5, 2009).
4.9	Certification of Designation of Series E Preferred Stock (incorporated by reference to Exhibit 10.2 of the Issuer's Form 8-K filed on July 2009).
4.10	Warrant Certificate for warrants in connection with Series A Preferred Stock (incorporated by reference to Exhibit 10.2 of the Issuers Form 8 K filed on January 17, 2008).
4.11	Warrant Certificate for warrants in connection with Series B Preferred Stock (incorporated by reference to Exhibit 10.2 of the Issuers Form 8 K filed on May 12, 2008).
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 referenc to Exhibit 10.1 of the Registrant's Form 8-K filed on December 29, 2006).

10.2	to Exhibit 10.2 of the Registrant's Form 8-K filed on December 29, 2006).
10.3	Employment Agreement, dated March 27, 2006, by and between International Stem Cell and Jeff Krstich (incorporated by reference t Exhibit 10.3 of the Registrant's Form 8-K filed on December 29, 2006).
10.4	Employment Agreement, dated October 31, 2006, by and between International Stem Cell and Jeffrey Janus (incorporated by reference t Exhibit 10.4 of the Registrant's Form 8-K filed on December 29, 2006).
10.5	Advisory Agreement, dated as of October 18, 2006, by and between International Stem Cell and Halter Financial Group, L.P. (incorporated by reference to Exhibit 10.5 of the Registrant's Form 8-K filed on December 29, 2006).
10.6	Consulting Agreement, effective as of September 1, 2006, by and between International Stem Cell and Capital Group Communications, Inc (incorporated by reference to Exhibit 10.6 of the Registrant's Form 8-K filed on December 29, 2006).
10.7	Lifeline/ASC Final Settlement Agreement, effective as of June 30, 2006, by and between each of the American Stem Cell Corporation Partic (which include American Stem Cell Corporation Kenneth Swaisland, Ken Sorensen, Milton Datsopoulos, Michael McClain, Array Capit Catalytix LDC, Catalytix Life Sciences Hedge, Avion Holdings, Inc., jointly and severally) and the Lifeline Parties (which include Lifeline Corporation Catalytix LDC, Catalytix Life Sciences Hedge, Avion Holdings, Inc., jointly and severally) and the Lifeline Parties (which include Lifeline Corporation Particle Corporation Particle Catalytix LDC, Catalytix Life Sciences Hedge, Avion Holdings, Inc., jointly and severally) and the Lifeline Parties (which include Lifeline Corporation Particle Pa
10.8	First Amendment to Exclusive License Agreement (ACT IP), dated as of August 1, 2005, by and between Advanced Cell, Inc. and Lifelir (incorporated by reference to Exhibit 10.9 of the Registrant's Form 8-K filed on December 29, 2006).
10.9	First Amendment to Exclusive License Agreement (UMass IP) dated as of August 1, 2005, by and between Advanced Cell, Inc. and Lifelir (incorporated by reference to Exhibit 10.10 of the Registrant's Form 8-K filed on December 29, 2006).
10.10	First Amendment to Exclusive License Agreement (Infigen IP) dated as of August 1, 2005, by and between Advanced Cell, Inc. and Lifelin (incorporated by reference to Exhibit 10.11 of the Registrant's Form 8-K filed on December 29, 2006).
10.11	Exclusive License Agreement (Infigen IP), dated as of May 14, 2004, by and between Advanced Cell Technology, Inc and PacGen Cellc LLC (predecessor company of Lifeline) (incorporated by reference to Exhibit 10.12 of the Registrant's Form 8-K filed on December 29, 2006).
10.12	Exclusive License Agreement (ACT IP), dated as of May 14, 2004, by and between Advanced Cell Technology, Inc. and PacGen Cellco, LL (predecessor company of Lifeline) (incorporated by reference to Exhibit 10.13 of the Registrant's Form 8-K filed on December 29, 2006).
10.13	Exclusive License Agreement (UMass IP), dated as of May 14, 2004, by and between Advanced Cell Technology, Inc. and PacGen Cellc LLC (predecessor company of Lifeline) (incorporated by reference to Exhibit 10.14 of the Registrant's Form 8-K filed on December 29, 2006).
10.14	International Stem Cell Corporation 2006 Equity Participation Plan (incorporated by reference to Exhibit 10.15 of the Registrant's Form 8-1 filed on December 29, 2006).
10.15	Securities Purchase Agreement of May 14, 2008 for sale of OID Senior Secured Convertible Note and Warrants (incorporated by reference to Exhibit 10.1 of the Issuers Form 8-K filed on May 16, 2008).

10.16	OID Senior Secured Convertible note (incorporated by reference to Exhibit 10.2 of the Issuers Form 8-K filed on May 16, 2008).
10.17	Common Stock Purchase Warrant issued with OID Senior Convertible Note (incorporated by reference to Exhibit 10.3 of the Issuers Form K filed on May 16, 2008).
10.18	Multiple Advance Convertible Note (incorporated by reference to Exhibit 10.1 of the Issuers Form 8-K filed on August 18, 2008).
10.19	Common Stock Purchase Warrant issued with Multiple Advance Convertible Note (incorporated by reference to Exhibit 10.2 of the Issuer Form 8-K filed on August 18, 2008).
10.20	Employment Agreement with Andrey Semechkin (incorporated by reference to Exhibit 10.4 of the Issuers Form 8-K filed on January 5, 2009).
10.21	Employment Agreement with Ruslan Semechkine (incorporated by reference to Exhibit 10.5 of the Issuers Form 8-K filed on January 5, 2009).
10.22	Preferred Stock Purchase Agreement, dated June 30, 2009 (incorporated by reference to Exhibit 10.1 of the Issuer's Form 8-K filed on July 2009).
21.1	Subsidiaries of the Registrant (incorporated by reference to Exhibit 21.1 of the Registrant's Form 8-K filed on December 29, 2006).
23.1	Consent of Vasquez & Company LLP
23.2	Consent of DLA Piper LLP (US) (included in Exhibit 5.1)
24.1*	Power of Attorney (included on the signature page to the registration statement)

\*Filed herewith

**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

July 29, 2009

International Stem Cell Corporation 2595 Jason Court Oceanside, CA 92056

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the registration under the Securities Act of 1933, as amended, by International Stem Cell Corporation, a Delaware corporation (the **Company**"), of up to an aggregate of 8,139,535 shares of common stock, par value \$0.001 per share, consisting of (i) 290,698 shares of common stock (the "Shares") that have been issued in connection with the Preferred Stock Purchase Agreemen dated as of June 30, 2009, (the "Agreement"); and (ii) up to 7,848,837 shares of common stock (the "Warrant Shares") issuable upon exercise of a warrant issued pursuant to the Agreement.

In connection with this opinion, we have examined and relied upon the Registration Statement and the related Prospectus, the Company's Certificate o Incorporation, as amended, and Amended and Restated Bylaws, as currently in effect, and the originals or copies certified to our satisfaction of such other documents, records, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below.

In rendering this opinion, we have assumed the genuineness and authenticity of all signatures on original documents; the genuineness and authenticity of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as copies; the accuracy, completeness and authenticity of certificates of public officials; and the due authorization, execution and delivery of all documents where due authorization, execution and delivery are prerequisites to the effectiveness of such documents.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that: (i) the Shares have been validly issued and are fully paid and nonassessable and (ii) the Warrant Shares, when issued in accordance with the terms of the applicable warrant, will be validly issued, fully paid and nonassessable.

In addition to the qualifications set forth above, the foregoing opinion is further qualified as follows:

(a) The foregoing opinion is rendered as of the date hereof. We assume no obligation to update such opinion to reflect any facts or circumstances that may hereafter come to our attention or changes in the law which may hereafter occur.

International Stem Cell Corporation July 29, 2009 Page Two

- (b) We are members of the Bar of the State of California and we do not express any opinion herein concerning any law other than the Delaware General Corporation Law, the substantive law of the State of California and the substantive federal securities laws of the United States c America. We express no opinion as to the laws of any other state or jurisdiction of the United States or of any foreign jurisdiction. We have made no inquiry into the laws and regulations or as to laws relating to choice of law or conflicts of law principles. The opinion expressed herein is subject to the effect of judicial decisions which may permit the introduction of parol evidence to modify the terms or the interpretation of agreements.
  - (c) We express no opinion as to compliance with the securities (or "blue sky") laws of any jurisdiction.
  - (d) This opinion is limited to the matters set forth herein, and no other opinion should be inferred beyond the matters expressly stated.

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus. In giving our consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ DLA Piper LLP (US)

DLA Piper LLP (US)

## CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

International Stem Cell Corporation Oceanside, California

We hereby consent to the use in the Prospectus constituting a part of this Registration Statement of our report dated March 30, 2009 relating to the consolidated financial statements of International Stem Cell Corporation which appears on Page F-2 in the Company's Annual Report on Form 10-K for the year ended December 31, 2008 which is contained in that Prospectus. Our report includes an explanatory paragraph regarding the Company's ability to continue as a going concern.

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

/s/ Vasquez & Company LLP Los Angeles, California July 30, 2009