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

FORM 10-K

☑ **ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2008

☐ **TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____
Commission File No. 0-51891

INTERNATIONAL STEM CELL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	20-4494098
(State of other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
2595 Jason Court Oceanside, CA	92056
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number: (760) 940-6383

Securities registered pursuant to section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
None	None

Securities registered pursuant to section 12(g) of the Act:

Common Stock, $0.001 par value per share
(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☐ No ☑

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes ☐ No ☑

Note – Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Exchange Act from their obligation under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☑ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 204 of Regulations S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Park III of their Form 10-K or any amendment to this Form 10-K.

☑

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.

Large accelerated filer ☐ Accelerated filer ☐

Non-accelerated filer ☐ (Do not check if a smaller reporting company) Smaller reporting company ☑

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☑

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date.

Number of shares outstanding of each of the issuer's classes of common equity, as of March 16, 2008:
Common Stock: 38,410,675-

DOCUMENTS INCORPORATED BY REFERENCE

Information from the registrant's definitive Proxy Statement for its Annual meeting of Stockholders in 2009 is incorporated by reference into Part III of this Form 10-K.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements. For example, statements regarding our financial position, business strategy and othe plans and objectives for future operations, and assumptions and predictions about future product demand, marketing, expenses and sales are all forward-looking statements. These statements may be found in the items of this Annual Report entitled "Description of Business" and "Management's Discussion and Analysi or Results of Operations," as well as in this Annual Report generally. These statements are generally accompanied by words such as "intend," "anticipate," "believe," "estimate," "potential(ly)," "continue," "forecast," "predict," "plan," "may," "will," "could," "would," "should," "expect," or the negative of such terms or other comparable terminology.

We have based these forward-looking statements on our current expectations and projections about future events. We believe that the assumptions and expectations reflected in such forward-looking statements are reasonable, based on information available to us on the date hereof, but we cannot assure you that these assumptions and expectations will prove to have been correct or that we will take any action that we may presently be planning. However, these forward-looking statements are inherently subject to known and unknown risks and uncertainties. Actual results or experience may differ materially from those expected or anticipated in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, regulatory policies, competition from other similar businesses, market and general economic factors, and the other risks discussed in Item 14 of this Annual Report. This discussion should be read in conjunction with the consolidated financial statements and notes thereto included in this Annual Report.

We have identified some of the important factors that could cause future events to differ from our current expectations and they are described in this Annual Report in the section entitled "Risk Factors" which you should review carefully. Please consider our forward-looking statements in light of those risks as you read this Annual Report. If one or more of these or other risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, actual results may vary materially from what we project. We do not undertake, and specifically decline any obligation, to update any forward-looking statements or to publicly announce the results of any revisions to any statements to reflect new information or future events or developments.

PART I

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 by-products 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.

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 reorganizatior required the consummation of a merger or acquisition prior to June 20, 2007. Until the Share Exchange Agreement described below, BTHC III, Inc. conducte 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 effe 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 corporatior ("ISC California"), in exchange for all outstanding stock of ISC California. As a result of this transaction, ISC California became wholly owned by us. Tl 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. All of our current operations are conducted b Lifeline. Our principal executive offices are located at 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 human embryonic stem cell lines approved by President George W. Bush were all produced using methods that exposed them to animal protein and anima cells. We believe that this will likely make them unsuitable for human therapeutic purposes and restrict their utility even for research into human disease. We have developed technologies to create human embryonic stem cell lines that will be free of non-human materials.

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 involv known cancer 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, ha 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 Scientific Officer, 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:

- Fibrolife™ 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. VascuLife™ VEGF-Microvascular
    2. VascuLife™ EnGS.-Microvasular
- Human endothelial cells. (Endothelial cells form blood vessels).
- DermaLife™ 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. NeuralLife™ ags NSC expansion medium kit

    2. NeuralLife™ 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 system, pursuant to the terms of License Agreements with Advanced Cell Technology, Inc. ("Advanced Cell Technology"), we will manufacture and sell embryonic stem cell products developed by Advanced Cell Technology. The first products we expect to release are (i) medium optimized for the growth of human embryonic stem cells, and (ii) pre-coated tissue culture plates for the serum-free and feeder-layer-free culture of embryonic stem cells. 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 2007. 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:

- Stem cells 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 cells 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 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.

We made a discovery during the derivation of retinal cells from stem cells 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 IP. Further research will be done in 2008 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 th 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 differentiatio procedures to derive human retinal cells from parthenogenetic stem cells have been worked out. We are working toward the manufacture of these cells for therapeutic use.

According to a 2004 study on *Blindness and Blinding Diseases in the U.S.*published by the University of Washington, approximately 13,000,000 Americans have signs of AMD, over 10,000,000 suffer visual loss and over 200,000 are legally blind from the disease. The occurrence of AMD increases with a patient's age. According to the same study, approximately 6,300,000 people are projected to develop AMD in 2030, compared to 1,700,000 in 1995.

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 — According to the Eye Bank Association of America's 2006 Eye Banking Statistical Report, there are more than 34,000 corneal transplants performed annually in the US. An additional 150,000 transplants are performed in the rest of the world. There are eight million corneal blind patients in developing countries who would benefit from corneal replacement were it not for the lack of established eye banking operations and religious/ethical issues. Concern over donor-to-recipient disease transmission and the increasing use of LASIK treatment has reduced the availability of donated corneas an increased costs. Demand for corneal tissue is growing based on advances in corneal transplant techniques. Even considering the fact that fees would be less in developing countries, the existing corneal transplant market is billions of dollars in size and is growing.

Diabetes — Another area of focus is on diabetes. According to the American Diabetes Association, approximately 20,800,000 people, or 7% of the U.S population, have some form of diabetes, and the National Institutes of Health estimates that there are as many as 2,500,000 people suffering from Type 1 Diabetes (Insulin Dependent Diabetes Mellitus). Normally, certain cells in the pancreas, called the islet ß cells, produce insulin which promotes the uptake o 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 — According to the American Liver Foundation, chronic liver disease (including hepatitis C) is the third most common cause of death due to chronic diseases in persons 35 to 64 years of age. In the United States diseases such as cirrhosis and hepatitis were ranked as the 12th leading cause of death in 2000. 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. According to the United Network for Organ Sharing, there are currently more than 17,000 persons on the wait list for a liver transplant.

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) industrial organizations such as pharmaceutical companies and consumer product companies.

Management believes that the combined academic and government market comprises approximately 40% of the total market and that the industrial segment comprises approximately 60% of the remaining market.
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%.

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 using 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.

We have several internally-generated patents pending. 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.

The Company has protected its research products and branding through both patents and trademarks. Lifeline has patents pending on its unique packaging for research products. The Company has registered trademarks on its company name, logo and various product names to protect its 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 be 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 Cell 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 2009 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 Obstetrics, Gynecology and Perinatology of th Russian Academy of Medical Sciences 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 will be working with our proprietary stem cells on the further development of retinal pigment epithelial cells as well as towards 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.

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, Genzyme 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 an 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 its 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 trials are submitted as a Biologics License Application ("BLA"). In responding to a NDA or BLA, the FDA may grant marketing approval, request additional 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 processes 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 all 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 four executive officers, we utilize the services of 25 full-time and 5 part-time staff members.

Item 1A. RISK FACTORS.

Risks Related to Our Business

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

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

We have a history of operating losses 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 or 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 a number of our competitors are located in those countries. The laws protecting intellectual property in some of those countries may not provide adequate protection to prevent our competitors from misappropriating our intellectual property.

Our 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, 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 call technology or nuclear transfer technology, or that such efforts might not be extended to include our parthenogenic technology. Further, there can be no assurance that legislative or administrative restrictions directly or indirectly delaying, limiting or preventing the use of hES technology, nuclear transfer technology, the use of human embryonic material, or the sale, manufacture or use of products or services derived from nuclear transfer technology or other hES technology will not be adopted in the future or extend to include our parthenogenetic processes.

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

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

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

- design and conduct advanced clinical trials in the event that we reach clinical trials;
- fund research and development activities with us;
- pay us fees upon the achievement of milestones; and
- market with us any commercial products that result from our collaborations.

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

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

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

These research facilities may have commitments to other commercial and non-commercial entities. We have limited control over the operations of these laboratories and can expect only limited amounts of time to be dedicated to our research goals.

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

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

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

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

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

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

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

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

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

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

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

Because of the specialized nature of our business, we are highly dependent on our ability to identify, hire, train and retain highly qualified scientific and technical personnel for the research and development activities we conduct or sponsor. The loss of one or more key executive officers, or scientific officers, particularly Mr. Janus, Mr. Aldrich, Mr. Adams or Dr. Revazova, would be significantly detrimental to us. In addition, recruiting and retaining qualified scientific personnel to perform research and development work is critical to our success. Our anticipated growth and expansion into areas and activities requiring additional expertise, such as clinical testing, regulatory compliance, manufacturing and marketing, will require the addition of new management personnel and the development of additional expertise by existing management personnel. 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 the products or methodologies we are developing;
- reports by securities analysts;
- activities of various interest groups or organizations;
- media coverage; and
- status of the investment markets.

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

The application of the "penny stock" rules to our common stock could limit the trading and liquidity of the 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 may be characterized by significant price volatility when compared to seasoned issuers, and we expect that our stock price could continue to be more volatile than a seasoned issuer for the indefinite future. The potential volatility in our share price is attributable to a number of factors. First, there has been limited trading in our common stock. As a consequence of this lack of liquidity, any future trading of shares by our stockholders may disproportionately influence the price of those shares in either direction. Second, we are a speculative or "risky" investment due to our limited operating history and lack of profits to date, and uncertainty of future market acceptance for our potential products. As a consequence of this enhanced risk, more risk averse investors may, under the fear of losing all or most of their investment in the event of negative news or lack of progress, be more inclined to sell their shares on the market more quickly and at greater discounts than would be the case with the stock of a seasoned issuer. Many of these factors will be beyond our control and may decrease the market price of our common stock, regardless of our operating performance. We cannot make any predictions or projections as to what the prevailing market price for our common stock will be at any time or as to what effect that the sale of shares or the availability of shares for sale at any time will have on the prevailing market price.
In addition, the market price of our common stock could be subject to wide fluctuations in response to:

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

Shares eligible for future sale may adversely affect the market.

From time to time, certain of our stockholders may be eligible to sell all or some of their shares of common stock by means of ordinary brokerage transactions in the open market pursuant to Rule 144 promulgated under the Securities Act of 1933, as amended, subject to certain limitations. In general, pursuant to Rule 144, a stockholder (or stockholders whose shares are aggregated) who is not an affiliate of our company and who has satisfied a six month holding period may, as long as we are current in our required filings with the SEC, sell securities without further limitation. Rule 144 also permits, under certain circumstances the sale of securities, without any limitations, by a non-affiliate of our company who has satisfied a one-year holding period. Affiliates of our company who have satisfied a six month holding period may sell securities subject to 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 four 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, certify the effectiveness of those controls and secure an attestation of our assessment by our independent registered public accountants. 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 stock and we do not plan to pay cash dividends on our stock in the foreseeable future.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None

ITEM 2. 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. Our current base rent is $6,983 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 March 2009, with a three-year renewal option, which at this time the Company plans to exercise that option. Our current base rent is $5,142 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. Our base rent is $1,200 per month. These facilities are close to our laboratory in Walkersville.

LEGAL PROCEEDINGS.

None.

SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

None.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

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 regulate 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 March 16, 2009 the last reported sales price of our common stock as reported by the OTC Bulletin Board was $ .50 per share. As of March 16, 2009, w had 38,410,675shares of common stock outstanding, and approximately 779 holders of record of our common stock, and we had 3,450,030 shares of preferred stock outstanding, and approximately 13 holders of record of our preferred stock, with 100,000 shares of preferred stock being convertible into 400,00 shares of common stock.

Our common stock started trading on OTC Bulletin Board in December 2006, as we went public through a reverse merger at that time. The quotations reflec 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 and 2008, are reported below:

	Market Price	
	High	**Low**
Fiscal Year 2008		
First Quarter	$ 1.02	$ 0.40
Second Quarter	$ 0.55	$ 0.32
Third Quarter	$ 0.41	$ 0.15
Fourth Quarter	$ 0.45	$ 0.14
Fiscal Year 2007		
First Quarter	$ 3.50	$ 2.50
Second Quarter	$ 3.20	$ 2.54
Third Quarter	$ 3.05	$ 0.86
Fourth Quarter	$ 1.47	$ 0.54

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.

Recent Sales of Unregistered Securities

During the fiscal year ended December 31, 2008 we did not issue any securities that were not registered under the Securities Act of 1933, except as disclosed in previous filings with the Commission.

The following table provides the information indicated as of December 31, 2008 with respect to compensation plans (including individual compensation arrangements) under which equity securities of the registrant are authorized for issuance, aggregated (i) for all compensation plans previously approved by security holders, and (ii) all compensation plans not previously approved by security holders.

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders:			
2006 Equity Participation Plan	6,167,500	$ 0.61	8,832,500
Equity compensation plans not approved by security holders	0	$ 0.00	
Total	6,167,500	$ 0.61	8,832,500

ITEM 6.SELECTED FINANCIAL DATA

Not required.

ITEM 7.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 Annual Report on Form 10-K. 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 accountin 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

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 end 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 previously described 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 $4,750,826 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 D 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.

Year Ended December 31, 2007 Compared to Year Ended December 31, 2006

Revenues

We recognized $38,764 of product revenue during 2007, compared to $2,828 for 2006. This increase is due to increased marketing dollars spent in 2007 on advertising and increased efforts by our sales and marketing team as well as our marketing consultants.

General and Administrative Expenses

General and administrative expenses for the year ended December 31, 2007 were $3,089,963 a decrease of $641,378, or 17%, compared to $3,731,341 for the same period in 2006. The decrease primarily relates to reduced expenses of the private placement of securities in 2006. During 2007 our general and administrative expenses related to the development of a support staff, which included payroll related expenses of $1,300,296, financial consultants to assist with various Securities and Exchange Commission filings of $64,250, public relations of $174,172, audit and accounting $266,910, and general corporate expenses of $952,606. In addition, we incurred expenses related to a private placement of securities in 2006, which certain closings occurred in early 2007. In addition we filed a SB-2 and incurred onetime expenses for legal, accounting and consulting fees during the year until the filing was effective on July 12, 2007.

Research and Development

Research and development expenses were $2,486,417 for the year ended December 31, 2007, an increase of $627,959, or 34%, compared to $1,858,458 for the same period in 2006. Research and development expenses increased from the prior year primarily due to increased salaries as a result of the addition of the lab in Oceanside, California, resulting in additional scientific staffing, as well as the addition of scientific staff at our Walkersville Maryland facilities. R&D salary expense totaled $860,951. Also, contract service expenditures continued to increase due to increased activity and collaborations with our lab located in Russia, as well as, contract service expenditures in the form of consulting fees incurred for scientific projects. These expenses totaled $472,698. Expenditures for lab supplies and lab facility rental increased primarily as a result of the addition of the Oceanside facility. Lab supplies and lab facility expenses totaled $526,563. Depreciation of lab equipment and amortization of licensed technology both increased as we continue to expand our facilities both in Oceanside, California and Walkersville Maryland, as well as, additions to our patent portfolio.

R&D operations consisted primarily of the development of additional stem cell lines through parthenogenesis, the development of new techniques of parthenogenesis, 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 previously described 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, 2007 were $495,009, an increase of $397,085, compared to $97,924 for the same period in 2006. During 2007, we continued to invest in developing marketing and sales strategies, as well as, establishing an infrastructure to support our sales team and our sales goals. Our primary marketing expenses continued to be for the development for our web site, creation of sales literature, and development and placement of print ads for trade journals. In previous years these functions did not exist nor needed improvement to support our current sales and marketing needs. Sales and marketing expense primarily consisted of $181,489 in sales and marketing salaries, $260,365 in marketing consulting and related expenses and $57,130 in trade show expenses.

Liquidity and Capital Resources

At December 31, 2007, our cash and cash equivalents totaled $165,344. Overall, we had a decrease in cash of $4,531,350 for the twelve month period ended December 31, 2007, resulting from $5,228,622 cash used in operating activities and $437,853 used in investment activities, offset by $1,160,125 of cash provided by our financing activities. The funds generated from financing activities during 2007 were used mainly to support our operating losses.

Operating Cash Flows

Net cash used in operating activities of $5,228,622 for the year ended December 31, 2007 was primarily attributable to a net loss of $6,071,983. The adjustments to reconcile the net loss to net cash used in operating activities include depreciation and amortization expense of $135,729, non-cash stock option expense of $427,496, an increase in inventory of $155,491, an increase in prepaid assets of $119,035, an increase in other assets of $9,575, a decrease in deposits of $2,320, an increase in accounts payable of $171,837, an increase in accrued expenses of $120,747, and an increase of $269,333 of related party payables attributable to loan by our Chairman Mr. Kenneth Aldrich.

Investing Cash Flows

Net cash used in investing activities of $437,853 for the year ended December 31, 2007 was primarily attributable to purchases of property and equipment of $430,694 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 $7,159 during 2007.

Financing Cash Flows

Net cash provided by financing activities of $1,135,125 for the year ended December 31, 2007 was primarily attributable to the delayed closings during such period for the sale of 1,373,000 shares of common stock that were part of a private placement of securities during the second half of 2006. Such shares were sold for cash at $1.00 per share, we incurred $212,875 in cash expense related to the subscriptions that closed in 2007 and we paid loans of $25,000.

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, including: 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 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 of 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 acquiri 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 a 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 t 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 Principl ("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 ha 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 effec on the consolidated financial statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Not required.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The information required by this Item is set forth in our Consolidated Financial Statements and Notes thereto beginning at page F-1 of this Annual Report on Form 10-K.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

ITEM 9A. CONTROLS AND PROCEDURES.

As required by Rules 13a-15 and 15d-15 of the Securities Exchange Act of 1934, the Company has evaluated, with the participation of management, including the Chief Executive Officer and the Chief Financial Officer, the effectiveness of its disclosure controls and procedures (as defined in such rules) as of the end of the period covered by this report. Based on such evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in reports prepared in accordance with the rules and regulations of the Securities and Exchange Commission ("SEC") is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms.

Our management, including the Company's Chief Executive Officer and Chief Financial Officer, does not expect that the Company's disclosure controls and procedures will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake.

Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Changes in Internal Control Over Financial Reporting

There have been no changes in the Company's internal control over financial reporting that occurred during the fourth quarter of the year ended December 31, 2008 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting. The Company continues to review its disclosure controls and procedures, including its internal controls over financial reporting, and may from time to time make changes aimed at enhancing their effectiveness and to ensure that the Company's systems evolve with its business.

Management Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States ("GAAP") and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on its financial statements.

Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. Further, because of changes in conditions, effectiveness of internal controls over financial reporting may vary over time. Our system contains self-monitoring mechanisms, and actions are taken to correct deficiencies as they are identified.

Our management conducted an evaluation of the effectiveness of the system of internal control over financial reporting based on the framework in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management concluded that our system of internal control over financial reporting was effective as of December 31, 2008.

This report does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit us to provide only management's report in this annual report.

OTHER INFORMATION.

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None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The information required by this item is incorporated by reference to the information under the caption "Election of Directors" and "Corporate Governance" contained in the Proxy Statement.

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this item is incorporated by reference to the information under the caption "Executive Compensation" contained in the Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information required by this item is incorporated by reference to the information under the caption "Stock Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" contained in the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information required by this item is incorporated by reference to the information under the caption "Related Person Transactions" and "Corporate Governance" contained in the Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.

The information required by this item is incorporated by reference to the information under the caption "Principal Accountant Fees and Services" contained in the Proxy Statement.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

SIGNATURES

In accordance with Section 13 or 15(d) of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

INTERNATIONAL STEM CELL CORPORATION

By: /s/ William B. Adams

Name: William B. Adams
Title: Chief Financial Officer

Dated: March 30, 2009

In accordance with the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature:	Capacity:	Date:
/s/ Kenneth C. Aldrich Kenneth C. Aldrich	Chairman of the Board and Chief Executive Officer	March 30, 2009
/s/ Jeffrey D. Janus Jeffrey D. Janus	President and Director	March 30, 2009
/s/ William B. Adams William B. Adams	Chief Financial Officer and Director (Principal Financial Officer and Principal Accounting Officer)	March 30, 2009
/s/ Donald A. Wright Donald A. Wright	Director	March 30, 2009
/s/ Paul V. Maier Paul V. Maier	Director	March 30, 2009
/s/ Rouslan Semetchkine Rouslan Semetchkine	Director	March 30, 2009
/s/ Andrei Semetchkine Andrei Semetchkine	Director	March 30, 2009

Consolidated Financial Statements
International Stem Cell Corporation and Subsidiary
(A Development Stage Company)
Years Ended December 31, 2008 and 2007

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
International Stem Cell Corporation
(A Development Stage Company)
Los Angeles, 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 each of 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 Cell 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 of 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 raises 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 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, Member's 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
Member's 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 December 31,		Inception (August 2001) through December 31,
	2008	2007	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

	Common Stock		Preferred Stock		Additional Paid-in	Accumulated	Total	Member's
	Shares	Par	Shares	Par	Capital	Deficit	Equity	Deficit
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								250,000
Net loss for the year ended								(390,751)
Balance at December 31, 2002								(181,747)
Members contribution								195,000
Net loss for the year ended								(518,895)
Balance at December 31, 2003								(505,642)
Members contribution								1,110,000
Net loss for the year ended								(854,718)
Balance at December 31, 2004								(250,360)
Members contribution								780,000
Net loss for the year ended								(1,385,745)
Balance at December 31, 2005								(856,105)
Members contribution								250,000
Effect of the reorganization transaction	20,000,000	$ 20,000			$ 2,665,000	$ (3,291,105)	$ (606,105)	$ (606,105)
BTHC transactions	2,209,993	2,210			(2,210)		-	
Offering costs					(2,778,082)		(2,778,082)	
Warrants issued for equity placement services					1,230,649		1,230,649	
Warrants issued for services					222,077		222,077	
Warrants issued with promissory note					637,828		637,828	
Common stock issued for services	1,350,000	1,350			1,348,650		1,350,000	
Issuance of common stock	10,436,502	10,436			10,371,512		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					(382,124)		(382,124)	
Warrants issued for equity placement services					169,249		169,249	
Issuance of common stock	1,370,000	1,370			1,368,630		1,370,000	
Warrants exercised	3,000	3			2,997		3,000	
Stock-based compensation					427,496		427,496	
Net loss for the year ended December 31, 2007						(6,071,983)	(6,071,983)	
Balance at December 31, 2007	35,369,495	$ 35,369	-	$ -	$ 16,124,046	$ (15,947,015)	$ 212,400	
Issuance of Preferred stock			3,550,010	3,550	4,546,450		4,550,000	
Preferred Stock Subscribed								
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					734,867		734,867	
Deemed dividend on preferred stock					1,581,627	(1,581,627)	-	
Net loss year to date September 30, 2008						(6,571,324)	(6,571,324)	
Balance at December 31, 2008	38,410,675	$ 38,410	3,550,010	$ 3,550	$ 24,491,311	$ (24,099,966)	$ 433,305	

See accompanying notes to consolidated financial statements

INTERNATIONAL STEM CELL CORPORATION AND SUBSIDIARY

	December 31,		Inception (August 2001) through December 31,
	2008	2007	2008
Cash flows from operating activities			
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 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)	(9,575)	(81,898)
Increase (decrease) in accounts payable	(28,392)	171,837	465,034
Increase (decrease) in accrued expenses	98,816	120,747	240,991
Increase (decrease) in related party payables	(485,130)	269,333	264,648
Net cash used in operating activities	(4,750,326)	(5,228,622)	(15,763,969)
Investing activities			
Purchases of property and equipment	(254,353)	(430,694)	(893,568)
Payments for patent licenses	(63,843)	(7,159)	(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	—
Cash and cash equivalent at end of period	$ 381,822	$ 165,344	381,822
Supplemental disclosures of cash flow information			
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	$ —	$ 1,581,627
Warrants issued for placement agent services	$ —	$ —	$ 1,230,649
Warrants issued with promissory notes	$ —	$ —	$ 637,828

See accompanying notes to consolidated financial statements

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, L 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 o 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 IS 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 accounti 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.

Principles of Consolidation

The consolidated financial statements of the Company include the accounts of International Stem Cell Corporation and its subsidiary after 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.

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), the 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 the 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 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 fo 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 o 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 materia 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 acquirin 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 a 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 t 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 ha 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 effec 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 ende 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:

	December 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:

	December 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 patent 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 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: 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 of $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. See

SeaCrest Capital and SeaCrest Partners are controlled by Mr. Adams and Mr. Aldrich, YKA Partners is controlled by Mr. Aldrich and the amounts represen 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 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 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 beneficial 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 Ce Technology ("Lifeline"), a wholly owned subsidiary of International Stem Cell Corporation, to produce, make, and distribute Joint Products. The $250,00 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 BTHC 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 to 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 capital 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 commissions 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 00-19-2. 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 private 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 $1,157,123 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 ("SeriesB Preferred") and two Series B Warrants ("Series B Warrants") to purchase Common Stock for each $1.00 invested. The total purchase price received by the Company was $400,000. The Series B Preferred is convertible into shares of common stock at the initial conversion ratio of two shares of common stock for each share of Series B Preferred converted (which was established based on an initial conversion price of $0.50 per share), and the Series B Warrants 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 SeriesB 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 SeriesB Units, plus a liquidation premium of 6% per year. If the Company elects to declare a dividend in any year, it must first pay to the Series B Preferred holder a dividend equal to the amount of the dividend the Series B Preferred holder would receive if the Series B Preferred were converted just prior to the dividend declaration. Each share of Series B Preferred has the same voting rights as the number of shares of Common Stock into which it would be convertible on the record date.

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 or liquidation of the Company equal to the purchase price of the Series B Units, plus a liquidation premium of 6% per year. If the Company elects to declare a dividend in any year, it must first pay to the Series B Preferred a dividend equal to the amount of the dividend the Series B Preferred holder would receive i the Series B Preferred were converted just prior to the dividend declaration. Each share of SeriesB 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 o $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 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 amount of the dividend the Series C Preferred holder would receive if converted just prior to the dividend declaration. Each share of Series C Preferred shall have 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 D 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 at $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:

	December 31, 2008	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 in future years.

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

	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 31, 2008	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 Outstanding				Options Exercisable	
Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighed Average Exercise Price	Number Exercisable	Weighted Average 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 Shares	Weighted Average 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&D 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 0(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 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.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders
International Stem Cell Corporation and Subsidiary
Oceanside, California

We hereby consent to the incorporation by reference in the Prospectus constituting a part of the Registration Statements on Form SB-2/A (No. 333-142048 and on Form S-8 (No. 333-150920) of our report dated March 30, 2009 of International Stem Cell Corporation and subsidiary (the Company), a developmer stage company, relating to the consolidated balance sheets 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) to December 31, 2008, which report is included in this Annual Report on Form 10-K. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

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

Exhibit 31.1

CERTIFICATION

Pursuant to 18 U.S.C. 1350
(Section 302 of the Sarbanes-Oxley Act of 2002)

I, Kenneth C. Aldrich, Chief Executive Officer of International Stem Cell, Corp., certify that:

1. I have reviewed this Annual Report on Form 10-K of International Stem Cell, Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under my supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to me by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principals;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report my conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 30, 2009

By: /s/ Kenneth C. Aldrich
Kenneth C. Aldrich
Chief Executive Officer

Exhibit 31.2

CERTIFICATION

Pursuant to 18 U.S.C. 1350
(Section 302 of the Sarbanes-Oxley Act of 2002)

I, William B. Adams, Chief Financial Officer of International Stem Cell, Corp., certify that:

1. I have reviewed this Annual Report on Form 10-K of International Stem Cell, Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under my supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to me by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principals;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report my conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 30, 2009

By: /s/ William B. Adams
William B. Adams
Chief Financial Officer

Exhibit 32.1

CERTIFICATION

Pursuant to 18 U.S.C. 1350
(Section 906 of the Sarbanes-Oxley Act of 2002)

In connection with the Annual Report on Form 10-K of International Stem Cell Corp. (the "Company") for the year ended December 31, 2008, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Kenneth C. Aldrich, as Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 30, 2009

By: /s/ Kenneth C. Aldrich
Kenneth C. Aldrich
Chief Executive Officer

This certification accompanies each Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of §18 of the Securities Exchange Act of 1934, as amended.

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

CERTIFICATION

Pursuant to 18 U.S.C. 1350
(Section 906 of the Sarbanes-Oxley Act of 2002)

In connection with the Annual Report on Form 10-K of International Stem Cell Corp. (the "Company") for the year ended December 31, 2008, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), William B. Adams, as Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 30, 2009

By: /s/ William B. Adams
William B. Adams
Chief Financial Officer

This certification accompanies each Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of §18 of the Securities Exchange Act of 1934, as amended.

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.